

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



LSHTM Research Online

Hemmings, Joanne; (2007) Infertility and Women's Life Courses in Northern Malawi. PhD thesis, London School of Hygiene & Tropical Medicine. DOI: <https://doi.org/10.17037/PUBS.00967512>

Downloaded from: <https://researchonline.lshtm.ac.uk/id/eprint/967512/>

DOI: <https://doi.org/10.17037/PUBS.00967512>

Usage Guidelines:

Please refer to usage guidelines at <https://researchonline.lshtm.ac.uk/policies.html> or alternatively contact researchonline@lshtm.ac.uk.

Available under license. To note, 3rd party material is not necessarily covered under this license: <http://creativecommons.org/licenses/by-nc-nd/3.0/>

<https://researchonline.lshtm.ac.uk>

Infertility and Women's Life Courses in Northern Malawi

Joanne M Hemmings

London School of Hygiene & Tropical Medicine

Thesis submitted for the degree of Doctor of Philosophy
of the University of London

May 2007

Abstract

BACKGROUND: Anthropological and epidemiological studies have identified infertility as a significant health and social problem, yet it remains largely overlooked in reproductive and sexual health policy and practice in developing countries. This study examined the effects of infertility across women's lives in rural northern Malawi.

METHODS: Qualitative data were collected during in-depth life history interviews with forty-nine fertile and infertile women. These data were supplemented by key informant interviews, group discussions, field notes and observations. Demographic survey data were analysed to contextualise findings and quantify selected outcomes related to infertility. The importance of infertility for current understandings of sexual and fertility related behaviour was evaluated.

FINDINGS: Women experienced infertility within a complex social and metaphysical context, in which they had few alternative life course options apart from marriage and childbearing. Little help was available at hospitals, and most women took long courses of traditional medicine. Infertile women were more likely to be HIV positive, but only a minority of infertile women reported 'risky' sexual behaviour. Divorce was more common among infertile women, as children stabilised marriages in a variety of ways, but infertile women were no more likely to be polygynously married. Many infertile women had supportive marriages, often with polygynous men who had children with other wives. Infertile women negotiated marriages and living arrangements to make the most of their compromised situation, and were unwilling to tolerate secondary social status. Infertility was on a continuum of risks to successful childbearing: most fertile women had also experienced reproductive health problems and/or marital disruptions.

IMPLICATIONS: Routine health services and information are inaccessible and inappropriate for infertile women. Current reproductive and sexual health programmes focus on fertility reduction, but there are feasible ways to improve infertility management in resource-poor settings, which could contribute to meeting other objectives such as tackling STIs and building trust around contraceptive use.

Acknowledgements

This study was funded by a UK Economic and Social Research Council 1+3 Studentship (2002-2006), and was based at the Karonga Prevention Study, Malawi, which is funded by the Wellcome Trust and LEPR. Thanks to the following people: Basia Zaba, who initiated my links with KPS, and first coerced me onto a motorbike; my supervisors Dr Sarah Castle (for the first year), and Joanna Busza; Dr Frank Mwaungulu and his wife Josephine (Taz); Salome, Namba Mtawali and Richard and Ellen Ndovi, for welcoming me into their homes; Mia Crampin, Nuala McGrath, Marsya Mwasinga, Christina Chisambo, Lydia Ngwira, Andreas Jahn, Mwinuka, Paul Fine, Sian Floyd, Judith Glynn, Jackie Saul, Keith Branson and numerous other KPS staff for guidance and support in all aspects of fieldwork and beyond. Special thanks to all my assistants, especially Doris Banda and Cellina Kalua, whose enthusiasm, patience and dedication was invaluable. Thanks to my family and Martin for writing to me, visiting, and always encouraging me. This piece of work is dedicated to all the study participants who gave their time and energy to talk to Doris, Cellina and I.

Table of Contents

Glossary	12
Chitumbuka words	13
Acronyms and Abbreviations	14
PART 1: BACKGROUND TO THE STUDY	15
1 The Challenge of Infertility in Global Reproductive and Sexual Health	15
1.1 Introduction.....	15
1.2 Definitions and concepts	19
1.3 Role of the candidate.....	20
1.4 Outline of thesis	20
1.5 Aims and objectives	21
2 Literature Review	22
2.1 Introduction.....	22
2.2 Medical and demographic aspects of infertility	22
2.2.1 Causes of infertility	22
2.2.2 Measurement and prevalence of infertility	23
2.2.3 Factors associated with infertility	25
2.2.4 Fertility and HIV	27
2.3 Anthropological approaches	30
2.4 Infertility within reproductive and sexual health	35
2.5 Study context: northern Malawi.....	36
2.5.1 History, politics and economy	36
2.5.2 Demographic and health profile.....	40
2.6 Summary	43
3 Conceptual Framework	45
3.1 Introduction.....	45
3.2 Life course approach.....	45
3.3 Critical perspectives	46
3.3.1 Gender	46
3.3.2 Social structure and agency.....	47
3.4 Conceptual framework.....	48

4	Methodology	51
4.1	Introduction.....	51
4.2	Integrating qualitative and quantitative approaches.....	51
4.3	Research strategy: qualitative component.....	54
4.3.1	Local interviewers.....	54
4.3.2	Selecting life history interview participants.....	55
4.3.3	Pilot work.....	57
4.3.4	Life history interviews	57
4.3.5	Carrying out life history interviews	59
4.3.6	Focus group discussions.....	60
4.3.7	Expert and other interviews	61
4.3.8	Field notes	61
4.3.9	Qualitative data management.....	62
4.3.10	Qualitative data analysis	63
4.3.11	Ethical considerations	66
4.4	Research strategy: quantitative component.....	67
4.4.1	Census data	68
4.4.2	Antenatal Non-Attenders (ANA) study	68
4.4.3	Antenatal clinic (ANC) surveillance.....	69
4.4.4	Operationalising definitions.....	70
4.4.5	Quantitative analysis	71
4.5	Study area.....	72
4.6	Summary	73
	PART 2: RESULTS – SETTING THE CONTEXT	75
5	Women’s Life Courses.....	75
5.1	Introduction.....	75
5.1.1	Childhood and adolescence.....	77
5.1.2	Formal education.....	77
5.1.3	Mobility and migration	78
5.1.4	Pre-marital relationships	79
5.2	Marriage and childbearing	82
5.2.1	The mandate and pressures to marry.....	82
5.2.2	Getting married	86
5.2.3	Married life	89

5.2.4	Relationships with original family	93
5.2.5	The importance of children in marriage.....	93
5.2.6	Building and spacing a family.....	99
5.3	Potential developments within marriage.....	102
5.3.1	Polygyny	102
5.3.2	Divorce and separation.....	105
5.3.3	Child custody following marital breakdown.....	107
5.3.4	Separated women	108
5.3.5	Re-marriage.....	109
5.3.6	Widowhood	110
5.4	Getting older	111
5.5	Summary and discussion.....	112
6	Infertility	118
6.1	Introduction.....	118
6.2	What constituted infertility	119
6.3	Explanations of infertility	122
6.3.1	Male versus female factor infertility	122
6.3.2	The will of God and the devil	123
6.3.3	Supernatural influences.....	125
6.3.4	Vimbuza	128
6.3.5	Abnormalities that closed the ‘path’	129
6.3.6	Menstrual disorders.....	130
6.3.7	Sexually transmitted infections.....	131
6.3.8	Induced abortion	133
6.3.9	Contraception	134
6.3.10	Other causes of infertility.....	135
6.4	Treatment-seeking.....	135
6.4.1	Traditional medicine	137
6.4.2	Religious help	140
6.4.3	<i>Wazungu</i> medicine	140
6.4.4	Interaction between traditional and <i>wazungu</i> medicine.....	143
6.4.5	Social support.....	144
6.4.6	Adoption.....	146
6.5	Conclusions.....	147

6.5.1	Summary	147
6.5.2	Discussion	149
PART 3: RESULTS – INFERTILITY AND THE LIFE COURSE.....		152
7	Infertility and Marital Stability	153
7.1	Introduction	153
7.2	Stable monogamous marriages with children	154
7.3	Stable monogamous marriages without children	160
7.4	Stable polygynous marriages	167
7.4.1	Women entering polygynous marriages with subsequent infertility.....	167
7.4.2	Women with established infertility entering polygynous marriages.....	174
7.5	Summary and discussion.....	180
8	Infertility, Polygyny and Marital Instability	185
8.1	Introduction	185
8.2	Infertile women gaining a co-wife	185
8.2.1	Monogamously married women who gained a co-wife.....	186
8.2.2	Polygynously married women gaining additional co-wives	195
8.3	Infertility and marital instability	195
8.4	Summary and discussion.....	207
9	Infertility, Childbearing, and Reproductive Health	210
9.1	Introduction	210
9.2	Infertility and HIV.....	210
9.2.1	Hypothesis 1: Infertile women more likely to divorce.....	212
9.2.2	Hypothesis 2. Infertile women have boyfriends	217
9.2.3	Hypothesis 3. Infertile women’s husbands more likely to marry polygynously or have girlfriends to try to have children	218
9.3	Infertility and wider ill-health	219
9.4	Pregnancy and childbirth	223
9.5	Discussion	226
10	Conclusions and Recommendations	229
10.1	Introduction	229
10.2	Summary of main findings.....	229
10.2.1	Infertility as a morally loaded condition	230

10.2.2	Demonstrating commitment to childbearing.....	231
10.2.3	Infertile women no more likely to be currently polygynously married	232
10.2.4	Why infertile women were more likely to have divorced.....	232
10.2.5	Love in infertile relationships	234
10.2.6	How infertile women contrived to ‘stay well’	235
10.2.7	Infertility and reproductive health.....	239
10.3	Reliability and validity.....	240
10.3.1	Interviewer and participant effects.....	241
10.3.2	Interpretation of data and validity of findings.....	245
10.3.3	Validity and reliability of quantitative data	246
10.3.4	Limitations of study	246
10.4	Implications and recommendations.....	249
10.4.1	Applicability of findings	249
10.4.2	Infertility and sexual behaviour	250
10.4.3	Improving women’s RSH knowledge and skills.....	251
10.4.4	Qualitative data needed to appreciate nature of infertility.....	252
10.4.5	Incorporating infertility into RSH.....	253
10.4.6	Increasing access to health services for infertile women.....	257
10.5	Future work	257
	Bibliography.....	260

List of tables

Table 1	Marital outcomes by fertility status, Malawi 2004	26
Table 2	Selected demographic indicators, Malawian women.....	40
Table 3	Overview of qualitative methods	54
Table 4	Fertility status of life history interview participants	56
Table 5	Overview of quantitative data sources	67
Table 6	Quantitative indicators of infertility.....	70
Table 7	Educational attainment, 20-29 year olds, KPS Census 2002-05	78
Table 8	Mean birth intervals by age group (currently pregnant women, projecting forward to next birth)	94
Table 9	Bride price following divorce	107
Table 10	Proportion of ever-married women with no live births, 2002-05 KPS Census	119

Table 11 Length of time after marriage nulliparous women waited before seeking fertility treatment (all women who sought treatment before their first child).....	120
Table 12 Percentage of married ANA women reporting current use of traditional fertility treatments, by age group	137
Table 13 Summary of infertile women in ‘stable’ monogamous marriages living with children.....	154
Table 14 Summary of infertile women in ‘stable’ monogamous marriages living without children.....	160
Table 15 Summary of women who entered polygynous marriages with subsequent infertility.....	167
Table 16 Summary of women with established infertility who entered polygynous marriages	174
Table 17 Summary of monogamously married infertile women who gained a co-wife	186
Table 18 Summary of women ever divorced or separated from infertile marriages	198
Table 19 Suggestions for improving infertility prevention and care in resource-poor settings	256

List of Figures

Figure 1 Women with secondary infertility, percentage by age and urban/rural residence, Malawi 1992	25
Figure 2 Fertility rate ratios of HIV positive/negative women, by age, from nineteen studies.....	28
Figure 3 Malawi within Africa; Karonga district within Malawi.	39
Figure 4 Population of demographic surveillance area 2004-5, KPS baseline census ...	42
Figure 5 Iterative processes between qualitative and quantitative approaches.....	53
Figure 6 Diagram of quantitative data sources (not to scale).....	68
Figure 7 Overview of stages in normative woman’s life course.....	76
Figure 8 Percentage of men and women ever married, by age at interview.	82
Figure 9 Percentage of married women with polygynous husband, by age (three-year rolling averages), KPS census and ANC data.....	102
Figure 10 Schematic representation of infertility aetiologies	124
Figure 11 Percentage of married women married to polygynous men, ANC and ANA, by fertility status (adjusted for age)	186

Figure 12 Percentage of women ‘married more than once’, ANC and ANA, by fertility status (age cohort and marital status adjusted rates)	196
Figure 13 Percentage HIV positive, ANC and ANA, by fertility status (age cohort and marital status adjusted rates)	211
Figure 14 Factors affecting women’s wellbeing in marriage.....	237
Figure 15 Factors affecting women’s decisions to stay in, or leave, marriage	238

Declaration by candidate

I declare that the work presented in this thesis is my own.

Joanne Hemmings

May 2007

Glossary

Fecundity	The physiological ability to reproduce
Fertility	<ol style="list-style-type: none">1. In demography: actual performance of persons over time in terms of their reproduction of live births2. In clinical use: the physiological ability to reproduce
Gravidity	The state of being pregnant; pregnancy
Iatrogenic	A symptom or disease induced unintentionally by a physician's treatment
Infertility	The inability to conceive or impregnate, resulting in a live birth, after a certain amount of time: <ol style="list-style-type: none">1. Primary infertility: having never had a live birth2. Secondary infertility: infertility subsequent to at least one live birth
Matrilineal	Recognising kinship with, and descent through, females
Neolocal	Marriage in which the couple settles in neither the husband nor the wife's community
Nulliparous	A woman who has never had a live birth
Patrilineal	Recognising kinship with, and descent through, males
Patrilocal	Marriage in which the couple settles in the husband's home or community
Polygyny	Marriage in which a man has more than one wife at once
Sterility	The complete physiological inability to conceive
Uxorilocal	Marriage in which the couple settles in the wife's home or community

Chitumbuka words

Banja	Marriage/family
Cheka	Menstrual condition involving severe period pain
Chibadala	Payment by man to future wife's family before marriage OR compensation for making unmarried woman pregnant
Chikamwini	Men staying at their wife or girlfriend's house in contrast to usual patrilocal residence
Chizonono/chindoko	Syphilis
Chuma	Bride price, lobola: money, cattle or goods in kind paid by a man to the parents of the woman he is marrying
Chumba	Unable to conceive, without potential fertility
Kukhuluzganenge	To be married without children (just having fun)
Kumeta	To 'become clean' after resuming menses following childbirth
Kusomphola (waka)	To (just) elope
Kuthula	For a pregnant woman's family to take her to responsible man's house for marriage
Kuwela	To care for (especially a man providing for wife or child)
Mabomo	Buboes
Mbilya	Marriage to two or more women from the same family
Mphapho	Fertility; womb
Ndopa	Blood; sperm
Nsima	Thick maize or cassava porridge (staple food)
Nthowa	Path; vagina
Thenga	Message sent by a man to his intended wife's family to request commencement of marital negotiations OR to inform them that he has 'taken' their daughter
Uhawi	Witchcraft
Vimbuza	Spirits which can possess the human body
Wapapi	Parents or elders
Wazungu	Of white people (e.g. <i>wazungu</i> medicine)

Acronyms and Abbreviations

ANA	Antenatal non-attenders
ANC	Antenatal clinic
ART	Anti-retroviral therapy
CRS	Continuous registration system (of demographic events)
DHS	Demographic and Health Survey
GPS	Global positioning system
ICPD	International Conference on Population and Development
KPS	Karonga Prevention Study
LH	Life history
LSHTM	London School of Hygiene & Tropical Medicine
PID	Pelvic inflammatory disease
PPA	Post-partum abstinence
RSH	Reproductive and sexual health
RTI	Reproductive tract infection
STI	Sexually transmitted infection
UNAIDS	Joint United Nations Programme on HIV/AIDS
VCT	Voluntary counselling and testing
WHO	World Health Organisation

PART 1: BACKGROUND TO THE STUDY

1 The Challenge of Infertility in Global Reproductive and Sexual Health

1.1 Introduction

Reproductive and sexual health research has grown in scope and volume in recent years, reflecting that a wide range of disciplines has interest in the field: those concerned with population and development, family planning, HIV prevention, demography, and human rights in general. Women's reproductive and sexual health (RSH) in particular has been internationally recognised as a key component of health and development strategies in developing countries since the International Conference on Population and Development (ICPD 1994), and the importance of RSH for achieving the Millennium Development Goals has recently been emphasised (UN Millennium Project 2006).

This thesis concerns infertility, an area of RSH that has received relatively little attention in academic, policy and programmatic spheres in developing countries (Inhorn 1994b), despite its inclusion in the ICPD 'round-up':

Objective 7.29: To prevent and reduce the incidence of, and provide treatment for, sexually transmitted diseases, including HIV/AIDS, and the complications of STDs such as infertility, with special attention to girls and women... Objective 7.6: Reproductive health care in the context of primary health care should... [include] prevention and appropriate treatment of infertility (ICPD 1995)

The low priority accorded to infertility in primary health care, family planning, and health education programmes in developing countries has been explained in the context of post 1960s population programmes, which aimed principally to reduce fertility. Birth rates have remained high in most of sub-Saharan Africa, whilst falling throughout Asia and Latin America. Within this climate, African women were thought of as 'over-producers' by international policy makers (Handwerker 1998), or 'resisting' the transition to lower fertility (Reidman 1993). A paradigm of excessive fertility does not readily treat infertility as a public health concern. Even the post-Cairo shift towards viewing RSH as right for individuals, regardless of population targets, has not resulted in greater attention to infertility. This is partly a question of economics: treatments can

be expensive, the technology used requires intensive training, and therapies are often unavailable (Okonofua 2004).

A growing body of research argues the importance of infertility as a public health issue. Numerous preventable threats remain to reproductive health which impact upon fertility, affecting women in particular. Recent demographic research in sub-Saharan Africa has found infertile women more likely to be HIV positive, and more likely to experience marital disruption (Ross, Morgan et al. 1999; Rutstein and Shah 2004). Infertile women also miss services provided at antenatal (ANC) and Under Fives' clinics (such as health education and voluntary counselling and testing for HIV (VCT)). Ethnographers have described moral, psychological and religious aspects of infertility, and have highlighted the disproportionate burden that women face in infertile partnerships, including compromised social status and associated economic vulnerability (Inhorn 1994b). Most research has focused on female factor infertility or has identified couple infertility through the woman. This is a function of the difficulty in diagnosing infertility among men outside of well-resourced hospital settings, and of researchers concentrating on women because they usually suffer disproportionately from the consequences of infertility.

This study was instigated after an interesting question emerged from ongoing demographic research at the Karonga Prevention Study (KPS)¹ in rural northern Malawi. One of their surveys² had asked women about use of fertility treatments, and preliminary results suggested that HIV prevalence was higher in women who were using them (OR 7.1, $p=0.002$) (Jahn, Ngwira et al. 2004). Although numbers were small, they were consistent with other studies which have found HIV to lower women's fertility (which might prompt use of fertility treatments), and pre-existing subfertility to be a potential risk factor for HIV. This study was thus originally designed to investigate the connection between HIV and infertility, using qualitative methods and analysing KPS survey data. Following the literature review and pilot work, its scope was expanded to look more broadly at the effects of infertility on women's lives. The study maintains a focus on women, reflecting the initial survey data that it draws upon, though male perspectives were incorporated into qualitative data collection.

¹ A Wellcome Trust and LEPR funded LSHTM research site for immunological, epidemiological and demographic research based in Chilumba, Karonga district.

² The Antenatal Non-Attendees (ANA) study, which is fully described in 'Chapter 3: Methodology'.

Study aims were refined as follows:

1. To gain a sense of what characterised women's life courses in this area of northern Malawi. A life course perspective was taken to reflect the dynamic process of reproduction, and disrupted reproduction, in women's lives.
2. To investigate how infertility affected women's lives, by analysing the beliefs, meanings, definitions and social processes surrounding reproduction and infertility. Women with a history of infertility were compared with those with a more typical fertility history, in order to determine issues relating to infertility in particular, and to contextualise infertility within the range of reproductive health issues faced by women.
3. To evaluate the importance and role of infertility for current understandings of sexual and fertility related behaviour.

The study took place in the area covered by the KPS demographic surveillance system: 135km² with 32,500 people (in 2005)³. Research questions were initially approached from a demographic perspective, using population-based data from the KPS baseline census area and local antenatal clinics. Infertility was measured using demographic definitions and analyses focused on areas of demographic interest: infertility and its relation to marital status and HIV. Qualitative methodologies, including life history interviews with fertile and infertile women, were introduced during ten months fieldwork during which the principal investigator was based at KPS. Participants were asked about infertility; and the social, health and economic consequences associated with it. This allowed examination of the social environment in which reproductive lives were played out, to examine the social construction of infertility, and to look at the impact of infertility on affected women's life courses from their own perspectives. Both qualitative and quantitative methodologies were used. Quantitative analyses produced generalisations from survey data, and qualitative methods explored the cultural system in which infertility was experienced, and helped give meaning to processes by which infertility led to particular outcomes.

Some of these issues have been tackled in existing literature. It is already known that infertile women are more likely to experience certain demographic outcomes (such as increased likelihood of divorce or HIV) in many parts of sub-Saharan Africa. However,

³ Some antenatal clinic data came from clinics outside this area but within Karonga district.

survey data do not explain how or why these associations come about, and do not aid understanding of the meaning and implications of such associations. Interpretation of quantitative findings has often been through the inappropriate use of ethnography and other qualitative studies, sometimes written decades earlier or concerning different geographical regions (Coast 2003). In this way, local responses to infertility have been employed to ‘tell the story’ of infertility across large swathes of the developing world.

To try to improve upon these rather speculative interpretations of the effects of infertility, some studies have used both qualitative and quantitative methodologies in the same population (Inhorn 1994a; Ties Boerma and Mgalla 2001), as this study did. Advantages of basing qualitative research in an area for which demographic and health survey data were available included being able to sample infertile women for in-depth interview from the community, rather than clinics (where participants are usually selected for qualitative infertility studies). It was also possible to draw a ‘comparison’ sample of women with more typical fertility histories, in order to gauge what effects might be attributed to infertility as opposed to other factors. Other qualitative studies have explored the lived experience of infertility but without these comparative and quantifiable aspects.

The research uncovered a complex picture of how infertility is perceived, suggesting that as a social construct and experience its importance is far greater than might be suggested by cross-sectional infertility prevalence data. Childlessness by age 45 among women was 5%, but a far greater lifetime experience of fertility problems and concern about infertility was suggested by the qualitative data. This has implications for the way that RSH priorities are identified. Results for the association between infertility and various demographic outcomes were largely consistent with those found elsewhere: infertile women (measured both by demographic and self-perceived indicators) were more likely to be HIV positive, be divorced, and have had more than one marital partner. However, they were no more likely to be currently polygynously married, which is an unusual finding within the literature. The qualitative data revealed a range of processes by which infertile women might arrive at these outcomes, and allowed an examination of structural factors which conditioned responses to infertility. Children stabilised marriages in a number of ways, and marital dynamics were affected by childlessness. However, there were many exceptions to the usual findings about the

effects of infertility, which challenged prevailing demographic and anthropological notions of women's status, fertility and marriage in sub-Saharan Africa.

1.2 Definitions and concepts

Defining infertility is problematic, with terminology varying across disciplines. In demography, *fecundity* is the physiological ability to conceive; *fertility* is the actual number of live births to a woman; and *infertility* is the failure to produce a live birth after a certain length (usually five years) of exposure to pregnancy (this is defined as regular sexual activity in the absence of contraception, post partum amenorrhea or breastfeeding) (Larsen and Raggars 2001a). In clinical medicine, *fertility* is the physiological ability to reproduce, and *infertility* is usually defined as the inability to conceive (or to produce a live birth), after one or two years' exposure to pregnancy (WHO 2001). Two types of infertility are recognised: *primary infertility* (those who have never had a live birth), and *secondary infertility* (those with at least one live birth) (Pressat and Wilson 1985).

In contrast to these bounded definitions, anthropologists have employed subjective, local definitions of infertility (Runganga, Sundby et al. 2001). Scenarios thought of as representing infertility in differing local contexts have included the death of a large proportion of one's children (Caldwell and Caldwell 1987), an undesirable sex ratio of children (Handwerker 1998), and failure to have children at the right time and with the right frequency (Feldman-Savelsberg 1994).

Difficulties emerge when using mixed research methodologies due to these different definitions. Quantitative approaches use predetermined categories, whereas qualitative approaches develop emic⁴ definitions from local understandings. There was no clear definition of infertility in northern Malawi: in the local language, Chitumbuka, the closest concept was *chumba*, meaning something akin to sterile unable to conceive. Yet *chumba* was not applicable to women with secondary infertility, or those who had not been trying to get pregnant for long enough (women were only called *chumba* after several years without conceiving). In order to define infertility for this study, a compromise between these two epistemological approaches was made. Pre-determined categories were used for some purposes (such as survey data analysis), whilst local indicators of fertility problems were used for others (recruiting participants according to

⁴ An insider's view of culture.

their use of fertility treatments). The methods by which study participants were selected and subsequently classified are detailed in Chapter 3 (Methodology).

This study defined infertile women by absence of live births, rather than absence of pregnancy. There was no attempt to ascertain where the cause of the infertility lay, so women described as infertile in this study were those who *experienced* infertility, whether or not they were actually infecund (unable to conceive). Men contribute to infertility in up to 48% of cases in Africa (Mayaud 2001), yet women are typically the subject of scrutiny over infertility, both in their communities, and in studies of infertility, partly because female fertility is much more visible than male.

The term 'life courses' refers to the events and processes that constitute people's lives over time, such as adolescence, childbearing, divorce, and ill health. The use of this term also reflects that a life course approach was used. This is an approach which recognises the interconnectedness of different social, environmental and biological factors in women's lives, and that events at one stage in life can have implications in later life (Kuh and Hardy 2002).

1.3 Role of the candidate

KPS collected all quantitative survey data as part of their 2001-2005 research programme. The candidate was not involved with the design or collection of these data (aside from accompanying some fieldwork teams), but performed analyses in this thesis based on these data. The qualitative research was independently planned and executed by the candidate under the auspices of KPS. The candidate developed the research questions, trained research assistants, supervised fieldwork, attended all interviews, and carried out qualitative analyses.

1.4 Outline of thesis

The thesis is divided into three parts. The rest of Part 1 comprises the background to the study. The literature review examines the main approaches used to examine infertility in epidemiological, demographic, and anthropological research. The review focuses on the effects of infertility on aspects of women's life courses in sub-Saharan Africa. The place of infertility in global population and RSH policy and practice is discussed. The historical and social context of northern Malawi is outlined. Chapter 3 outlines the conceptual framework of the research, which underpinned the methodology, and relates

it to the reviewed literature. Chapter 4 describes and justifies methods used to collect and analyse data.

Part 2 sets the context by presenting background findings on the normative progression of women's life courses in the study area, and what constituted a departure from this widely recognised norm (Chapter 5); and local meanings of infertility, what constitutes infertility, beliefs about its causes, and treatment-seeking (Chapter 6).

Part 3 explores the effects of infertility on women's life courses. Chapters 7 and 8 are organised according to the effects that infertility had on women's marital careers, as this emerged as the most important category through which women recounted and made sense of their life histories. Chapter 9 discusses the relationship between infertility and health, and in particular, the relationship between infertility and HIV. It describes how infertility related to other local RSH concerns. The final chapter summarises these results and discusses their implications, suggesting ways in which infertility might be incorporated into the RSH agenda in resource poor settings.

1.5 Aims and objectives

Overall aim: To improve understanding of the importance, meanings and consequences of infertility on women's life courses in northern Malawi, and to discuss infertility's place on the RSH agenda in light of these findings.

Objectives:

1. To identify, and begin to quantify, demographic and health outcomes associated with infertility in women in the study area.
2. To investigate what characterises women's life courses in the study area, with particular attention to factors relating to RSH.
3. To define what constitutes infertility locally, and describe how individuals, couples and the wider community respond to infertility.
4. To examine affected women's life courses, looking at processes by which infertility leads to particular outcomes and their impact.
5. To assess the implications of findings for the conceptualisation and provision of RSH programmes and policy.

2 Literature Review

2.1 Introduction

This chapter reviews selected literature on infertility from epidemiological, demographic, and anthropological perspectives. Literature has been chosen for its importance in framing the study's research questions, and for its significance to the development of the conceptual framework and research methodology. Literature relating to developing countries, and sub-Saharan Africa in particular, is emphasised. Firstly, medical and demographic aspects of infertility, including recent studies of infertility and HIV, are summarised. Ethnographic research on infertility and anthropology's contributions to the study of reproduction are discussed. The position of infertility within the global RSH discourse is then analysed. Finally, the historical, economic and demographic context of Malawi is presented.

2.2 Medical and demographic aspects of infertility

This section describes medical causes of infertility, risk factors related to acquired infertility, methods of measuring infertility, recent estimates of the prevalence of infertility, and sociodemographic factors associated with infertility. It concludes with an examination of how infertility is related to HIV.

2.2.1 Causes of infertility

Causes of involuntary infertility can be divided into two groups. The first, core infertility (chromosomal, congenital, hormonal and endocrinological abnormalities), is largely untreatable, especially in resource-poor settings, as it is due to damaged sexual organs, or sperm or egg production. The second, acquired infertility, is both preventable and often treatable. It can be caused by cervical, tubal, or uterine damage following induced abortion, childbirth, infection, or invasive medical procedures (Cates, Rolfs et al. 1993). Most infertility in sub-Saharan African women is related to tubal factors: damaged fallopian tubes have been found in 57–83% of infertile women in several African studies (Cates, Farley et al. 1985; Collet, Reniers et al. 1988; Chigumadzi, Moodley et al. 1998). Damaged tubes are commonly the result of pelvic inflammatory disease (PID), which is usually caused by sexually transmitted infections (STIs) (especially repeated, severe, long lasting STIs such as syphilis, gonorrhoea and chlamydia), reproductive tract infections (RTIs), or post-partum infections (Cates, Rolfs et al. 1993; Favot, Ngalula et al. 1997; Caldwell and Caldwell 2000; Mayaud 2001).

Genital tuberculosis, parasitic diseases, malnutrition, female genital mutilation, and infection associated with IUDs are also risk factors for infertility in sub-Saharan Africa (Cates, Rolfs et al. 1993; Mayaud 2001).

Demographic surveys and hospital-based studies have found certain social and behavioural factors to be associated with infertility in women, probably through their association with an increased likelihood of acquiring a sexually transmitted, reproductive tract or post-partum infection. These include early age at first intercourse (Duncan and al 1990; Cates, Rolfs et al. 1993; Grodstein and Rothman 1994; Larsen 1995; Ericksen and Brunette 1996; Favot, Ngalula et al. 1997), childbirth unattended by health professionals (Larsen 1995), history of ever using contraception (Larsen and Raggars 2001a), urban compared to rural residence (Larsen 1995; Ericksen and Brunette 1996; Larsen 1996), high frequency of sexual intercourse and multiple sexual partners (Cates, Rolfs et al. 1993; Grodstein and Rothman 1994; Ericksen and Brunette 1996), high rate of acquiring new sexual partners (Grodstein and Rothman 1994), having sex for money (although these were studies with small sample sizes) (Boerma and Urassa 2001; Larsen and Raggars 2001a) and low levels of employment or income (Mayaud 2001). A significant risk factor for secondary infertility is greater number of live births. This is partly due to increased age, but also to risks in giving birth (Caldwell and Caldwell 2000). Although these are seen as risk factors for acquiring infertility, some might also be consequences of infertility. It is difficult to establish cause and effect: because infertile women have generally been found to be more likely to divorce, they may then be more likely to engage in transactional sex or move to urban areas, and then be more likely to contract an STI or use contraception. A cyclical pattern of risks related to infertility could develop due to these interrelated factors.

2.2.2 Measurement and prevalence of infertility

Infertility in sub-Saharan Africa has been primarily measured through analyses of nationally representative demographic surveys such as Demographic and Health (DHS) or World Fertility Surveys. Couple infertility is inferred from women's birth histories: primary infertility is usually defined as when a woman has been exposed to pregnancy for at least seven years without a live birth (Larsen and Raggars 2001a). 'Currently married without using contraception' is used as a proxy for exposure to pregnancy, with

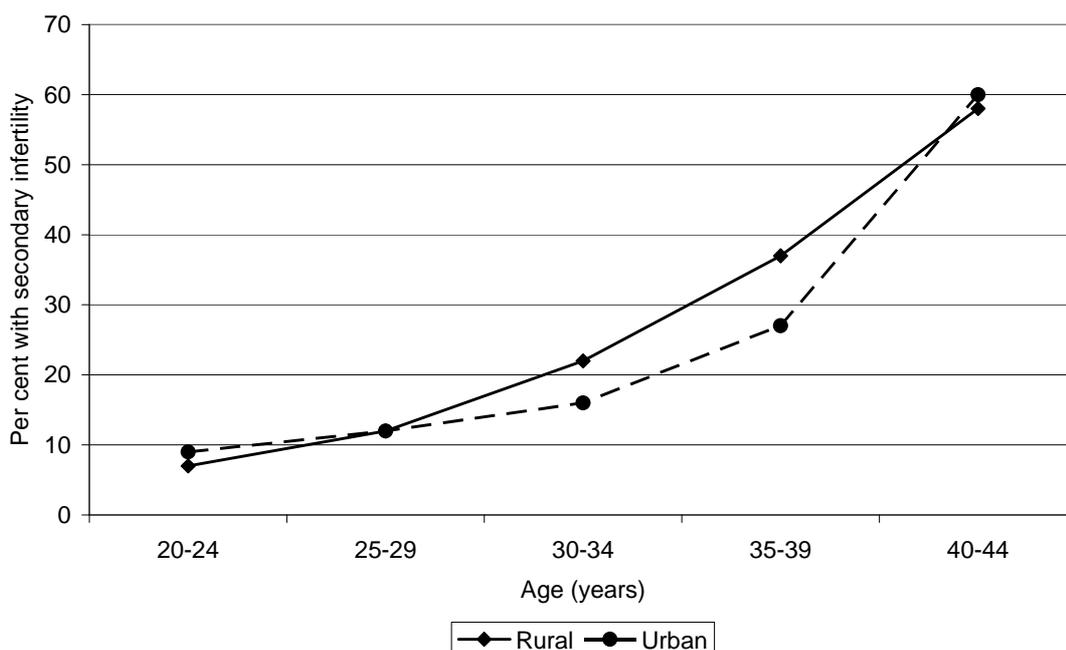
several limitations⁵. When exposure to pregnancy cannot be accurately determined (e.g. if contraceptive use is unknown), alternative measures of infertility may be used; e.g. for primary infertility, the proportion of married women with no live births by age 45 (they are presumed unlikely to give birth after this). Secondary infertility is usually estimated by the ‘subsequently infertile’ measure: the proportion of married women with no live birth at least five years after their last birth (Larsen and Raggars 2001a). These methods tend to produce much lower estimates of infertility than clinical definitions, which diagnose primary infertility after one or two years’ exposure to pregnancy without conception or a live birth.

Primary infertility has decreased across sub-Saharan Africa in the last few decades, especially across the so-called west and central African ‘infertility belt’ (a swathe of countries with high levels of primary infertility) (Larsen and Raggars 2001a). Rutstein and Shah’s 2004 analysis found lower levels of infertility than the 1984 World Fertility Survey across Africa. This is thought to be due to the widespread introduction of antibiotics to treat STIs (or which inadvertently treat undiagnosed STIs when taken for other purposes) (Rutstein and Shah 2004).

A theorised sterility level of at least 3% exists in any population due to core infertility (Bongaarts and Potter 1983). Only a few countries in sub-Saharan Africa (including the Central African Republic, Cameroon, Mozambique and Niger) record higher levels than this, as measured by the proportion of sexually experienced women with no live births by age 45-49 (Rutstein and Shah 2004). The figure of 3% may overestimate baseline sterility levels in countries where marriage is almost universal, and where women are exposed to pregnancy for long periods. Most infertility is not actual sterility (the complete inability to conceive), but is the result of a lowered ability to conceive (sub-fecundity). Thus a sub-fecund woman in a population with low contraceptive prevalence rates, and early and almost universal marriage, may have a better chance of having a live birth than a woman who is not exposed to pregnancy until later in life.

⁵ Marital status does not take into account pre- or post-marital sexual activity, and does not accurately measure exposure to pregnancy (contraceptive use, frequency of sexual activity, length of post partum infecundability) during marriage. Long periods between births may reflect prolonged breastfeeding, post-partum abstinence, or seasonal migration of a partner. Some couples may be voluntarily childless, though this is assumed to have a negligible effect in Malawi where only 0.4% of women with no living children say that their ideal number of children is zero (Malawi DHS 2000).

Figure 1 Women with secondary infertility, percentage by age and urban/rural residence, Malawi 1992⁶



SOURCE: Larsen and Raggars 2001a

The 2004 Malawian DHS recorded 1.9% of Malawian women who had ever had sex to have no live birth by age 45-49, and 2% of Malawian women had primary infertility after seven years of marriage (Larsen and Raggars 2001a). This suggests that Malawi has lower levels of infertility than other parts of sub-Saharan Africa (2.6% of women aged 25-29 in the region have primary infertility) (Rutstein and Shah 2004). A greater proportion of women experience secondary infertility, the prevalence of which rises with age (see Figure 1). One would expect secondary infertility to increase with age, and whether it is considered involuntary and problematic, or rather is perceived as a ‘natural’ end to childbearing (attributable to menopause, or decreased sexual activity), varies according to individual women’s circumstances.

2.2.3 Factors associated with infertility

Marriage

Numerous demographic studies have found primary infertility in women to be associated with marital instability, including divorce and having been married more than once (Renya 1975; Larsen 1989; Ericksen and Brunette 1996; Larsen 2001). In a hospital-based study in Tanzania, infertile women had more marital breakdowns and more lifetime sexual partners than fertile women (Favot, Ngalula et al. 1997). Rutstein

⁶ Based on the ‘subsequently infertile’ estimator, parous women. Estimates presume all contraceptive users are fertile.

and Shah's 2004 analysis of the 2001 Malawi DHS found all types of infertile women to be more likely to be currently divorced, as indeed they were in most other African countries analysed (although the proportion of childless women who were divorced varied greatly: 40% in Eritrea versus 4% in Mali). They also found all types of infertile women to be more likely to have had more than one husband and to be in a polygynous first marriage, and less likely to be in a monogamous first marriage (see Table 1). Women with secondary infertility did not differ as greatly from other women in terms of these characteristics as those with primary infertility did, suggesting that primary infertility is of more importance in affecting life course events.

Table 1 Marital outcomes by fertility status, Malawi 2004

Marital outcome	<i>Primary infertile</i>		<i>Secondary infertile</i>	
	Not primary infertile	Primarily infertile	Not secondary infertile	Secondary infertile
% divorced	9.9	16.4	6.2	11.1
% married more than once	34.8	64.4	25.5	38.1
% in polygynous first marriage	18.1	21.6	-	-
% in monogamous first marriage	45.4	19.3	57.9	41.0
% with adopted child in house	18.9	25.1	15.2	20.2

SOURCE: (Rutstein and Shah 2004)

The authors suggest that divorce is a 'coping strategy' for men and an 'unfortunate consequence' for women in infertile partnerships. Such interpretations are common in the demographic literature surrounding infertility, but they should be made cautiously in the absence of knowledge about local social contexts. As Reniers points out, it could be that the lower probability of divorce among couples with children is due to women fearing that they will lose custody over their children if they divorce, as is often the case in Malawi (Reniers 2003). His analysis of data from retrospective life history data from Malawian women found that first marriages with children were much less likely to end than first marriages without children (hazard ratio 0.23, $p < 0.01$). However, he concluded that analysis of cross-sectional data could not explain the reasons for this. Because marital instability is unlikely to be on the causal pathway for primary infertility, it might be concluded that primary infertility contributes towards an increased risk of divorce, being polygynously married, and being married more than once. However, pathways by which infertility leads to these outcomes are not clear.

Anthropological or other qualitative studies may be invoked to explain such associations, but cross-sectional surveys are not able to interpret them in depth.

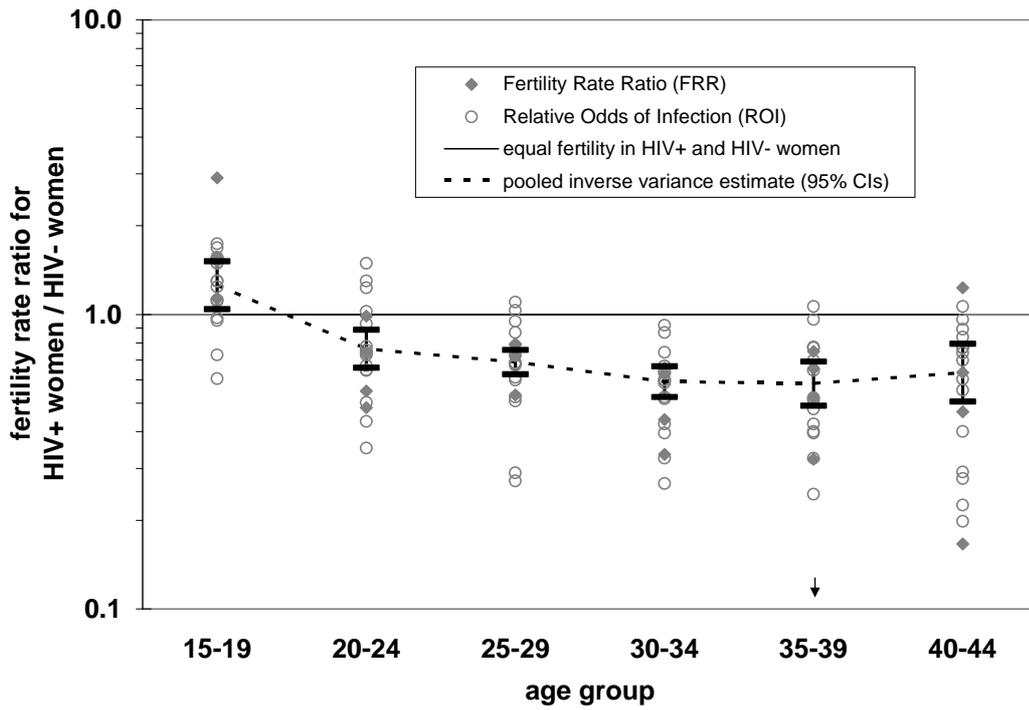
Infertile women were also more likely to have at least one adopted child in the house (Table 1). However, the definition of ‘adopted’ used here is not particularly useful (a child whose biological parents do not live in the household). In this context, a woman ‘adopting’ her stepchild would not be counted as having adopted a child, as the child’s father would still be there. Adoption and fostering are common responses to infertility in many parts of the world, though they appear to be rare in much of Africa. Even in west Africa, where fostering is common in other contexts (Bledsoe 1990), infertile couples rarely adopt children (Araoye 2003). In other regions, including India and Egypt, adoption may also be socially unacceptable (Inhorn 1996; Bharadwaj 2003).

Rutstein and Shah also investigate the possibility that in certain cultures women are expected to prove their fertility before marriage, in which case infertile women might be less likely to marry in the first place. They calculated the proportion of 30+ year old women in various DHS surveys who had ever had sex but had never married, and compared women with and without a live birth. In Kenya, 27.8% of childless non-virgins had never married, compared to just 2.6% of women with children, suggesting that pregnancy was an important catalyst to marriage. In Malawi, the difference between the groups was small: 2.8% of non-virgins with no live births had never married compared to 0.2% of women with at least one live birth. This was one of the smallest differences in the southern African countries examined, suggesting that not conceiving before marriage was not a barrier to marriage.

2.2.4 Fertility and HIV

The global HIV epidemic has disproportionately affected sub-Saharan Africa. In recent years, studies have looked into the relationship between HIV, fertility levels, and fertility related behaviours. HIV positive women have lower fertility than HIV negative women in all but the youngest age group (see Figure 2 and Appendix A; source: Lewis, Ronsmans et al. 2004). Higher fertility in the youngest group reflects selection effects: sexually active women are more likely to become HIV positive as well as pregnant when compared to virgins of the same age.

Figure 2 Fertility rate ratios of HIV positive/negative women, by age, from nineteen studies⁷



⁷ These figures were calculated explicitly in four studies and approximated by the relative odds of infection in fifteen studies. This is the most recent compilation of relevant data: see Appendix A for references of studies involved.

There are several possible explanations for this pattern. Fecundity could be lowered through higher rates of miscarriage (Temmerman, Plummer et al. 1990) (the risk is increased by co-infection with other STIs such as syphilis (Gray, Wawer et al. 1998)), amenorrhea, menstrual disorders and immunosuppression. Factors such as increased partner mortality and reduced coital frequency due to illness could also contribute to lowered fertility (Gregson 1994; Zaba and Gregson 1998). The relative contribution of these different factors is not known. It is unlikely to owe to increased use of contraception among HIV positive women, as these studies were carried out in populations with low levels of contraceptive use, and the majority of women did not know their HIV status.

How the reduced fertility associated with HIV is experienced by individual women is unclear. Some lowered fertility might be attributed to sexual inactivity or obvious illness. Others might experience longer birth intervals, or stop childbearing altogether, which could be perceived as infertility. This raises the possibility that in countries with generalised HIV epidemics, a proportion of women experience HIV-related infertility. This introduces a new dimension to the distribution of infertility's causes, and might affect how women respond to infertility, depending on whether they know or suspect themselves to be HIV positive.

Another factor that could contribute to the observed lower fertility in HIV positive women could be that infertile women are at greater risk of HIV. In a longitudinal study in Uganda (the only study that has estimated the contribution of pre-existing sub-fertility to the lowered fertility of HIV positive women), pre-existing low gravidity⁸ was strongly associated with reduced incidence of pregnancy (odds ratio 0.39; 95% CI 0.19 – 0.81)⁹, accounting for almost 50% of the observed association between HIV and lowered incidence of pregnancy (Ross, Morgan et al. 1999).

The most robust method of investigating whether infertile women are at greater risk of HIV would be to measure HIV incidence in fertile and infertile women. In a study in Tanzania, HIV incidence was found to be only slightly higher in infertile women compared with fertile women, though numbers in the study were perhaps too small to detect a real difference, and the infertile women in question had been recruited from bar

⁸ Defined as women over 20 years old with fewer pregnancies than the 25th percentile in their five-year age band.

⁹ Controlled for age, frequency of sexual intercourse, illness, lactation, and infection with other STIs.

workers and other socially marginalised groups, rather than the general population (Boerma and Urassa 2001). Further population based longitudinal studies would be required to provide stronger evidence that infertile women are at higher risk of acquiring HIV.

One proposed mechanism by which infertile women may be at greater risk of HIV is due to marital instability. Because infertile women are more likely to divorce and marry more than once, they may have a higher exposure to STIs (Boerma and Urassa 2001). It has also been proposed that in some settings infertile women might have extra-marital relationships in an attempt to get pregnant (sometimes with the tacit support of their husband or extended family (Gerrits 1997, for Mozambique)). The hypothesis that infertile women's husbands might have more sexual partners to try to have children has been overlooked in recent works in favour of risk factors relating to women's behaviour.

2.3 Anthropological approaches

The social organisation and interpretation of human reproduction varies enormously across space and time, and this review discusses anthropological insights pertinent to the study of infertility. The following section is arranged according to different approaches taken to infertility and reproduction. It ends by summarising several influential studies, characteristic of recent trends in anthropological demography, which have employed both qualitative and quantitative approaches to problems such as infertility.

The literature on social aspects of fertility in sub-Saharan Africa reflects broader fashions in academia and policy. Anthropologists and demographers have always been interested in reproduction. Early ethnographies typically mentioned infertility in the context of kinship studies, whilst demographers studied infertility as a proximate determinant of fertility, and an explanatory factor for high fertility rates in Africa. With the advent of feminist approaches in anthropology, pregnancy and motherhood became popular topics of enquiry (Maclean 1982; Bledsoe 2002; Roth Allen 2002), and several recent ethnographies have provided rich local data on infertility, situating it as an RSH issue (Udvardy 1990; Feldman-Savelsberg 1994; Inhorn 1996; Gerrits 1997; Cornwall 2001; Pool and Washija 2001; Runganga, Sundby et al. 2001; Leonard 2002; Dyer, Abrahams et al. 2004).

Structural functionalist approaches have looked at the role of children in social life and how they contribute towards the maintenance and reproduction of society. Such an approach is typified by the Caldwells' hypothesis on sub-Saharan Africa's 'resistance' to lower fertility. They argued (using a rather ambiguous definition of 'culture' as a 'religious belief system') that culture caused African societies to maintain high fertility rates, primarily through concern that without descendants, one could not become an ancestor oneself. This fear of childlessness was thought to contribute to high fertility rates:

The horror of barrenness goes far towards explaining the fear of limiting family size, the aversion to sterilisation, or to accepting that family size is now complete, and the apprehension of most methods of sterilisation. (Caldwell and Caldwell 1987; 418)

The anthropologist Brian Morris has also argued for the importance of having children within the context of the traditional religion of ancestor worship in Malawi (Morris 2000). Failure to have children meant that after death, one's perpetuation through the commemorative acts of descendants was not assured.

In this framework, children are seen in terms of their structural and functional importance, which is determined by the local context. In much of rural sub-Saharan Africa, in economic terms, these benefits include labour contributions to the household economy, receiving inter-generational wealth transfers from grown children in old age (Oppong 1992), and having a 'child to send' on errands (Gijssels, Mgalla et al. 2001). Having children gives women their place in the domestic cycle. Having sons who bring daughters-in-law into the household confers status onto older women, who can delegate work to their daughter-in-law. Daughters might bring bride price payments to their family upon marriage. As often the most mobile members of households, children may be actors in adults' political alliances (Bledsoe 1995). Having children may cement marriages and secure economic support from men for women (Feldman-Savelsberg 1999; Runganga, Sundby et al. 2001). In some areas of Africa, a marriage is not seen as finalised until a child has been born (Guyer 1994). Infertility may thus deny men and women these benefits.

Other approaches have focused on the disproportionate burden that women face in the experience of infertility, and the gender inequalities which mean that having children is

the principal way of women improving their status in sub-Saharan Africa, as in much of the world (Inhorn 1996; Hellum 1999). The argument is that in Sub-Saharan Africa, women have lower status than men, and labour is divided according to gender. In this system, women's principal role is producing and nurturing children, and having children helps them to acquire additional status as they get older (Caldwell and Caldwell 1987; Spring 1995). Infertile women might thus be denied opportunities for improving their social status. The Caldwells paint a bleak picture of infertile women's lives in rural Nigeria in the early 1980s. Regarded as witches responsible for their own condition, they were sent home, lived beyond their villages or had their bodies despoiled at death. Other negative consequences reported for infertile women have been domestic violence, psychological distress and facing social stigma (Daar and Merali 2001). Yet in some studies, infertility was not found to have such dire effects. In West Africa, child fostering is widespread, affording infertile women some of the benefits of having children (Bledsoe 1990). In Mali, women with no or few children, and hence fewer domestic responsibilities, can be very successful in the commercial sphere, able to travel and trade at markets (Castle 1992).

Such approaches have been criticised for being too narrow, looking at women as passive daughters, wives, and mothers in patriarchal systems (Mohanty, Russo et al. 1991). Women in developing countries are often talked about as though they were a homogenous group sharing similar status and concerns in the face of male domination. A call has been made for women to be reconceptualised as active agents in social life, who can and do influence their reproductive careers (Bledsoe, Banja et al. 1998).

The following studies describe how anthropologists have moved away from the individualistic cost/benefit perspective of having children, and have situated infertility in the wider social realm. Fertility is often the concern of the social group (be it a family or village) rather than the individual or couple. Failure to produce sufficient children can be seen to threaten the very existence of a lineage, village, or even state (Inhorn and Buss 1994c; Feldman-Savelsberg 1999), and to ensure the continuation of the group, elders may intervene. This might take the form of facilitating treatment, or encouraging people to divorce an infertile partner, or take an additional partner (Maclean 1982; Peltzer 1987).

Infertility can have important symbolic aspects at the group level. In Feldman-Savage's ethnography on infertility in Cameroon, she found a wealth of symbolism associated with infertility: if large numbers of children represented good fortune, health and social status, she argued, then infertility was the 'quintessential indicator of bad fortune' and bore little relation to medical concepts of infertility (Feldman-Savelsberg 1999; 101). Infertility was interpreted as a sign of the overall decline of the Bangangté kingdom, reflecting on the potency of the royal family in particular.

Bledsoe (2002) suggested another potential aspect to the experience of infertility when she argued that the process of childbirth is seen to cause ageing amongst Gambian women, who do not see the process of ageing as an accumulation of chronological age, but rather as the result of accumulated 'wear and tear' resulting from repeated childbearing. A childless woman has therefore never aged, which was undesirable in societies where elders had elevated social status:

Suspended in an eerie state of agelessness, she knows that insinuations of supernatural interference hang over her. (Bledsoe 2002; 228)

In her influential study of women and infertility in Egypt, Inhorn powerfully argues that childbearing largely defines women's identity. Infertility was an unexpected, chronic life crisis. Unable to proceed according to life course norms, infertile women felt incomplete, inadequate, and painfully different from their neighbours. The strength of Inhorn's argument lies in her use of a feminist and political economy approach: she contextualises reproduction in Egypt within the broad economic and social environment in which women are socially and physically isolated and disempowered. Children were a source of comfort and companionship and a way of improving women's tenuous social status (Inhorn 1994a; Inhorn 1996).

She also outlined a ritual process of seeking therapy, in which infertile women may face health problems from iatrogenic (medically induced) symptoms, caused by invasive procedures or toxic preparations such as pharmacologically active herbs inserted into the vagina. Such 'quests for conception' have been detailed in other anthropological studies of infertility (Leonard 2002; Bharadwaj 2003). Women, and sometimes their husbands, often undergo long and arduous treatment-seeking, visiting both traditional healers and hospitals (though suitable services are rarely available). Inhorn argues that

the difficulties surrounding infertility are compounded by the poor status of women and health systems in many parts of the developing world.

In her ethnographic work with the Pemba in Tanzania, Kielmann (1998) expanded the study of infertility to look not just at affected individuals, but also at the local discourse around infertility. This placed the responsibility of infertility within the context of social relations such as jealousy and bewitchment: she also saw infertility as an embodiment of day to day concerns such as ‘compromised physical conditions and disturbed social relations’ (Kielmann 1998; 139). There was evidence for a more modern discourse in which infertility was seen a punishment from ancestors or God, provoked by immoral behaviour such as drinking alcohol, promiscuity, contraception, and un-Islamic activities. Infertility could therefore have a detrimental impact on women’s identities and moral credentials.

There have been several small scale qualitative studies of infertility carried out in southern Malawi (Barden-O’Fallon 2005), Botswana (Mogobe 2005) and South Africa (Dyer, Abrahams et al. 2002b). Whilst providing interesting local details, these studies are limited in their approach. They were typically carried out over a short time period and with little contextualisation of findings. They tend to report what people ‘say’ about infertility in focus groups or interviews, whilst not making deeper inferences or theorising from results. Whilst it is useful to examine normative responses to infertility, they are not a substitute for investigating the lived experience of women affected by infertility. Some studies have concentrated on the exotic and peculiar cases, without paying attention to more typical, everyday experiences.

Fear of infertility at the community or even national level has also been investigated as a social phenomenon. Fear of infertility or rumours concerning causes of infertility have affected the delivery of family planning and primary care services such as vaccination programmes, most recently in Nigeria, where polio vaccine coverage has dropped catastrophically due to local fears that it would sterilise female children (BBC 2004). Historically in Malawi, the roll out of free contraceptives was delayed by many years by the government’s fear that the population would react unfavourably, as there were widespread rumours that the family planning programme intended to sterilise women. Such fears persist in Malawi: any fertility-related activity such as promoting condom use is viewed with suspicion (Kaler 2004). It has also been proposed that Nigerian

women may resort to illegal and unsafe abortion rather than use hormonal contraceptives, which they fear will damage their fertility (Okonofua 1997). If levels of knowledge concerning the relationships between STIs, HIV and infertility are low, as they have been found to be in Uganda (Nuwaha, Fixelid et al. 1999), women's perceptions of relative risks to their reproductive health and fertility might not accord with epidemiological estimates of risk. For instance, illegal abortions or having unprotected sex at a young age is quantifiably more harmful for fertility than using suitable contraceptives or condoms to prevent HIV, STIs and youthful pregnancy, yet the examples just mentioned suggest that some women do not view these risks in the same light.

2.4 *Infertility within reproductive and sexual health*

Infertility does not occupy a central place in the conceptualisation of reproductive health at an international level, although the stated goals of the ICPD follow up, ICPD+5, include:

By 2005, 60% of primary health care and family planning facilities should offer prevention and management of RTIs, including STIs and barrier methods to prevent infection.

ICPD+5 21st special session, agenda item 8 (53) (WHO 1999)

Although objectives agreed at the ICPD aimed to be human rights-based and holistic, they were underpinned by the expectation that women would use their 'reproductive choice' to reduce their fertility. The fact that infertility is afforded so little attention conceptually or financially reflects the dominant rhetoric in population programmes of fertility reduction (Kielmann 1998). A handful of scholars have taken up this point but face the challenge of arguing why infertility should be accorded additional attention and resources in the face of other demographic and health challenges such as maternal mortality, HIV and AIDS, and continuing high fertility rates (Sundby 1998; Okonofua and Datta 2002).

Yet the literature demonstrates that infertility remains a significant concern for people across sub-Saharan Africa. In the early stages of Nigeria's family planning programmes in the 1970s, many women would turn up to clinics because they wanted more, not fewer, babies (Adadevoh 1974). African contributions to RSH policy have repeatedly stressed their concern with the 'tragedy' of infertility and considered it a high socio-demographic priority. A vocal proponent of this view is Professor Okonofua (consultant

obstetrician and gynaecologist from the University of Benin in Nigeria), who has repeatedly called for attention to be paid to the prevention and early management of genital tract infections, which cause a large proportion of infertility. He strongly believes that infertility prevention, treatment and counselling should be a part of reproductive health and family planning programmes (Okonofua and Datta 2002; Okonofua 2003; Okonofua 2004).

Some of the research and advocacy around infertility has started to have an impact. Family Health International has recently begun to advocate the use of a 'triple protection' message for family planning clients (Brady 2003; Shears 2003): that abstinence, being faithful and condom use (the ABC approach to HIV and STI prevention) can protect against unplanned pregnancy, STIs and infertility. They argue that it makes more sense to relate safer sex to fertility, rather than disease prevention, as this destigmatizes issues around STIs and HIV (Brady 2003). By shifting health messages to reflect local concerns about infertility, the aim is to reduce infertility whilst simultaneously strengthening family planning and STI prevention efforts and winning the trust of communities.

2.5 Study context: northern Malawi

2.5.1 History, politics and economy

Malawi is a small, landlocked country in south eastern Africa with an area of 118,480 sq km and a population of just over 13 million (CIA Factbook 2006) made up of several ethnic groups (including Ngoni, Tumbuka, Tonga, Yao, Chewa, Lomwes, Senas, and Mang'anjas). English and Chichewa are official languages but regions also have predominating local languages. The country has three administrative regions, which are divided into districts. Each district is divided into Traditional Authorities headed by Chiefs (Chiweza 2005). Villages are controlled by Village Headmen (though occasionally a woman inherits this role), who administer land, co-ordinate development and community activities, and may mediate in marital and family disputes.

Previously known as Nyasaland, Malawi became a British Protectorate in 1891. Independence was gained in 1964. From this point, national unity became a priority for the President, Hastings Banda, who led a one party state from mid-1966 until 1994 (Ross and Phiri 1998). His authoritative rule was enforced through militarised youth

brigades and control over the media. He emphasised 'traditional' ways of life (subsistence agriculture, modest dress), and did little to expand manufacturing or industrial agriculture (Ribohn 2002). Chichewa and English were made official languages and no local languages were taught in schools (Kamwendo 2002). The transition to multi-party politics followed civil unrest in the early 1990s (there was no widespread violence). Elections were held in 1994 and a fledgling democracy is developing (VonDoepp 2002).

With few mineral resources, Malawi is one of the world's poorest countries (ranked 165th out of 177 countries using the Human Development Index) (UNDP 2003). Its GDP per capita value is \$605 (PPP US \$), a third of the average for sub-Saharan Africa (UNDP 2003). Almost 80% of the population rely on subsistence farming (Machinjili 1998). Food insecurity is high due to frequent crop failures. High rates of population growth (3% per year between 1975 and 2002), crumbling infrastructure, increasing environmental degradation, and failure to sustain economic development mean that some have argued that standards of living have fallen since the 1990s (Kalipeni 2000; VonDoepp 2002). External debt from the 1980s and structural adjustment programmes of the 1990s only served to decrease investment in basic public services. Civil society (and in particular, the churches) is responding to these crises by rallying at the local level (VonDoepp 2002), and the extended family provides a locus of support and resource sharing. Primary education has been compulsory and fees removed since 1994. By 1998, 59% of Malawians had been to primary school, and 8% to secondary school, and the literacy rate (any language) was 64% for men and 51% for women (National Statistical Office and ORC Macro 2001).

The study was based in the Northern region, the most rural of the regions, but with the highest education and literacy indicators (Zulu 1996). Livingstone and subsequent missionaries, especially from Scottish churches, were largely responsible for developing the basic health and education infrastructure (King and King 1992). The churches still administer many of the region's schools and clinics. Christianity is the predominant religion in the Northern region, representing 96% of people; 1% are Muslim (compared to 21% in the Southern region) (Machinjili 1998). The north is largely populated by Chitumbuka speaking peoples, thought to be descended from Bantu peoples who moved into the area during the 13th – 15th centuries A.D. (Young 1932). There is little modern ethnography written on northern Malawi, and available material largely consists of

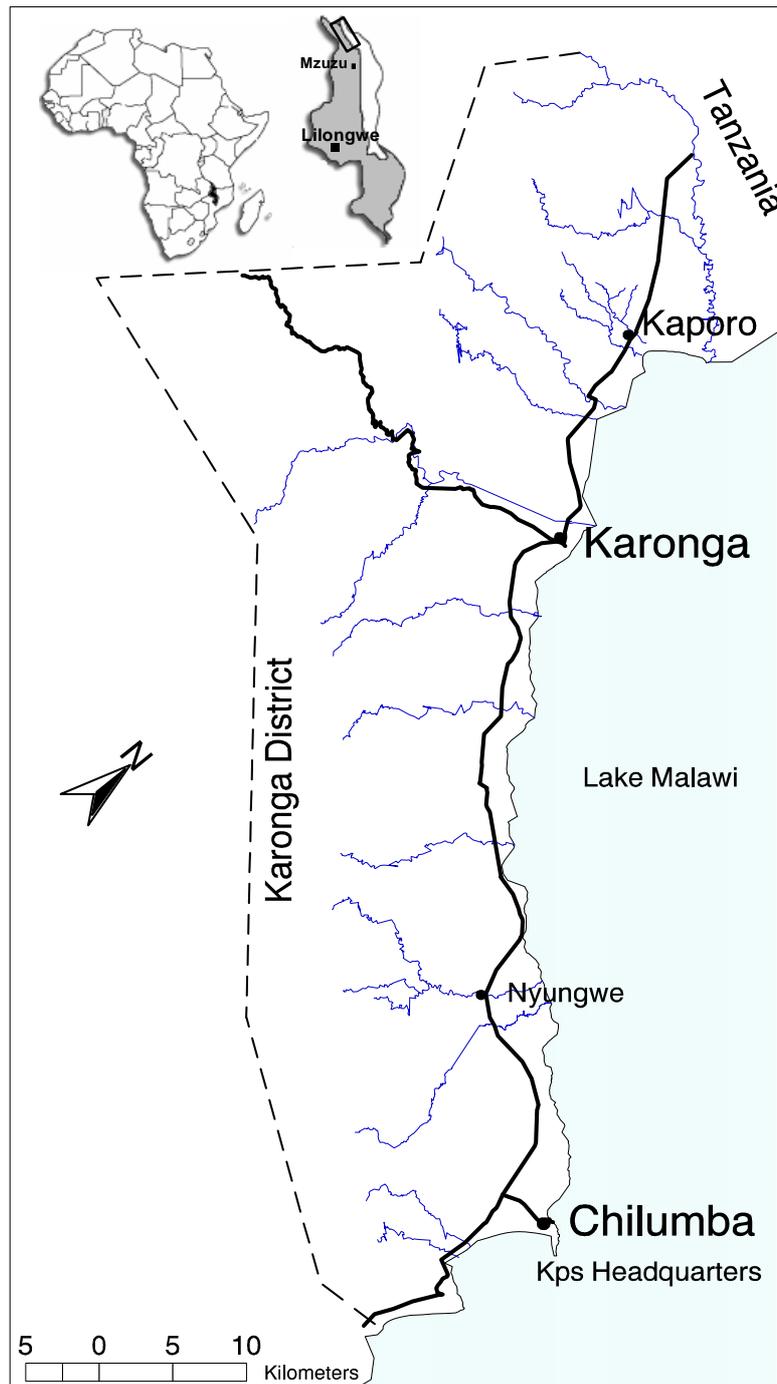
amateur writings in religious tracts. The last notable studies of the Tumbuka were by missionary T. C Young in the 1930s. He believed that they used to be matrilineal¹⁰, like their southern counterparts, but that incoming traders and invaders introduced the prevailing patrilineal descent system (from the mid-nineteenth century, the region was invaded by the Ngoni, and Arab and Portuguese slave traders). The present system of men paying bride price to their wife's family upon marriage was then cemented by colonial bureaucracy. Young also discussed the 'good village', a concept that prevails to this day. He quotes a Tumbuka man:

‘A good village is where the headman and elders are respected by all: and where they too have regard for all, even for the children. It is a good village where the young respect parents and where no one tries to harm another. If there is even one person who belittles another person or works harm, then the village is spoiled’ (Cullen Young 1934; 90)

It was thought that a good village should have numerous people, and increasing numbers were desirable for strength and prestige. This desire was shaped by the real and historical threat of de-population through slave trade kidnappings, slaughter by invading peoples, drought, and disease.

¹⁰ System of tracing kinship and descent through the female line.

Figure 3 Malawi within Africa; Karonga district within Malawi.



2.5.2 Demographic and health profile

Women in Malawi marry relatively young compared to other southern and eastern African countries (see Table 2), and men are at least six years older than their wives in 50% of marriages in Malawi (Reniers 2003). In northern Malawi, descent is patrilineal and post marital residence is usually patrilocal (with, or near, the husband's household), though couples are increasingly likely to live neolocally¹¹ (Peltzer 1987). This is in contrast with southern Malawi, which has matrilineal and uxorilocal¹² systems. Men commonly take more than one wife: estimates range from 40% of women in first marriages having a polygynous husband (rising to 65% of women in their second marriage) (Reniers 2003) to 26% of all women having at least one co-wife (National Statistical Office and ORC Macro Calverton 2005). Divorce rates are some of the highest recorded in Africa (there is a lifetime probability of divorce of 40% in northern Malawi) though the causes are unclear, and once divorced, re-marriage is very common and fairly prompt (Reniers 2003).

Table 2 Selected demographic indicators, Malawian women

20-24 year olds never married	12.0%
Median age at first sex, 25-49	17.3
Median age at first marriage, 25-49	18.0
19 year olds who have begun childbearing	67.9%
Median age at first birth, 25-49	19.0
Total Fertility Rate 1970-1975	7.4
Total Fertility Rate 2001-2004	6.0

SOURCE: National Statistical Office and ORC Macro Calverton 2005

Fertility rates are high and youthful: 33% of teenagers have begun childbearing (National Statistical Office and ORC Macro Calverton 2005). The recent decline in total fertility rate (Table 2) is largely attributable to the 40-44 year age group (Kirk and Pillet 1998). Family planning programmes have had a chequered history in Malawi. Initial attempts to introduce them in the 1960s were halted by the government, who believed population growth would enhance agricultural productivity. They also feared a public backlash due to widespread rumours that they were actually planning mass-sterilisation of the population (Zulu 1996). This may have contributed to rates of modern contraceptive usage being among the lowest in sub-Saharan Africa. Contraceptives were

¹¹ With neither the husband nor wife's kin.

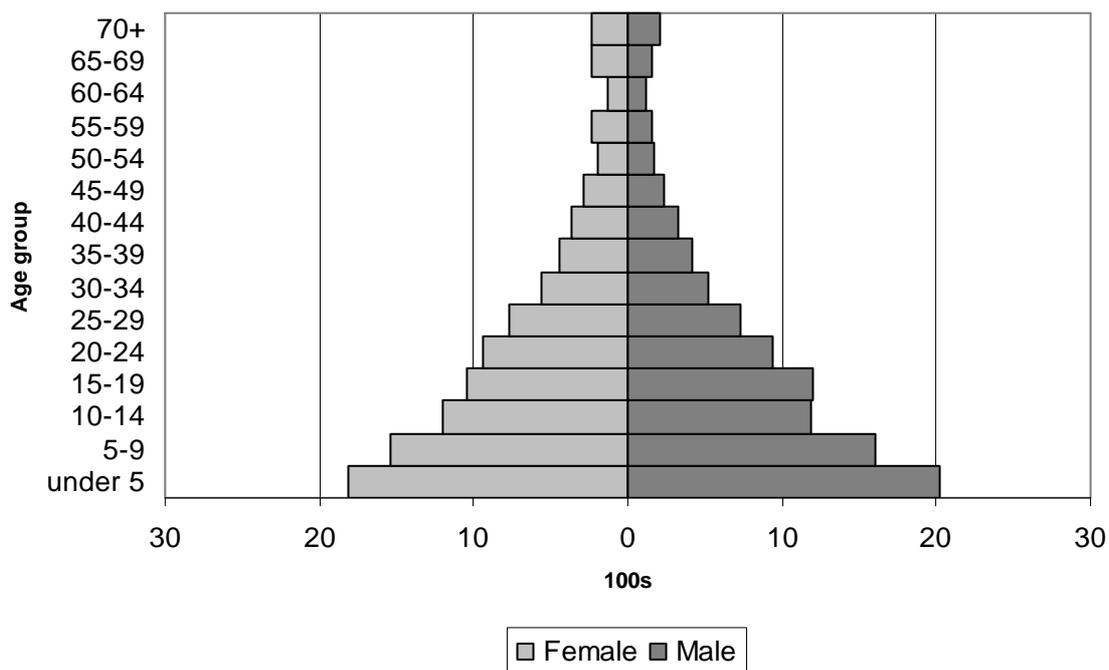
¹² Residence with or near the wife's kin.

only available privately until 1984, when a 'child spacing' programme was introduced. It was not until 1994 that the government explicitly stated its goal of fertility reduction and introduced its first population policy, and in 1996 family planning programmes were liberalised (Thomson 1999). In the most recent DHS survey, 28.2% of all married women were currently using a modern method of contraception, up from 7.4% in 1992 (National Statistical Office and ORC Macro Calverton 2005).

Sexual and reproductive experiences are structured by gender norms, which may place girls and women in a vulnerable position in terms of exposure to STIs, which are in turn a risk factor for infertility. Fifty five percent of a sample of 120 adolescent girls in Malawi reported being 'often forced' to have sex against their will (Helitzer-Allen 1994). Additionally, economic necessity may encourage young women into relationships with older men (Meekers and Calves 1997). Age and status differentials between women and their male partners might make it difficult to negotiate contraceptive and condom use (Longfield, Glick et al. 2004). Especially in the south of Malawi, initiation rites, cleansing ceremonies and customs such as widow inheritance have also been investigated for their impact on reproductive health as they frequently involve potentially risky sexual encounters (Kornfield and Namate 1997a).

The youthful age structure of the study area is typical of a pre-fertility transition population: the result of high fertility and mortality rates (see Figure 4). Adult mortality rates have risen in the last decade, largely due to the AIDS epidemic. Consequently life expectancy at birth has fallen from 41.8 years in 1970-75 to 39.6 years in 2000-05 (UNDP 2005). As in most of sub-Saharan Africa, malaria, intestinal diseases, tuberculosis, accidental death (especially road traffic accidents), perinatal conditions, childhood illnesses, respiratory and cardiovascular problems are important causes of mortality.

Figure 4 Population of demographic surveillance area 2004-5, KPS baseline census



SOURCE: KPS (n=25,574)

Infant and child mortality is also relatively high: 7.6% of live births do not reach a year old, and 13.3% will die before age five (National Statistical Office and ORC Macro Calverton 2005). This is significant in the context of understanding fertility related behaviour, because people may want larger families in the expectation that not all children survive to adulthood. The maternal mortality ratio is also amongst the highest in the world at 984 deaths per 100 000 live births (AbouZahr and Wardlaw 2003).

Malawi's national HIV prevalence is around 14% (UNAIDS, WHO et al. 2004). In Karonga district, HIV prevalence peaks at 30% in women aged 30-35 years (Jahn, Ngwira et al. 2004). Antiretroviral therapy (ART) became available in June 2006 at the district hospital, and has since been rolled out to rural hospitals, including Chilumba. Therapy is available to all who need it and is free at the point of delivery. By the end of 2006, waiting times had not exceeded two months.

Traditional medicine plays an important role in Malawi, and is used by all sectors of society (Morris 2000; Barber 2003). Jealousy, witchcraft and troubled social relations are seen as the root of many health problems (Peltzer 1987). Many complaints are attributed to spirit possession (vimbuza), requiring dance therapy (Ncozana 2002). People can become traditional healers through spirit possession or training from a

grandparent, and are supposed to be registered by law. They practice from their homes or market places; some have in-patient accommodation. Payment can be by cash or gift, and is often not requested until a patient is cured. Medicines usually consist of plant-based preparations, which are eaten, bathed with, or inserted into skin incisions.

2.6 Summary

This study was not undertaken because of the particular magnitude of the problem of infertility in Malawi, in fact, levels of infertility in Malawi are lower than many sub-Saharan African countries. There are several other reasons why the problem of infertility has provoked attention in spite of this. Epidemiological analyses have suggested links between HIV and infertility, though the nature of the association remains unclear. Infertile women have recently been identified as a possible 'high risk' group for HIV, but the epidemiological evidence is too scarce to be conclusive, as are theories about the scale and nature of the proposed mechanisms by which infertility might expose women to greater risk. Anthropological literature illustrates the nature of the problem of infertility, and its great importance both to affected individuals and concerned communities throughout sub-Saharan Africa. This importance is at odds with the low priority accorded to infertility at local and international level in RSH. Anthropological literature shows how infertility touches upon numerous aspects of women's lives. It involves individuals, couples and wider communities; affects livelihoods, marriages, health and well-being; has effects across the life course, and has symbolic, political and gender dimensions.

Some of the most insightful recent studies of infertility have combined qualitative and quantitative approaches. Yet combining these approaches can be problematic: there has been a tendency to interpret quantitative associations involving infertility with rather crude and sweeping interpretations, drawn from cursory reference to anthropological literature from different regions in Africa. Likewise, qualitative findings have been used to suggest that women might be at greater risk of acquiring HIV where no measurable mechanisms have been demonstrated.

This study is unusual compared with other studies of infertility, as it is a largely qualitative study nested within a population for which demographic surveillance data are available. Associations between infertility, marital instability, and health outcomes can be investigated, and qualitative methods can look at why these associations might

be found. By combining qualitative and quantitative results from the same population over the same period of time, the validity of comparisons is increased.

Setting the research in Malawi provides an appropriate context to investigate the research aims. With a low contraceptive prevalence rate, high divorce and fertility rates, a generalised HIV epidemic and a political and economic climate and history that has affected the delivery of reproductive health services and limited peoples' modes of subsistence, Malawi is a potentially insightful study area in which to investigate themes highlighted in the literature review. Issues such as the importance of children, mistrust of modern contraceptives, the role of children in marriage, divorce and polygyny, and the role of the extended family are all particularly pertinent in Malawi.

Lastly, the literature review revealed infertility to be an area with great potential for improvement in services and prevention. Most infertility in sub-Saharan Africa is preventable, and it has been suggested that incorporating basic infertility education and counselling into existing services could potentially the prevalence of fertility problems whilst increasing people's trust in services (which at present are likely to be associated with disease prevention and fertility control, methods of which are sometimes thought to harm fertility themselves). Strategies to reduce risk factors for infertility are complementary to other RSH priorities, including the improvement of maternal health, prevention and early treatment of STIs, discouragement of sexual activity among the very young, and promotion of safe sex.

3 Conceptual Framework

3.1 Introduction

This chapter details the perspectives taken during the research, and presents a scheme illustrating how various social and biological aspects of infertility were seen to relate to each other. The main perspective employed was a life course approach, which views women's lives as dynamic wholes embedded within social structures (Das Gupta 1995). As such, no life course event or process (be it marriage, or household conflict) is analysed without reference to the life course as a whole, and the context in which it is lived. This approach encourages an awareness of the interrelatedness of different aspects of women's lives such as their fertility, social status and health, and how these are conditioned by broader structural factors such as marital norms and economic constraints (Kuh and Hardy 2002). The methodology is underpinned by critical perspectives on reproduction taken from anthropological demography. These include a gendered perspective and the use of the analytical concepts of social structure and agency (Greenhalgh 1995).

3.2 Life course approach

Epidemiological life course approaches use longitudinal data to examine cumulative exposures over long time periods and their relationship with outcomes in later life (Owen, Martin et al. 2005).

[Life course approaches] assess the biological and social factors at each stage of life...[and] also study the biological, psychological, and social pathways that link early life experiences, reproductive events, conventional adult risk factors and health outcomes in later life. (Kuh and Hardy 2002; 3)

In anthropology, life course approaches typically look at socialisation, development, and transitions. They see the individual as constantly interacting with the household, and with changes in wider society (Hareven 1978). The life course approach has these ideas at its core: that there are pathways by which earlier experiences condition later outcomes, and that life courses are embedded within immediate localities and broader social environments.

Many anthropological writings discuss how infertility 'disrupts' the life course, preventing expected transitions to motherhood, or the accumulation of status through

having children, or rendering women more vulnerable to negative health outcomes or marital dissolution (Feldman-Savelsberg 1994; Inhorn and Buss 1994c; Leonard 2002). This implies that there exists, at some social level, a widely recognised ‘normative’, or expected, life course, against which women interpret their own experiences. One of the challenges of taking a life course perspective was to characterise the nature of a normative life course for women in the study area, as this shaped women’s narratives. Information on this was collected through wide ranging life history discussions, group discussions, and observations and field notes made during fieldwork.

The life course perspective encourages infertility to be seen as a dynamic process rather than a static personal attribute or diagnosis. The problem of infertility can affect women across their lives: as early as their teenage years, throughout their ‘childbearing years’, and into older age. Contextualising experiences of infertility within women’s overall life courses encourages an awareness of the interrelatedness of childhood experiences, partnership formation and dissolution, reproductive history, STIs, and treatment-seeking (Gray, Wawer et al. 2002). Life history narratives made up the main data source, and women’s life histories were treated as wholes rather than being broken down into constituent parts and decontextualised. Each woman’s unique history and set of circumstances shaped her current situation: narratives were a product of past events and present situations.

3.3 *Critical perspectives*

Anthropological theory has informed demographers wanting to take a more critical approach to reproduction and gender (Greenhalgh 1995; Coast 2003). The following section describes such perspectives as they were employed in this research, focusing on gender and the concepts of social structure and individual agency. Through the application of these critical perspectives, the aim is to build ‘whole demographies’ (Greenhalgh 1995, p12), which contextualise reproduction not only in conventional social and economic terms, but in political and cultural terms as well.

3.3.1 Gender

Gender, the social construction of the roles of ‘male’ and ‘female’ (as opposed to biologically determined ‘sex’), is a central organising principal in social life. Differentiation between genders is central to any analysis of reproduction, as men and women face different vulnerabilities, expectations and life course norms (Hardy and

Makuch 2001). Within social life, all structures are gendered, and we would expect, from the literature review, that the experience of infertility would be a highly gendered social phenomenon.

A gendered analysis must by definition consider men (Doyal 1998). Men in infertile couples can also feel stigmatised and low in social status due to infertility (Dyer, Abrahams et al. 2004), and their responses to infertility are important in determining women's life courses. There are several logistical and analytical reasons why this study focused on women. Firstly, the original rationale for the study was to investigate further findings from a demographic survey that collected data only on women's health and fertility. Secondly, women experience most of the burden of blame and consequences of infertility. Thirdly, the qualitative components of the study were managed by a female researcher, present in almost all of the interviews, in an environment where it was not appropriate to discuss personal matters with members of the opposite sex. Lastly, the existing literature suggested that it was women's lives that were most affected by infertility, especially in societies where divorce and/or polygyny was common (Gerrits 1997; Kielmann 1998; Mogobe 2005). Although men were not the subjects of life history interviews, men's voices were captured using other qualitative methods.

3.3.2 Social structure and agency

This section outlines the perspective taken on the relationship between individual women's lives and broader social structures. A social structure is seen as an abstract entity (such as a kinship system or marital customs) which defines a set of structural possibilities, and which can be identified at a certain point in time in a certain location (Giddens 1979). Social structures within any geographically defined area are not closed systems: they are subject to continuous change and contestation, and are influenced by external and internal people and ideas. In spite of this, social structures are relatively durable and widely understood within their areas of operation (Fairclough 2003; 23). Social structures can be seen to operate at the global, national, regional, local or household level, all of which can be seen to influence a woman's life course. As children are an important bargaining tool in households, potentially used to secure resources and favour by co-wives, analyses of infertility should be situated in a household context, in which co-operation and conflict exist side by side (Bruce 1989). But because the causes and consequences of infertility are shaped by global forces

which inequitably structure wealth, power, resources and knowledge (Doyal 1995), the analysis should also take into account the wider context.

The relationship between what is theoretically possible within a structure and what actually happens is mediated by ‘social practices’ (Fairclough 2003). Social practices control the selection of certain structural possibilities and exclude others. Norms structuring marriage might favour patrilocal residence and marital payments before marriage, but in practice people set up their own households or make marital payments by instalments. Social practices produce social events (marriage, childbirth, treatment-seeking), which make up the data that people most commonly relate to researchers. Part of the process of analysis is to contextualise social events by making inferences about social practices and structures.

Within this approach, women are seen as active participants in social life, possessing the quality of ‘agency’. Agency (the ability to make and implement choices) is a concept brought to the demographic study of reproduction by anthropology. Agency recognises individuals’ ability to exert themselves within the context of ‘cognitive and motivating structures’ and within a ‘socially structured setting’ (Greenhalgh 1995; 19). It attributes individuals with the quality of being able to strategise, manipulate, negotiate, or resist structures or practices, within the boundaries of, but not determined by, a particular social context (Samuelsen and Steffen 2004). Thus the relationship between structure and individual agency is seen to be mutually constitutive (Giddens 1979).

3.4 Conceptual framework

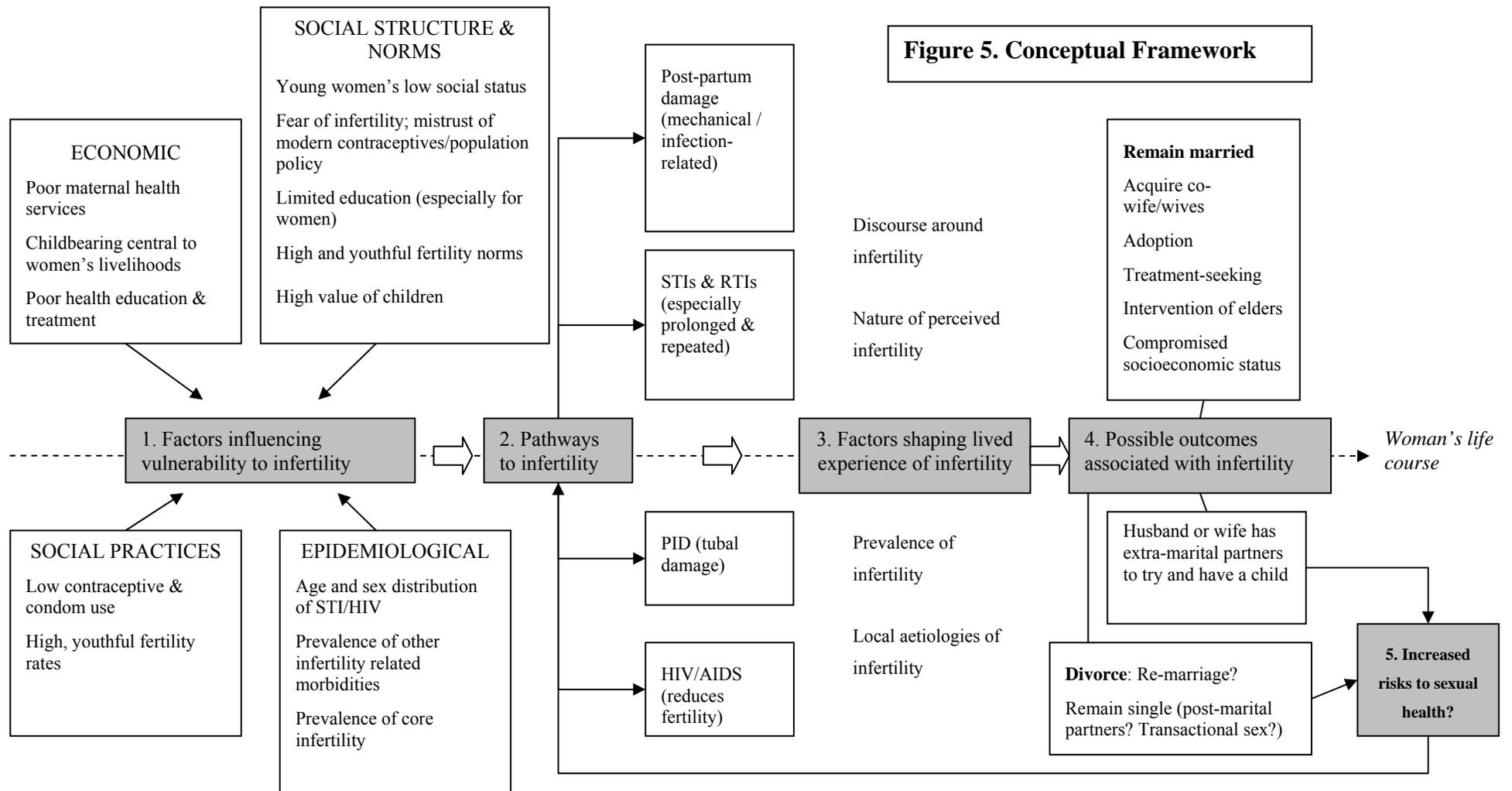
The conceptual framework diagram (Figure 5) illustrates the thinking behind the research methodology and interpretation of resulting data. The scheme is a broadly chronological representation of how infertility might be experienced across women’s life courses. It reflects the central interest of the life course approach in looking at the interconnectedness of processes over time.

Box 1. These are contextual factors that influence risk of acquired infertility in the study area. These factors also influence the context of the ‘lived experience of infertility’ (Box 3), and have implications in terms of public health recommendations for preventing and managing infertility in this area.

Box 2. The biological pathways to acquired infertility. This study did not identify pathways to infertility in participants, or distinguish between core and acquired infertility. Of interest was whether participants understood biological pathways to be related to their experiences of infertility, and how women responded to any of these experiences.

Box 3 outlines the social and cultural factors that shaped women's lived experience of infertility. Local aetiologies of infertility were considered in order to see how people made sense of their experiences. Of particular interest were the processes linking **Box 3** with **Box 4**, the possible outcomes of infertility. How did experience of infertility result in particular outcomes, and what might explain variations in outcomes? Life history interviews examined these processes. Certain outcomes could result in an increased sexual health risks (**Box 5**). For instance, infertile women may be at greater risk of HIV due to their being more likely to be divorced. Thus Box 5 links back to Box 2.

Figure 5. Conceptual Framework



4 Methodology

4.1 Introduction

This chapter presents the study's research methodology, which integrates qualitative methods with survey data analysis. Primary qualitative data collection involved in-depth life history interviews with fertile and infertile women, focus groups, expert interviews, and making observations and field notes over ten months. Qualitative data were supplemented by secondary analysis of demographic survey data, collected by KPS, which helped set the demographic context and explore the relative risk of various demographic and social outcomes according to fertility status. These included recent census data, a study of women who had not attended ANC in the four years prior to census (the ANA study), and ANC data. This chapter describes the selection of methods, how qualitative and quantitative components relate to each other, and implementation of the methodology.

4.2 Integrating qualitative and quantitative approaches

Qualitative methods were chosen to address certain aspects of the research objectives. Researching local definitions of infertility and treatment-seeking responses required preliminary exploration of experiences and beliefs relating to fertility, and an appreciation of the wider sociocultural context. Life history interviews were carried out to gain a sense of the complex processes by which infertility affects women's lives. An interpretive and explorative approach was adopted as it was considered to be the most appropriate way of tackling subjects such as reproduction, familial and marital relationships, sexuality, and other complex personal issues (Kleinman 1992). The final research objective was to evaluate the current place of infertility within current RSH discourse, and challenge prevailing assumptions and definitions around infertility.

These methods benefited from being carried out within a population for which detailed and contemporary demographic and health data were available. Some of the research questions aimed to detect associations at the population level between infertility and outcomes such as divorce or HIV status, results that qualitative data cannot provide. These research questions were based on pre-determined categories of infertility and social and health outcomes, and pre-determined hypothetical links between them (such as the idea that infertility might contribute to divorce). Quantitative data set the

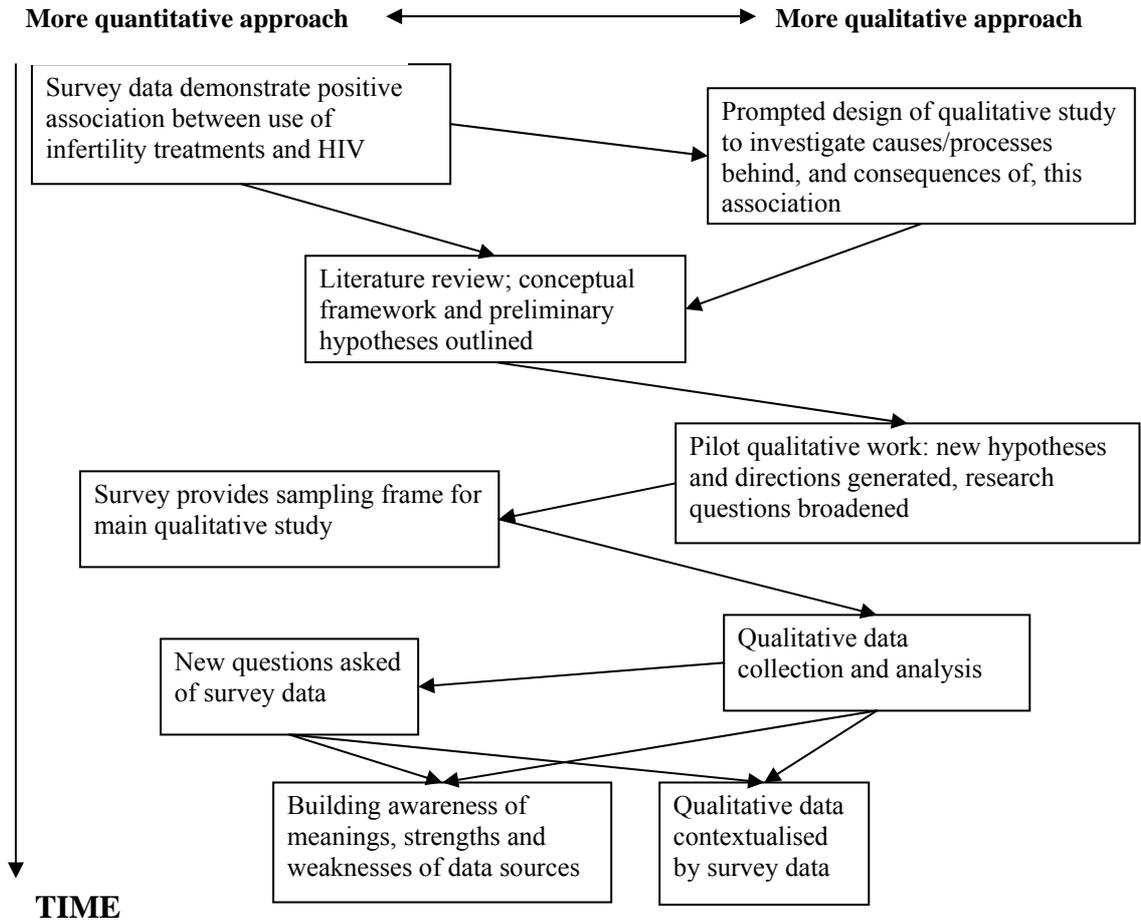
demographic context. These background data deepened understanding of the environment in which women experienced infertility.

Combining qualitative and quantitative approaches requires an awareness of the types of findings they produce. The demographic positivist tradition aims to represent the scale, determinants, or distribution of phenomena. Qualitative approaches aim for an understanding of the significance and meaning of phenomena in people's lives, and do not analyse narratives as objective, externally verifiable realities, but as accounts which are products of a particular locus of time, place and people (Reissman 1993). Hypotheses emerge throughout data collection and analysis, and findings consist of coherent explanations of conclusions (Silverman 2000). This section clarifies how these contrasting methodological approaches informed each other, and the purposes and limitations of each approach:

‘Some fancy epistemological footwork is required because the interpretive perspective that undergirds narrative is very different from the realist assumptions of many forms of qualitative analysis and certainly of quantification.’ (Reissman 1993; 263)

The differing data sources and methods used were designed to strengthen and complement each other. Throughout the research, an iterative process developed between qualitative and quantitative components (see Figure 5.5). Firstly, survey data results (showing a preliminary positive association between fertility treatment-seeking and HIV) prompted the study design: a qualitative investigation of whether and how social processes might help explain the observed association. Preliminary research hypotheses were then outlined (the conceptual framework), to be addressed using qualitative and quantitative data, and a literature review suggested likely mechanisms by which infertility might be positively associated with HIV. New ideas emerged when qualitative data collection and analysis began, prompting further research questions to be asked of the survey data. Qualitative investigation of the same women's lives who had also participated in the survey encouraged awareness of the strengths and limitations of the quantitative data, because the social significance and local definitions of infertility were often incongruent with demographic categories. Lastly, survey data were used to contextualise qualitative findings by providing quantitative measures of women's life courses, such as levels of education and marital patterns. While the qualitative data produced rich and detailed findings, they could not quantify levels of infertility or associations.

Figure 5 Iterative processes between qualitative and quantitative approaches



4.3 Research strategy: qualitative component

A range of qualitative methods was used during ten months fieldwork in Chilumba (see Table 3). Life history interviews were the main data source. Details of potential participants were drawn from KPS databases, selecting women with a variety of fertility histories. Additional qualitative techniques were used to investigate the local context, and to gain perspectives from people who were ‘missing’ from the life history interview sample (older women, men, adolescents, local experts and health service providers).

Table 3 Overview of qualitative methods

Method (n)	Participants (n)	Source
In-depth life history interviews (54)	Infertile women aged 20-29 (34, of which 19 repeated)	KPS database
	Fertile women aged 20-29 (15; none repeated)	KPS database
	Infertile women aged over 30 (5; of which 2 repeated)	Cases referred by KPS fieldworkers
Focus group discussions (5)	Adolescent girls aged 18-20 (2)	Secondary school
	Women aged 20-35 (3)	Social network or recruited by other study participants
Expert and key informant interviews (7)	Traditional doctors (3)	Social network
	Family planning nurses (2)	Chilumba Rural Hospital
	Elderly people (2)	Social networks
	Husbands of infertile women (2)	KPS database
Observations, field notes	Written by principal researcher	

4.3.1 Local interviewers

Two local women in their mid-twenties were trained as interviewers. They knew the area which gave them a greater chance of establishing rapport with participants and reducing social distance between them (Bourdieu 1996). They were a similar age to most participants, and took a friendly, informal approach. Interviewers were trained in concepts of social research, including in-depth, non-leading, open-ended interviewing, and transcription and translation of transcripts. Monitoring and evaluation of interview and translation technique was ongoing. Particular attention was paid to avoiding appearing judgmental to participants, as the subject matter could be very sensitive.

4.3.2 Selecting life history interview participants

The sampling strategy aimed to interview a sufficient number and variety of women to gain an in-depth understanding of their experiences of infertility, and broader RSH and social issues. During pilot work, the principal researcher estimated the time required to carry out, transcribe, translate and analyse life history interviews. Targets were set to interview 30 infertile women (repeating interviews with at least 15), and 15 fertile women, within the remaining seven months' fieldwork. The aim was not to write a detailed ethnography or to characterise every possible life course that women might have experienced, but to aim for theoretical saturation in the area of interest (when the value of new data becomes marginal) (Glaser and Strauss 1968). The limited time available meant that it was sensible to aim for a minimum number of interviews, and spare time was used to collect more data using other qualitative methods.

Most of the women interviewed were between 20 and 30 years old. The age range was restricted so that women's lives were comparable with each other, as they had lived through a similar era in terms of educational opportunities, the HIV epidemic and other political, cultural and social factors. The 20-29 age group is the most appropriate for identifying cases of involuntary infertility. In high fertility areas, fertility rates decline rapidly over the age of thirty as women start to space their births or stop childbearing altogether. Women under 20 were less likely to be married, and if married may not have been married for long enough without a child to consider themselves infertile. Women in their twenties with fertility problems were most likely to perceive this as problematic and unusual. This age group is also of most relevance to the aim of contextualising infertility within broader RSH discourse. They have the highest fertility rates, the highest rates of using fertility treatments, and relatively high HIV prevalence (prevalence is only higher among the 30-35 year old women) (KPS data, unpublished).

Most participants were selected from the KPS database of a recent census, and a study nested within the census of women who had not recently attended ANC (the ANA study). These studies are described further in Section 4.4. Women aged 20-29 years were selected according to different fertility statuses:

- **Self-perceived infertility:** reporting current use of fertility treatments in the ANA study

- **Possible infertility:** divorced with unusually low parity-for-age¹³ in the ANA study
- **Probably not infertile:** a random selection of women with medium/high parity, drawn from the census and matched to infertile women for area of residence.

The ‘self-perceived’ sample only captured married infertile women, as single women were unlikely to use fertility treatments. Therefore, to include infertile women who had divorced, divorced women with low parity-for-age from the ANA study were sampled. However, women did not always have the same characteristics when they were interviewed in the field as they had done on paper in the KPS database. Some ‘self-perceived’ infertile women had had a baby, and some divorced low parity-for-age women were not necessarily infertile but had not been trying to get pregnant. Table 4 shows the final classification of life history (LH) interview participants for analysis after they had been interviewed (see Appendix H (ii) for a detailed summary of participants’ ages, marital history and status and fertility status).

Table 4 Fertility status of life history interview participants

Fertility status	n
Unmarried	3
Currently primary infertile	14
Currently secondary infertile	7
Previously primary infertile	8
Previously secondary infertile	2
No fertility problems	15
TOTAL	49

Several women who were selected from the KPS database were not interviewed. Two divorced, low parity-for-age women were missed: one had died, and one had moved to southern Malawi. Of women using fertility treatments, five were missed: one refused, and four had left the study area. Finally, one husband refused to let his wife participate unless he was present, so she was not interviewed. Eventually 31 ‘infertile’ women were interviewed, of whom 19 were interviewed twice.

Fifteen medium/high parity women were interviewed to see how a more ‘typical’ fertility career was described, and whether and how infertile women differed from this.

¹³ This was defined as being in the lowest age-specific parity-for-age quartile, using local ANC parity data (see Appendix H). In practice, these were women with no children or only one child.

The comparison group was randomly selected from the census database using an Access query, matched to the age and village distribution of the 'infertile' group. As marital dynamics appeared to be strongly affected by infertility in the literature review, it was important to gain an insight into marital dynamics in women unaffected by infertility. During a booking visit, screening questions were asked to select a range of marital statuses and histories (women in first and second marriages, monogamous and polygynous marriages).

4.3.3 Pilot work

Three months' pilot work was carried out. The principal researcher studied Chitumbuka, lived with a local family, and recruited and trained one interviewer. A preliminary life history guide was written after gaining understanding of cultural and cognitive domains related to research questions. KPS fieldwork teams were shadowed, which provided insight into the meanings, strengths and limitations of the survey data.

4.3.4 Life history interviews

Individual in-depth life history interviews were the main qualitative data collection method. They encouraged women to relate complex marital, residential and health histories. The interviews were a catalyst for the production of a narrative form of 'everyday' knowledge which gives insight into how infertility is experienced, interpreted and responded to (Gijssels, Mgalla et al. 2001). Unlike some epistemological perspectives, which maintain that qualitative data cannot be used to relate to any externally verifiable 'truth', the view was taken that in-depth interviews could be viewed as 'transformed' versions of events that had, in most cases, actually happened. Lived experience passes through numerous stages of 'representation' (the narrator, the interviewer's influence, transcription, translation, and being written up) before it reaches the reader, so interviews do not represent 'real' thoughts or deeds (Reissman 1993). Rather, they offer a particular reflection of people's lives, and how people make sense of themselves (Kleinman 1992). These sources of 'bias', or 'transformation' from lived experience to representation, can prove informative in themselves.

A semi-structured interview schedule was used. This encouraged women to talk about matters they might not have mentioned in an unstructured interview, and ensured that topics relevant to research questions were not completely missed. Neither interviewers nor participants were experienced in in-depth interviewing: it was an alien form of

social encounter. Without some structure, there would have been long, uncomfortable pauses, especially with shy younger women. During the pilot stage when less structured approaches were tested, women frequently tried to second-guess what information was wanted from them, and ended up discussing contraceptives at length because they associated researchers with the world of family planning. Because young women were not used to recounting their life stories, a semi-structured approach using familiar topics worked best.

Leading or closed questions were avoided (Bolton 1995). Feminist scholars have argued that in order to listen respectfully to women, especially those with whom there is an unequal power relationship, questions should be open-ended. The participant can then determine which issues to elaborate upon or pass over, according to what they consider appropriate or significant (Tonkin 1992).

The life history interview guide was developed and tested during pilot work and refined throughout the study period (see Appendix E). The questions gathered detailed information on life courses and broader structural factors. It took a biographical format, incorporating the following topics:

- Women's own childhood, education, economic activities, and residential history
- Courtships, marriages, and married lives
- Their pregnancies, children, and reproductive health
- Experience of infertility, treatment-seeking, and effects of infertility
- Use and opinions of traditional medicine, and their children's health
- Current socioeconomic status and activities, and sources of social support

These topics were designed to stimulate discussion about health care systems (hospital & traditional medicine); the local conceptualisation of infertility; health, disease and the body; the structure of marital, family and household dynamics (such as processes around marriage and childbirth); the structure of women's life courses (schooling, migration, residence patterns); moral and religious belief systems (Christianity, witchcraft and magic); and economic structures and activities.

The order of topics was roughly chronological, in keeping with a life course approach, starting with childhood, which was a relatively innocuous way of starting the interview, and which appeared to put people at ease. In practice, the narrative wandered between

topics and timeframes. Although most women were comfortable working within a biographical framework, some women found dealing with chronologies and ordered events problematic. Their answers were often contradictory or inaccurate. However, as narratives were interpreted as retrospective constructions, rather than objective recollections of concrete facts, this did not invalidate the data.

Before repeat interviews, initial transcripts were re-read, and unique follow-up questions were written for each participant. These probed for detail and clarification on interesting points, and provided the principal researcher with a chance to have an input into qualitative data collection, as she did not carry out life history interviews herself.

The topic of induced abortion was highlighted as significant in relation to acquired infertility in the literature review but was not pursued in life history interviews. During the pilot study, it became clear that almost no one would have discussed it openly, and questions about abortion would have made women feel very uneasy.

4.3.5 Carrying out life history interviews

Booking registers were printed from KPS databases, containing name, dates of births, heads of households, and GPS positions of households (which allowed maps locating households to be printed)¹⁴. ANA study fieldworkers accompanied the research pair (the principal investigator and one interviewer) to women's households and introduced them, explaining the study and reasons for their selection. Travelling was by motorbike as many households were off-road. If women agreed, a convenient time for interview was arranged. If women had moved house or were not at home, neighbours or relatives were consulted about how to find her. If after three such visits she was not found, or she had left the study area, she was considered 'missed'.

When returning for interview, the study was explained carefully, an information sheet and consent form were read out, and informed consent was discussed and indicated by a signature or cross. Time was taken to build rapport through small talk, discussing the purpose of the research, and reassuring participants of confidentiality. Interviews were conducted in Chitumbuka in a private location at participants' own households. Demographic and household data were collected (Appendix E). If necessary, a life history time line was drawn, to avoid missing important events, and to provide a

¹⁴ GPS points had been taken for each census household during the baseline census.

reference point for complicated processes. All interviews were digitally recorded with permission. If permission was not granted (and during early pilot work) the interviewer simultaneously translated interviews and the principal researcher made detailed notes. After the interview, participants were asked if they had any questions, which were addressed as fully as possible.

Following Watkins' reflections on carrying out similar research in rural Malawi (Watkins, Zulu et al. 2003), the principal researcher was present at all but four interviews. The benefits of being present were being able to evaluate the context, strengths, and limitations of data collected, and to have input into the interviews. As the principal researcher's Chitumbuka improved, she was able to understand interviews, and could guide the interviewer if the interviewer had any problems. The principal researcher's presence, as a foreign woman, had mixed effects. Many women, when asked, declared that as she was also a woman, they could speak freely. It certainly opened doors, as heads of households and participants attached importance to an unusual visit from a white person. Yet it may have inhibited some women, or could have made them more likely to give normative responses. However, following several interviews without the principal researcher's presence, the ways in which her presence affected data collection was discussed, and it was concluded that it did not make a significant difference. The local interviewers were still 'different' and represented other worlds whether they were accompanied by a foreign woman or not.

4.3.6 Focus group discussions

Early on in fieldwork, focus group discussions were used to widen understanding of the social context of infertility. There is little (recent) ethnographic writing on northern Malawi, and the social context was unfamiliar to the principal researcher. Focus groups were useful for efficiently, though not exhaustively, picking up local vocabulary and identifying key concepts and cultural domains (Bernard 1994). They provided insight into the production and synthesis of ideas, social norms and knowledge within a group situation, which is likely to differ from what one gathers in interviews with individuals. 'Free listing' generated a wealth of data in focus group discussions. Responses to questions such as 'can you tell me all the things which can harm a woman's fertility?' outlined realms of cultural understanding. Focus groups were also useful towards the end of fieldwork, addressing gaps in knowledge and emergent questions. Participants for focus groups were recruited through the local secondary school, through relatives of

interviewers, and through life history interview participants who the interviewers felt to be particularly interested in the research (sampling through personal connections in this manner is often called ‘snowball sampling’ (Rice and Ezzy 1999)). Focus group participants are summarised in Appendix H (ii).

Group discussions were held in quiet places, usually under a tree or next to someone’s house. The study was fully explained and informed written consent received from all participants. Discussions were digitally recorded. The two interviewers alternated between mediating and asking questions from a detailed open-ended schedule (see Appendix E for an example schedule), and taking notes. The principal researcher attended all discussions and made notes. Tea and sugar were given to thank participants.

4.3.7 Expert and other interviews

Expert interviews are defined as interviews with people possessing special knowledge or communication skills (Gilchrist and Williams 1999; 72). It was important to interview people with important roles in shaping infertile women’s experiences. These included family planning nurses, traditional healers, a traditional midwife, and women with knowledge of herbal medicine. Such interviews were a powerful tool in outlining the field of enquiry, and expanding and clarifying issues emerging from in-depth interviews. Local acquaintances (schoolteachers, neighbours, traditional healers, church members and shopkeepers) helped identify experts to interview. Two infertile women’s husbands were also interviewed.

Unstructured informal interviews were also carried out with ‘lay people’. Information on marriage, childhood, values and attitudes was sought. This served the purpose of increasing the principal researcher’s acquaintance with an unfamiliar cultural setting, and gaining an appreciation of general attitudes towards infertility. For pre-arranged interviews, a semi-structured interview schedule was prepared, but occasionally interviews were carried out as and when the opportunity arose, and an interviewer would simultaneously translate the principal researcher’s questions.

4.3.8 Field notes

The principal researcher wrote field notes consisting of daily observations on social life and research activities. She lived with two different Malawian households during pilot work and then rented a house in Chilumba, participating in village social life by visiting

friends, sharing meals, going to market, attending church, and social events such as marriages, funerals, singing groups, and football matches. This pro-active ‘hanging out’ had the aim of deepening her understanding of the social context, as well as enjoying her time in Chilumba. Field notes were written during and after field trips and interviews. They described people present, the physical surroundings, activities were taking place, the ‘mood’ and tone of interviews, the clothing and appearance of participants, and how the interviewer conducted the interview. These comments contributed to the analysis of interview transcripts. Observations were subsequently discussed with the interviewer to debate the validity of interpretations made. Often, the interviewer’s local knowledge led to further insights.

4.3.9 Qualitative data management

Interviews were digitally recorded and downloaded onto a computer, from where they were transcribed with the aid of a transcription pedal and headphones. Interviews were transcribed word for word in Chitumbuka, with pauses, laughter, and other features marked in the text. Transcripts were translated into English and typed by interviewers and KPS administrative staff. A degree of accuracy and contextual elements such as immediacy, wit, and embarrassment, were inevitably lost in translation due to poor recording or translation and the inability of the written medium to capture the complexity of a social encounter. Texts were necessarily transformed in order to summarise and render them comprehensible. The most important steps taken to minimise these losses were checking translation quality and writing accompanying field notes. Initially each transcript was checked against the original sound file to monitor accuracy, and every translation was discussed in detail with the interviewers, until the principal investigator was assured of their understanding of the required accuracy. Subsequently only selected interviews were double-checked in entirety, though all translations were discussed. English translations were typed directly below Chitumbuka paragraphs to facilitate evaluation of completeness and quality, and referencing original Chitumbuka words and concepts used.

Language is an important cultural resource, which defines, limits and shapes patterns of thought and speech.

Language is an irreducible part of social life, dialectically interconnected with other elements of social life, so that social analysis and research always has to take account of language.

(Fairclough, 2003; 2)

Several commonly used words, metaphors and phrases, with no exact equivalent in English, threw light on local categories and concepts underlying fertility and gender. Other words and phrases initially appeared to have English equivalents, but turned out to have subtly different meanings (the phrases in question will be recounted and explained throughout the results chapters). This resource was accessed by the principal researcher studying Chitumbuka and retaining the original text next to the English translation to facilitate constant comparison.

4.3.10 Qualitative data analysis

This section describes how qualitative data were transformed into results chapters. The aim was to conduct a thorough, systematic and transparent analysis, to avoid drawing anecdotal conclusions and focusing on colourful cases to the detriment of those which do not fit in with existing preferences. Two approaches to qualitative analysis were taken, according to the data source. In-depth life history interviews were subject to a case analysis, looking at the data from a narrative perspective (a ‘narrative case analysis’), in which women’s life history narratives were compared to pre-existing and emergent hypotheses concerning the effects of infertility on their lives. The remaining qualitative data were analysed thematically, allowing for emergent hypotheses.

Narrative case analysis meant that each woman’s life history was treated as a narrative, and examined as an individual case (as opposed to aggregating data from many women). Analysing the data case by case involved testing the ‘goodness of fit’ of each woman’s life history to hypotheses laid out in the conceptual framework. This aspect of analysis was largely concerned with the *content* of interviews: the social events and processes described. The aim was to help to explain observed quantitative associations, contribute to understanding of what factors might make women fit these hypotheses whilst others did not, and suggest new lines of enquiry. When cases did not fit hypotheses, this suggested that the hypotheses needed to be re-examined, refined or extended in some way (Eisenhardt 1989).

Yet interviews were not just the sum of their contents, and were treated as ‘narratives’, which involved examining the *manner* in which stories were recounted, as well as their content. Narrative analyses ‘work through examining the nature and sources of the ‘frames of explanation’ used by the interviewee’ (Silverman 2000; 157). These frames

of explanation can refer to local belief systems, gendered structures, or moral values. Several lines of enquiry in narrative analysis were particularly appropriate to this study's research questions (Reissman 1993). They involve posing the following sorts of questions of the data:

- How do narratives persuade the interviewer of their authenticity and identities?
- What linguistic and cultural resources ('frames of explanation') does the interviewee draw upon?
- Why did the interviewee tell a story in a particular way?
- What dynamics are witnessed in the interaction between interviewer and interviewee, and what do they tell us?

By analysing these aspects of narratives, the social and moral structures that influenced women's lives emerged. The way that narratives are constructed can indirectly provide insight into wider moral and political dimensions, which is useful for situating data in its broader structural context (Rice and Ezzy 1999).

The process of narrative case analysis took place as follows:

1. **Analysis during fieldwork.** Each interview was read and a personalised interview schedule developed for a follow-up interview, if necessary. Emergent themes, confusing findings and knowledge gaps were noted.
2. **Within-case analysis.** A detailed, descriptive case study was written for each woman, incorporating data from one or both interviews and field notes. This was central to the generation of insight, as it involved close and repeated examination of the data, and helped deal with the large volume of data. Illustrative sections of dialogue were incorporated for further analysis. Each summary was re-read and key themes identified, with the aim of becoming intimately familiar with each case. This allowed patterns to emerge from each case before holding cases up against hypotheses and pushing for generalisations.
3. **Cross-case analysis.** Each case was held up to see how well or poorly it stood in relation to hypotheses. Cross-case comparisons were made. New hypotheses and constructs also emerged at this stage.

At the cross-case analysis stage, participants were retrospectively classified as having experienced infertility or not. As there was no firm local definition of the length of time without pregnancy or a live birth that constituted infertility, a working definition of infertility was developed to identify current or previously infertile women. If they had

failed to have a live birth after trying to get pregnant for over a year (following the end of post partum insusceptibility¹⁵ in the case of secondary infertility) they were classified as ‘infertile’ or ‘previously infertile’. This one-year period was an arbitrary but sensible cut off point that reflects the clinical definition of infertility, and which also roughly reflected local perceptions¹⁶. Comparisons were then made between the experiences of fertile and infertile or previously infertile women.

Each life history was given equal weight during analysis so that extreme examples were not given undue attention at the expense of more everyday cases. The main difficulty with this approach was representing less forthcoming women’s stories. Several interviews were largely comprised of short exchanges between interviewer and participant, which gradually built up a life story, and were not particularly amenable to quotation. Their stories were summarised into case studies just as other women’s were, which meant that they were not unfairly neglected just because their accounts were not as rich.

Focus group and other interview transcripts were summarised, and quotes and the principal investigator’s interpretations were organised into key analytical themes. The aim was to build constructs that could be used to describe the local social context and situate life history data. A ‘construct’ in this sense is what a researcher creates when they group aspects of a phenomenon together and attempt to write a coherent, useful description which helps to make sense of the data. Examples of constructs built up through this process included ‘becoming tired of treatment-seeking’ and ‘when women have had enough of marriage’.

The process of writing up life history and other qualitative data was the final, and one of the most important, stages of analysis. Structured by constructs identified during initial analysis, long and detailed chapters were written, which were full of ‘raw’ interview data. Generalisations were then drawn about the range and content of life history and other qualitative data. The next step was to build theory: generalisations that best explained the observed data. This included theorising about structural aspects of social life: the kinship system, gender norms, power relations, and the significance of infertility within this broader context.

¹⁵ The infecund period following pregnancy caused by amenorrhea, breast feeding or post-partum abstinence.

¹⁶ How this working definition related to local conceptions of infertility is discussed in Chapter 6.

4.3.11 Ethical considerations

Ethical considerations included obtaining informed consent from participants¹⁷ (see Appendix F for information and consent forms), responding to requests for assistance, avoiding discomfort for participants, and disseminating findings. Steps were taken to ensure anonymity and confidentiality for participants. Digital recordings and transcripts were not linked to names, and were stored securely. Codes were assigned chronologically to both life history women and other interviewees (life history women were not numbered in sequential order). Direct quotes were only taken from people who gave informed consent for this. Several women asked for assistance (medicine, money, or advice). Although KPS policy was not to offer money to participants¹⁸, women received a visit from a KPS nurse if they reported health problems. The principal researcher offered a Polaroid photograph of participants as thanks for their participation. Fortunately, no women became distressed during interviews. Rather, many women were glad to tell their story and express the importance of the issue of infertility.

In-depth interview and focus group participants were invited to a dissemination session (all but three attended). Travel costs were reimbursed and women were given refreshments and soap. Interviewers presented preliminary results, and KPS nurses discussed causes of infertility, and simple techniques to improve chances of conceiving. Each woman was able to discuss health problems with a nurse privately. Further dissemination is underway through standard academic channels (preparation of journal articles, conference abstracts) and in partnership with health and development representatives in Malawi. Executive summaries will be sent to the Malawian Ministry of Health, the Karonga District Health Officer, and the Malawi National Health Sciences Research Committee.

Ethical approval was granted by the London School of Hygiene & Tropical Medicine Research Ethics Committee. In Malawi, research activities fell under the remit of ethical approval granted to KPS by the National Health Sciences Research Committee (NHSRC) of Malawi under the programme application, 'Epidemiology of Mycobacterial and HIV Infections in Northern Malawi'.

¹⁷ Apart from the most informal interviews and people written about in field notes: these people are not quoted directly.

¹⁸ A variety of individual and community level health services are provided by KPS to study participants.

4.4 Research strategy: quantitative component

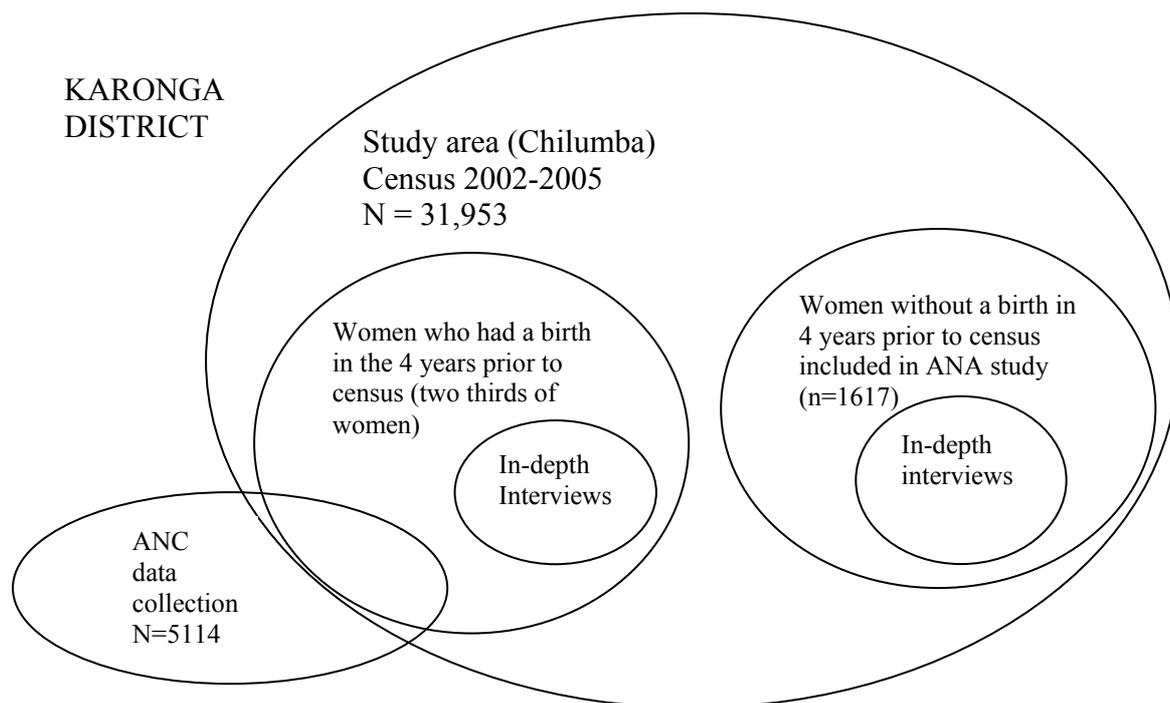
The first objective of the quantitative component was to describe characteristics of the study population that were illustrative of women's life courses and reproductive health: schooling levels, marital patterns, levels of infertility, and demographic and reproductive health indicators. Secondly, outcomes associated with primary and secondary infertility were explored. This section describes data sources, how concepts were operationalised, and data analysis methods.

Quantitative data were collected during the KPS 2000-2005 programme and were double entered and verified in Fox Pro by KPS. Three data sources were used: a baseline census of the study area, a study of antenatal non-attenders (ANA study) nested within the census, and antenatal clinic (ANC) surveillance data from Karonga district (see Table 5 and Figure 7; and Appendix D for survey forms). In brief, the census represented the whole study population, the ANA study provided more detailed data on women who had not given birth in the four years prior to the census (including infertile women), and ANC data came from women who had given birth recently.

Table 5 Overview of quantitative data sources

Data source	Participants	Data collected
Baseline census	Household member reports for all household members in 33 censused villages	Socioeconomic and educational indicators Current marital status For women: date of last birth and ANC attendance
Antenatal Non-attenders Study (ANA)	All women aged 15-44 in census who had not attended ANC in previous 4 years	HIV status Marital history Reproductive history , Contraceptive use STI symptoms
Antenatal clinic (ANC) data	Women attending five selected ANC clinics in Karonga district	HIV status Marital history Reproductive history, Contraceptive use

Figure 6 Diagram of quantitative data sources (not to scale)



4.4.1 Census data

A baseline census was carried out from 2002 to 2005 in order to establish a Continuous Registration System (CRS) of demographic events. The census covered over 30,000 people in 33 villages around Chilumba. All qualitative data were collected in this area. As census data were representative of the study area, they are used to illustrate the broad demographic context, and examine associations between infertility and outcomes such as current marital status and polygyny.

4.4.2 Antenatal Non-Attendees (ANA) study

The ANA study¹⁹ was designed to compare ANC non-attenders with ANC attenders on indicators such as HIV status, marital history, and parity for age. It aimed to measure the degree to which ANC HIV surveillance misrepresents HIV prevalence in the female population (Jahn, Ngwira et al. 2004). ANA women were recruited through the baseline census, which asked all women aged 15-45 years whether they had visited an antenatal clinic (ANC) in the past four years. Forty three percent (2949) of women had not, and were subsequently visited at home by ANA study fieldworkers. Study participants

¹⁹ Participants were offered voluntary counselling and testing for HIV, syndromic management of STIs, and treatment for anaemia and intestinal worms. Female interviewers administered questionnaires on marital and reproductive history, contraceptive use and age at first sex (interviewers were trained to define this as first penetrative sex).

consisted of currently infertile women, and women who had not recently given birth for other reasons, such as using contraceptives or not being sexually active. Very few women had had a birth but had not attended ANC (1%). Detailed marital history, contraceptive use, and fertility treatment data enabled identification of infertile women according to several different definitions (see 4.4.4).

The response rate to the ANA study was 80%. Of eligible women who did not take part, 60 refused and 210 were lost to follow-up. Eligible women tended to be quite mobile: by the time ANA study fieldworkers arrived, they had often married elsewhere, divorced, or moved away. If ANA and ANC data were roughly representative of the overall female population of women, their combined prevalence of a characteristic such as 'being currently divorced', if adjusted to match the age structure of the census, should have been similar to the prevalence of divorce in the census. These checks were carried out and it was found that the proportion of women divorced was the same in the census as in ANA, yet only 1% of women at ANC were divorced. One would expect the proportion of divorced women to be higher in ANA, suggesting that ANA under-represented divorced women. This supports the conclusion that ANA data are not representative of women who had not recently attended ANC, but is biased towards more settled women.

4.4.3 Antenatal clinic (ANC) surveillance

Data were collected from mothers attending five ANC clinics in Karonga district from 1999-2004. They included one urban district hospital (Karonga), two rural hospitals (one semi-urban (Chilumba), one rural), and two rural health centres. A similar questionnaire to that used in the ANA study was administered. Unlinked anonymous HIV testing was carried out. For ANA and ANC data collection, interviews, specimen collection, anonymisation and dual laboratory HIV testing were carried out using well-established methods. ANC data were not representative of the fertile female population: they represented a sample of clinics and a sample of women using them at that time. Clinics had been dropped systematically from surveillance as voluntary counselling for HIV was introduced, compromising anonymity.

4.4.4 Operationalising definitions

The following definitions of infertility were used in quantitative analyses:

Table 6 Quantitative indicators of infertility

Indicator	Definition	Data source
Childlessness	Ever-married women with no live births by age 45	Census
Perceived infertility	Currently using fertility treatment	ANA
Primary infertility	One year exposure to pregnancy without a live birth/pregnancy	ANA, ANC
Secondary infertility	5 years exposure to pregnancy without live birth/pregnancy following live birth	ANA, ANC

Childlessness can be used as a proxy for infertility in married women in populations where several assumptions might hold: that there is early marriage (94% of women in the census aged 25-29 are ever-married), that women aged over 40 years are unlikely to subsequently have a live birth, that there is little voluntary childlessness, and that few women are use contraception before their first birth (only 2% of married nulliparous ANC women had ever used contraception). This was the most accurate definition that census data could support, as exposure to pregnancy could not be calculated. This measure was used to estimate levels of childlessness in the study area.

Cases of infertility in ANA and ANC could be identified more accurately using marital history and contraception data. Absence of live births rather than conceptions was used to indicate infertility, because live births are more accurately reported. This study defined cases of primary infertility as women with one year's exposure to pregnancy without a live birth or pregnancy. This definition was in line with local definitions of infertility: after a year, lack of pregnancy would usually be considered problematic. Exposure of pregnancy was defined as being married and not using contraception. Being married was thought to be a suitable proxy for regular unprotected sexual activity, at least for cases of primary infertility, because of the desirability of pregnancy at the start of marriage (discussed in Chapter 5). However, this measure probably overestimates secondary infertility in older women. Their long birth intervals might reflect gaps in exposure to pregnancy rather than infertility, for instance, through not being sexually active. For secondary infertility, the definition employed was 'five years exposure without a live birth following the last live birth', which follows demographic

convention (Larsen and Raggars 2001a) and allows for a period of infecundibility following childbirth.

4.4.5 Quantitative analysis

Quantitative data analysis was carried out using Stata version 9. Descriptive data from the census, ANC and ANA were used to quantify aspects of women's life courses and estimate the level of childlessness in the census area.

Outcomes of interest when looking at effects of infertility on women's lives were:

- Positive HIV status
- Having been married more than once
- Being polygynously married

The next step was to decide how to use the available data sources to compare outcomes between exposure groups. Neither ANA nor ANC data reflected the general female population, and the census, which was representative of the female population, did not collect sufficiently detailed marital history data to define cases of infertility. Women in the ANA and ANC datasets were therefore divided according to their fertility status to generate the 'exposure categories' for which measures of relative, rather than absolute, risk could be calculated:

- Nulliparous ANA women
- Parous ANA women
- Nulliparous ANC women
- Parous ANC women
- ANA women, primary infertility (1 year)
- ANA women, secondary infertility (5 years)
- ANA women, using traditional fertility treatments

Crude outcome rates were calculated for each exposure group. These were then indirectly standardised for age cohort and marital status against a standard population (the census population structure and outcome rates from overall ANC data). SMRs²⁰ were then calculated (the ratio of observed to expected events) to give a measure of relative risk of each outcome compared to the standard population.

²⁰ Standardised mortality ratio: in this case, HIV status, or being polygynously married, were the outcomes, rather than death.

Year of birth rather than age at interview was used, because data were collected over several years. In order to determine exposure category, data on marital duration and contraceptive use were used. Marital duration was the sum of current and previous marriages. Start and end dates were available for ANA women's first marriages if they had been married more than once. Gaps between marriages were not counted unless women had more than two previous marriages, in which case date of first marriage marked the start of marital duration, and date of interview (if currently married) or date of last divorce marked the end of marital duration. Women who did not contribute HIV data were excluded from the analysis.

4.5 Study area

The study was carried out under the auspices of KPS²¹. KPS is a well-known and trusted research project, which provides a variety of health services to the local population (whether directly or indirectly involved in research activities), and institutional support to government health services. There have been ongoing biomedical research activities on the site since the late 1970s. This research was carried out within the area of the KPS demographic surveillance continuous registration system (CRS) of births, deaths and migrations, which completed its first baseline census in 2004. This covered a population of 31,600 people (in October 2005) in an area of 135 km² around Chilumba.

The area borders lake Malawi and is predominantly rural. A tarred road runs north-south through the area, and there are two trading centres (Chilumba and Uliwa). Most people are subsistence agriculturalists growing maize, cassava, rice and vegetables. Unemployment is high, and food security low. Farming is usually supplemented by piece work or commercial activity such as buying and selling foodstuffs or clothing. Fishing is an important component of the local economy and diet. Fishing is done by men, but women distribute and sell fish.

In addition to traditional medicine, clinical medical services were widely used. Facilities within walking or cycling distance for the study population were Chilumba Rural Hospital, a government health centre with rudimentary inpatient facilities and services including family planning, maternity services, syndromic management of STIs, and

²¹ This involved the principal researcher making use of office, transport, internet and other resources of the project, as well as benefiting from the local networks and knowledge of the staff. Several senior staff members were academic staff from the London School of Hygiene and Tropical Medicine.

ANC including VCT; the Chilumba Garrison Health Centre, a military funded clinic based at an army garrison providing basic primary health care; and St Anne's, a charitably funded private clinic at a Catholic mission, with maternity services. There were two other rudimentary government health centres and three dispensaries in the study area. The nearest government district hospital was at Karonga (70km away), with 200 bed inpatient facilities and specialist clinicians, which provided some secondary level services such as simple laboratory investigations, radiography, major surgery, and maternity services. Some participants had travelled further to Livingstonia, a charitably funded private hospital at a Church of Central African Presbyterian mission²², and Mzuzu hospitals (150 km) which had tertiary level services²³.

Although the study area was largely Chitumbuka speaking, the frequency with which people migrated from and to the area, through wage labour or marriage, resulted in a mixture of peoples in the area. KPS had not found ethnicity or 'tribe' to constitute a major part of people's identity when they had collected these data in previous surveys. Many people in the study area were born outside Karonga and/or Malawi, or are children of such immigrants. Many people had spent time away from southern Karonga, in other countries or urban areas. Other immigrants had also had a large effect on the area: Irish Catholic missionary priests, scientists from KPS who have been there over 25 years, and local people who had emigrated and returned with different values. The area has a heterogeneous, fluid population. Most people are Christian, attending a variety of Presbyterian, Zionist, Seventh Day Adventist and Catholic churches.

4.6 Summary

Integrating qualitative and quantitative methods can produce detailed, nuanced, findings, situated within their broader context. Qualitative methods were used to explore local conceptions of infertility and reproduction; to gain insight into complex and sensitive processes; and to interpret results in a manner that might challenge existing assumptions. At first, the study aimed to explore social explanations for an association between HIV and infertility, found in preliminary analysis of KPS survey data. Subsequently, qualitative data generated insight into the significance of infertility, and research objectives widened. Survey data were used to set the demographic context and

²² This is physically closer than Karonga but more inaccessible as it is located in the mountains and served by very limited public transport.

²³ Antiretroviral therapy for HIV has been available in the district since June 2005 but as this coincided with the end of fieldwork, it has not been described further in this thesis.

measure the relative risk of various outcomes according to fertility status. Qualitative and quantitative data were collected within the area of a recent KPS census, so were collected from the same population at almost the same time.

The research context was one of rural subsistence agriculture and substantial levels of poverty, in which participants often made requests of the research team, and were accustomed to being subjects of medical and demographic research. How this context influenced interactions between interviewers, participants and the principal researcher was considered throughout the research process. The principal researcher spent ten months in the study area and carried out primary qualitative data collection with the assistance of two local female interviewers. Life history interviews with fertile and infertile women were the main data source, supplemented by expert interviews, focus group discussions and field notes and observations from the principal researcher's attempts to learn as much as possible about local social life. Participants were selected from KPS databases and women with a range of fertility histories were interviewed. Life history interviews produced detailed accounts which were interpreted as transformed versions of some social reality, and which threw light on motivations, perceptions, and priorities relating to infertility. Analysis of life histories paid attention to both the content of interviews and how social facts and processes were communicated. This generated understanding of the 'frames of explanation' through which people made sense of their lives.

PART 2: RESULTS – SETTING THE CONTEXT

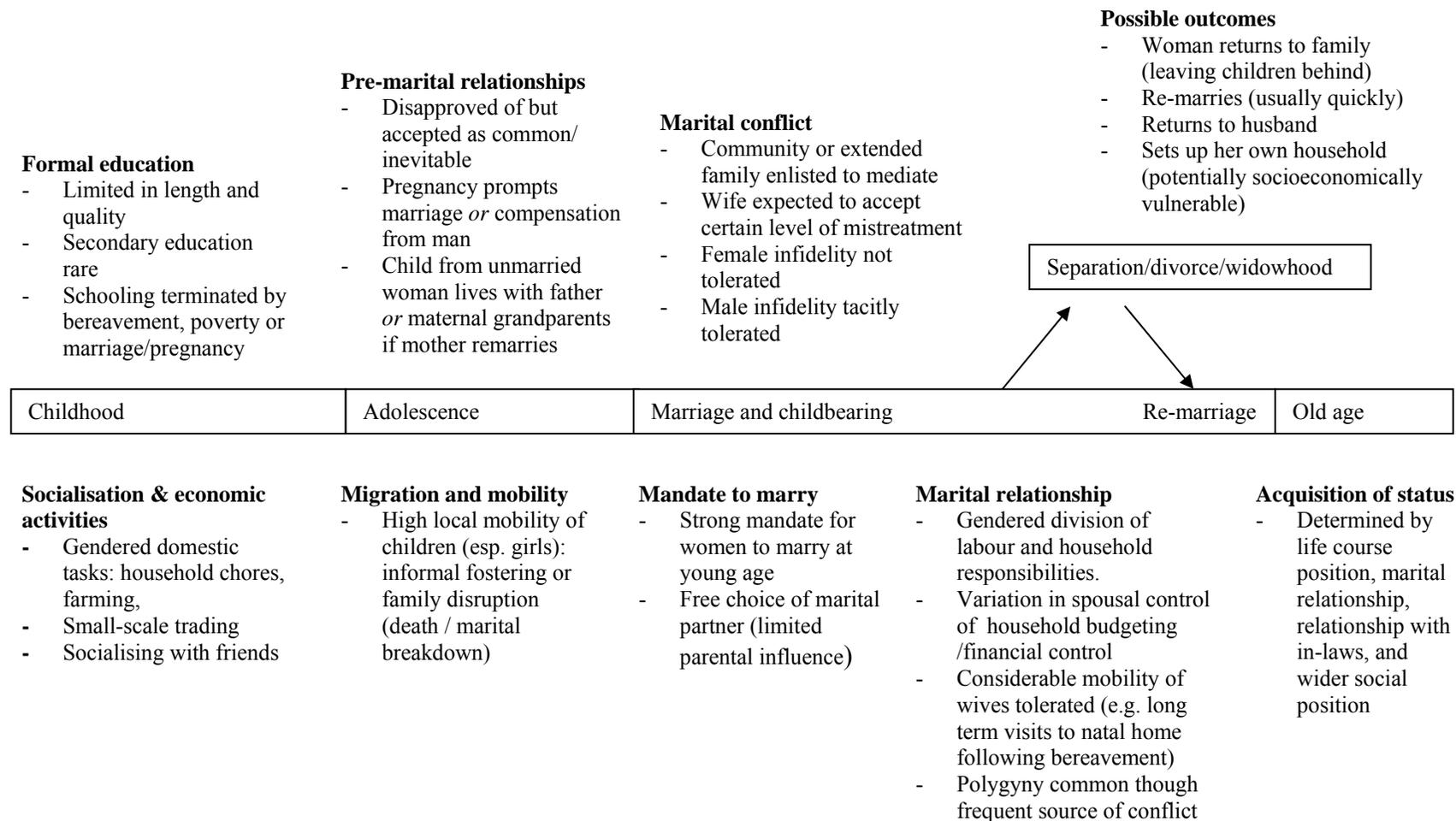
5 Women’s Life Courses

5.1 Introduction

Each woman’s life course was unique, shaped by both individual agency and external factors. The normative life course, that which was widely agreed upon to represent a typical and socially sanctioned passage through life, is considered, as well as departures from it (see Figure 7). This provides a useful model against which to analyse life histories, because women framed their experiences against how they thought things ‘ought to be’. This chapter is arranged chronologically, reflecting life course stages. It describes the variety of women’s lives from childhood onwards, encompassing education, marital formation and dissolution, and childbearing. The focus is on life course aspects most relevant to subsequent interpretations of infertility. KPS survey data are incorporated to quantify certain aspects. Shared structural influences on women’s lives are discussed, such as moral and social values, economic constraints, and kinship and gender norms. This thick description, necessary in the absence of local ethnographic data, sets the context for later chapters.

Throughout the following chapters, life history participants (the c.20-30 year old fertile and infertile women, n=49) are referred to as life history women (LH women), to distinguish them from other study participants. Quotations are attributed to individual female (F33) or male participants (M1) or group discussion participants (WA, G2).

Figure 7 Overview of stages in normative woman's life course



5.1.1 Childhood and adolescence

During childhood, gender roles were established, partly through the division of household tasks: boys tended animals and helped their fathers with construction work around the household; girls cooked, pounded flour, cared for children and the elderly or infirm, and drew water. Participation in economic and agricultural activities was initiated. Children prepared traditional beer or snacks, or sold fish or bananas. Social values were reproduced from parent to child:

Interviewer: 'What about young girls, when they are just little, how should they behave?'

'She must have good behaviour, and listen to her parents... because respect begins at home. She should follow what I do, and do what I do. If I am cultivating in the garden, she should do the same. If she sees secret things I'm doing, then she will learn from them. And if I don't insult other people, she should follow in my footsteps. She should not interrupt... she has to copy me, because she is growing up by my side' F34

While there was general disapproval of parents who curbed their daughter's movements too strictly, girls who 'walked around' too much, or spent lots of time away from home, were frowned upon (partly out of concern for their safety). Thus from an early age, girls' movements, behaviour and socialisation were subject to surveillance by their family, and comment from the wider community. This aspect of being female, apparent from childhood, proved important in interpreting women's accounts of their later lives.

5.1.2 Formal education

State primary school fees were removed in 1994, so most LH women had accessed some free primary education (only two had never attended school. Only 2% of comparably aged women in the 2002-2004 KPS Census had never attended school). Although LH women had attended school between five and twenty years ago, their descriptions indicated a situation similar to today, in which schools are over-crowded with few resources. Most girls do not attend secondary school as only a proportion of students qualify for government secondary schools, and fees deter some of these. More men attended secondary school than women (see Table 7).

Table 7 Educational attainment, 20-29 year olds, KPS Census 2002-05

Highest standard reached	Female	Male	Total
Never attended	57 (2%)	38 (1%)	95
Primary 1-5	243 (9%)	155 (6%)	398
Primary 6-8	1,716 (61%)	1,052 (41%)	2,768
Secondary/tertiary	808 (29%)	1,340 (52%)	2,148
Total	2,824 (100%)	2,585 (100%)	5,409

Less than a quarter of LH women had attended secondary school (see Appendix B). They left school prematurely for various reasons such as transport costs, school fees (especially following a parental death), marriage and/or pregnancy²⁴, and ill health. F18's uncle had heard rumours that she had a boyfriend, and removed her from school as a punishment. F39 left school because her body was 'growing fast' (she was physically mature for her age). Her comment reflected a widely held idea that there was a 'right time' (largely signified by physical maturity) for girls to leave school and marry. Many women did not remember school fondly, and recalled beatings, or being unable to understand lessons. Several women's education had suffered due to moving around a lot, or having to care for siblings after a parent's death or illness.

Women's low educational attainment contributed towards their limited employment opportunities, as did a labour market in which completing school was no guarantee of employment. No LH women had been formally employed, though some older women interviewed had worked in domestic service or teaching. Several LH women blamed their current poverty on failure to complete school, as education was seen as an important means of escaping poverty and improving families' status.

5.1.3 Mobility and migration

Labour migration networks have existed between Malawi and neighbouring countries (Zambia, Tanzania and Zimbabwe, and South Africa) for decades (Kalipeni 2000). Fifteen of the 49 LH women had been born and/or largely brought up outside Malawi; most had Malawian parents, though two had married Malawians.

Many women's childhoods were characterised by high mobility (see example of F40, below), and even those who had not moved around lived in communities with highly

²⁴ At the time of writing, the Malawian government had just introduced a scheme whereby young mothers are encouraged to return to school after having a baby.

mobile members. The transfer of children between households, as a way of looking after the elderly and reinforcing reciprocal family ties, has been well documented across sub-Saharan Africa (Goody 1982; Bledsoe and Isugo-Abanihe 1989). About half of the LH women were temporarily, and often repeatedly, transferred to households of grandparents, older siblings, aunts and uncles. It was explained that the movement of children showed 'love and respect' for the host; or that relatives requested children because they 'admired' the child; or that children should live with extended family to 'get to know their home'. Pragmatic reasons were also evident. Girls, usually first-born daughters, were often requested by grandmothers or aunts during illness, old age or following childbirth. F22's case was typical. She was 'sent to wash plates' for her grandmother aged seven, and stayed for some months until her grandmother died. She returned home, and then went to help her maternal great-aunt for a year.

Children were also sent elsewhere to be helped by their host (in particular, with school fees) if their parents were poor, or following disruptions such as divorce. Some, like F40 (below) were moved in order to access better medical treatment and schools. Excessive movement during childhood had troubled several LH women and prompted them to marry. F75 described her marriage as being when she 'eventually found peace'.

F40. Twenty-nine years old. Example of mobility and migration in childhood

After her parents divorced, F40 went to live with her aunt (a traditional healer) at her mother's family home when she became ill and swollen from bewitchment. After two years, her uncle took her to town, where she was ill for four more years. She returned to her mothers' home and went to school, where she fainted and became dumb for four years. She stayed with another traditional healer while her mother and aunts cared for her. Her mother wanted her to live in town with her uncle, but her father wanted her with him in Nkhata Bay (her mother's view prevailed). She then got another illness (convulsions) and went to stay with her great uncle before marrying.

No evidence was found for formal adoption, though this effectively happened when orphaned children were taken in by relatives. Many LH women had been orphaned as children, and several had repeatedly lost guardians (i.e. a parent died, followed by the death of the grandparent or uncle with whom they were living).

5.1.4 Pre-marital relationships

Although pre-marital sex was not socially sanctioned, it was accepted as common and almost inevitable, and no strong emphasis was placed on maintaining virginity until

marriage. ANA data suggest that pre-marital sex was widespread. By age 18, 90% of nulliparous never-married women had had sex (which is probably an underestimate because these data did not include recently parous women, and will include some degree of under-reporting). LH women talked relatively openly about pre-marital sex. F22 told us that she learnt about sex and men from her first boyfriend, 'not from any elder person', and F72 described how she became pregnant at school because her boyfriend forced her to have sex. Most LH women had a boyfriend at school, who often became their husband. Relationships were kept secret from parents, and even from friends²⁵. Others refused to have boyfriends because they did not want 'sex in the bushes' (a euphemism for sex outside marriage), or were afraid of diseases or pregnancy.

Physical maturity (largely defined as having started menstruating (the median age for menarche in ANA data was 15 years) and breast and hip development) was seen by adult observers to indicate probable sexual activity in young women. ANA study fieldworkers, attempting to determine which girls had ever had sex²⁶, often disbelieved 'grown up' girls who claimed they were virgins, and tried to persuade them they could confidentially admit they had had sex. Having a sexual relationship could offer material benefits for young women, who would typically receive small gifts or money.

Pre-marital pregnancies were not unusual. Twelve per cent of ANC attenders either had their first child before marriage, or were currently pregnant and unmarried. In one group discussion, teenaged girls described why their peers might not use contraception when having sex. They said that girls hope to escape poverty through pregnancy by 'being helped' by the child's father. Others saw having a baby as commanding popularity. One participant said, 'girls with babies seem more beautiful than other girls'. However, some pregnancies were unintentional, the result of unwanted sex, or inability to access or use contraception²⁷. Others thought they were unlikely to get pregnant because they were not married. F24 had not been worried that she had not become pregnant for a year while she was sleeping with her boyfriend, 'because we were having sex in the bushes'.

²⁵ Several women had worried that jealous friends would try to steal their boyfriend.

²⁶ In order to ascertain eligibility for inclusion in the full version of the ANA study.

²⁷ Although contraception was made officially available to unmarried women in 1996, observations at the local rural hospital suggested that it would be very difficult for unmarried women to access family planning services confidentially. At the start of the family planning session, women wishing to attend were asked to raise their hands in a public waiting room, and women were led to the nurse's room together for a group consultation.

However, she was surprised and disappointed that when they married, and started sleeping together in the house, she still did not conceive.

Although some parents were initially angry at their daughter's pregnancy, and 'cut off their love', most were eventually supportive. Several women's families refused to let their pregnant daughter marry their child's father if he lived far away, due to concern that their daughter would lose their support and protection in the event of mistreatment at their marriage. F31's uncle wanted her to return to school (though she never did) so vetoed her marriage to her boyfriend:

'The term finished, I'd been pregnant for a while. The next term my pregnancy was discovered. My uncle refused to let me marry my husband. He said 'No, after you give birth, you will go back to school'... In his heart, maybe my boyfriend was planning to marry me, but my uncle's death came between us, because I moved away from there and came home, and I haven't been back... My boyfriend wrote me letters... when I first came here he sent some money, but since then, he hasn't even written a letter' F31, age 25

Pregnancy might also act as a catalyst for marriage²⁸. Some families presented their pregnant daughter for marriage at the responsible man's house (a specific Chitumbuka verb, *kuthula*, describes this act). If he refused to take her in as a wife, her family could demand cash compensation. Three LH women had done *kuthula*, but each marriage had been short lived. Such marriages were notoriously unstable as often one or both spouses were not enthusiastic about the match, but were pushed into it.

Unmarried women's children usually lived with their mother and her family for several years. After this, the child's father might claim the child by paying 'damages' (*chibadala*) to cover costs incurred by the woman's family in raising the child²⁹. If he did not pay *chibadala*, and the child's mother later married (as she was likely to), the child usually stayed with its' mother's relatives, and did not accompany its' mother to her new marriage. Stepfathers were considered 'harsh' and unwilling to care for other men's children, and grandparents might keep the child because 'they belong at home'. As F31 remarked, 'can a child marry?' Although she had found it hard to leave her child when she re-married, she believed that 'a child should know his home'.

²⁸ ANC data on date at first marriage were not accurate enough to determine what proportion of pregnancies were conceived before date of first marriage, as many women only knew the year that they married, and not the date or month.

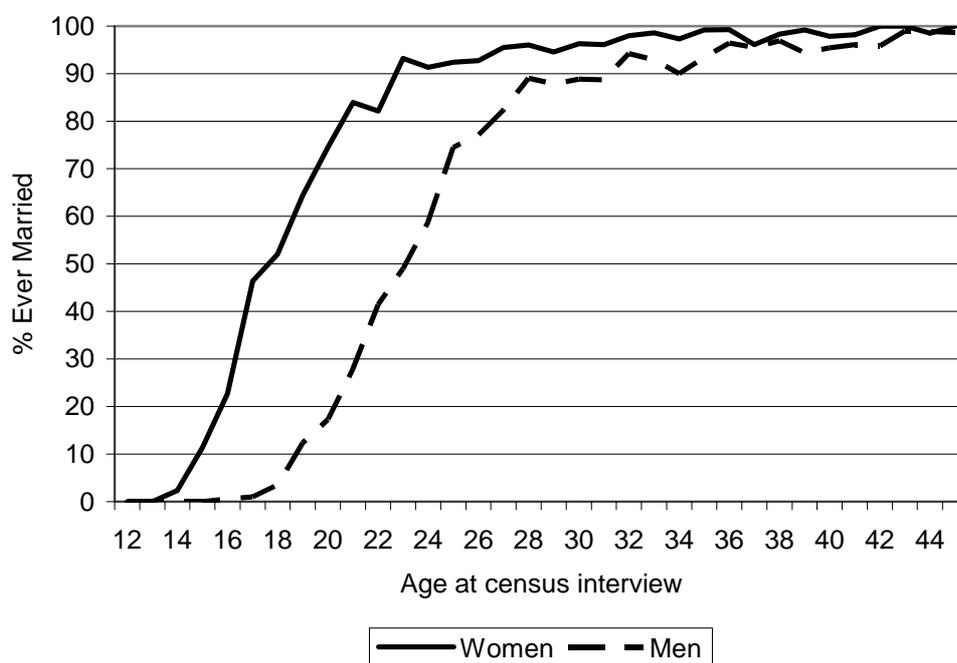
²⁹ Damages might also be paid to a woman's parents even if the father wanted nothing to do with the pregnancy.

5.2 Marriage and childbearing

5.2.1 The mandate and pressures to marry

Marriage in rural Malawi is still largely ‘common law’³⁰, and is ‘discouraged’ under the age of 15 (Constitution of Malawi 2004). Only 2% of women aged over 20 in the KPS baseline census had never married, and the median age at first marriage was 18.0 years³¹ in the latest DHS (2004). This pattern of youthful and near universal marriage reflects what amounted to a mandate for young women to marry. It could be dangerous for women to postpone marriage and motherhood as there were so few alternative life course options available to them (Spring 1995). Figure 8 shows the age and sex specific prevalence of ‘ever-married’ KPS census respondents. Male-female differences represent men marrying at older ages than women do. By their early twenties, almost all women had ever married, and by their early thirties, virtually all men had ever married.

Figure 8 Percentage of men and women ever married, by age at interview.



SOURCE: KPS census 2002-2005

The gap between childhood and married life was typically short. Many women married during school holidays, shortly after leaving school, or soon after menses began:

³⁰ By reputed or permanent cohabitation, without having to register.

³¹ For women aged 20-49.

Interviewer: 'Before you got married, did you have a boyfriend?'

'No. I didn't... Because when I was an adolescent, I didn't stay [at home] for long, I had just started to menstruate, then I had another period, and then the week I had my second period was when I got married. I came to know [sleep with] a man where? Here' F21, age 45

A good age for marriage was thought to be 18-20 years, which was when women were thought ready to begin childbearing ('this is when the bones are strong', F35). The following quotation from a group discussion on the best age to marry shows how physical maturity, rather than chronological age, was thought to be an important prerequisite for marriage. It also reflects a common concern that children grow up faster and marry earlier 'these days':

'It should be twenty years old, but nowadays it is difficult to reach twenty, to tell the truth, because children now grow up fast, like broiler chickens... when a girl matures, after only a short time you find that she has married. We just judge [readiness to marry] from how she looks, and not from how many years old she is... We cannot say that she should marry at a particular age, but a good age is from twenty years onwards, because by then she will be mature enough. However, the problem is that many of us do not reach that age, and as a result, they are found with babies, because people grow differently than in the past' WB, G5, age 24

Two LH women had married at relatively late ages owing to unusual circumstances. F54 was chronically ill, so did not marry until age 26, and F33 had attended secondary school and had lived in the capital city before marrying at age 34.

Young women cited factors that made marriage attractive, and factors that discouraged them from remaining single. Positive aspects of marriage included achieving independence, influence, motherhood and respect, as described in this discussion amongst teenaged girls:

'If a person gets married it means she is old [grown up]. She has moved on from our age [group]...she knows about marriage. If we see a person who is married, we see that she is very grown up... she is in her own house, preparing her own things...while we are just preparing things with our parents' WC, G2, age 17

‘She operates under her own rules, she makes her own budget. She has powers with her husband, to say maybe ‘this year we have to do this and that’. They talk to each other in that family. But if you don’t have a husband, you just know ‘today I have eaten, I must sleep’. But those two know their budget’ WE, G2, age 16

‘It is true; we respect a person who is married. She used to be like you, you were age mates for a long time. Now she is a mother who looks after her house, with her husband who has also left his parents and started up on his own. So they are independent. It is true; people give them respect’ WA, G2, age 17

GC (above) described married women as being ‘old’, because marriage was an important step in the transition to adulthood. Like joining a club, there were certain subjects that only married women were supposed to know about and discuss together (such as sexual relationships). ‘Just staying’ at home was an unattractive option. Patrilineal inheritance meant that daughters were expected to marry out, and if they remained at home, the system would come under pressure, as women would be in competition with their brothers for land. Staying at home also meant remaining under their family’s authority, without married women’s relative independence. The economic necessity of marriage for women (in order to access farmland and material support) was frequently commented on. One LH woman remarked to her interviewer, when she heard that she was unmarried, ‘oh, you do not need to get married, as you are working!’ (F31).

Factors that pushed women into marriage were moving around a lot during childhood, poverty, pregnancy, disliking school, and lack of school fees. Women hoped marriage would improve their situation: ‘if you are an orphan, a man can come to you and be your parents’. F47 had lived with numerous relatives following the death of her father:

Interviewer: ‘So what prompted you to get married the first time?’

‘I found that I was having problems, going here and there, so I said ‘It’s good to get married, rather than going here and there’’

Interviewer: ‘How did you feel when you got married?’

‘I was just thinking about the problems that I had been through’ F47, age 22

Bride price payments to her family, and material support for herself, could also encourage a woman to marry. F22 explained why she left school to marry her first husband:

‘I found out in standard four that we had to pass exams to get into standard five. That was when I found that man, and I got married to him’

Interviewer: ‘So you stopped school, because of that man?’

‘He visited my home, could I have refused that money? [laughs] No, I couldn’t refuse money’
F22, age 21

Not wanting to feel ‘stranded’ and left out if they remained unmarried also encouraged women to marry. As women got older, the number of potential spouses diminished. By age 25-29 single women far outnumbered men in the age group they would typically marry (age 30-34), and women might have to reluctantly marry a polygynist or widower. Finally, not wanting marriage was tantamount to not wanting children, which was socially unacceptable (see section 5.2.5).

In spite of these pressures, not all women married. Examples of why this might be were provided by two LH women, both of whom lived in Chilumba, where unconventional life courses were less remarkable as it was a busy trading centre. The first, F57, consented to be interviewed, but answered reluctantly with a sparse account of her life. She had her first and only child when at secondary school, and the child was brought up by her elder sister. F57 finished school, and returned home to nurse her sick mother. She said she had never had a boyfriend. She was the only woman interviewed who had not pursued having more than one child. The interviewers’ opinions of her were informative. They did not believe her when she said she had not had sex since getting pregnant, because they could not countenance that a single woman, who had already had a child, was not sexually active. She typified an ‘unconventional’ woman by not wanting marriage or more children, wanting to stay with her mother, and not ‘answering [interview] questions well’³². She was provided for by her older brothers at home, and had a role in the household caring for her mother.

³² During post-interview evaluation of the meeting, the interviewer described her behaviour as rude and impolite. Although her behaviour contrasted with usual gender and status norms of behaving compliantly; from the principal investigator’s perspective this was an understandable reaction to a series of potentially intrusive questions.

The second example, F56, was unusual because she was the only LH woman to live with her illegitimate child in her own household, without her parents. As a teenager, she had lived in town with her sister, selling tomatoes. She was ‘confused’ by numerous men propositioning her, and became pregnant, which she kept secret from her parents. After her child was born, she was called to its father’s village to show the baby to his parents. He already had one wife, and did not pay bride price or damages to her family. Although she wanted to marry him, he rejected her, so two weeks later she went home to Chilumba to live with her child and older brother, farming and running a grocery. She answered questions about whether she had ever been married inconsistently, and it was not clear to her, or the interviewer, whether her two-week stay with the father of her child constituted marriage. Although she had not had a serious relationship since, she had had boyfriends. She used condoms with her boyfriends because ‘my blood is still working’ (she still had sexual desires), yet she wanted to avoid pregnancy with men who she ‘did not have an appetite to have a child with’. She explained why she had not had another child:

‘I really want to get married, but I haven’t found a man, so without a man, can you get pregnant? Something that stops us women from getting pregnant is if we have already have a child. If you have another child with someone else, you have to make sure that you find a man with knowledge, [and be sure that] ‘this man can take care of me, and can take care of my child who I had with someone else’. He shouldn’t just give you money, and then you get pregnant: you need to find out [what he’s like] first... I really want a child, but do they [children] just borrow a man? Because I don’t want a man who I don’t know very well, and I don’t want a man just to give me a child. No... I really need a child, but a child needs to have a father at home, [I don’t want] a child with an unknown father’ F56, age 31

F56 was a confident, independent businesswoman who had managed to remain living with her own child. She was also single and sexually active, the type of woman who other women often referred to disparagingly as ‘a prostitute’. Yet she was far from socially excluded in the market community of Chilumba. Fitting in with a normative life course was not obligatory for women, provided they were equipped with the personal and social resources necessary to secure an alternative livelihood and identity.

5.2.2 Getting married

Women met their husbands working in the fields, or at social, sporting or religious events. Some women recounted romantic relationships prior to marriage, whereas others

married men they barely knew, often the first man who asked them. Most freely chose their spouse, though occasionally parents vetoed marriages. F58's husband's parents succeeded in preventing him from marrying a woman pregnant with his child. However, most couples ignored protests from parents and married nevertheless.

Women reported being regularly propositioned by men as soon as they appeared (physically) 'ready' for marriage. Their accounts always situated men as the active agents in courtship. Women were expected to act coyly and ignore preliminary approaches, using men's persistence as a means of judging how genuine their proposals were:

Interviewer: 'Exactly how did you come to know [your husband]? Tell us the story of how it started'

'I was coming from home, and I reached the road with my friend... at that point we didn't know each other yet... Then he saw me, and he called me... he asked me a lot of questions... such as where I lived. Then he told me to come again tomorrow, but I refused him. For a whole week... he came there [to my home], and then after that I accepted [his proposal], and we started going out together, then we got married... It was during the school holidays, I had been expecting to return to school' F32, age 22

M36's language when describing his first marriage accorded with gender norms evident in women's accounts. The woman he proposed marriage to kept ignoring him, so he 'just took her'. In other cases, women talked about being 'tricked' into marriage:

'When I was living at home he started proposing to me... I refused, and refused again. That's when he came and got me. I went to visit my friend, which was when I accepted his proposal. After I accepted, I stayed at home, and that was when he carried me here on his shoulders... I was asleep in my bedroom with my cousin... Before I had gone to sleep, that person [her future husband] had already come inside, whilst we were eating our dinner. When I went to sleep, he was waiting in the corner... He just took my hands, saying 'let's go, we're going'. I started shouting, and he said, 'if you start shouting, I will do what?' He got a cloth and put it in my mouth, then carried me here... My family started looking for me during the night and in the morning. That's when they found he had sent a person saying 'don't look for her, we have got your child', and he also sent K400 (\$4 US). Then they accepted [the marriage].' F40, age 29

Some men approached women with pragmatic rationales for marriage. F72's husband's pleaded, 'I am alone, I don't have anyone to cook for me, let's go', whereas F21's

husband proposed that she come to look after his (and her aunt's) child, whose mother had left him. F63's husband entreated that his mother was dead, there was no food at his home, he had no strength to cook, and had no siblings; she 'understood him' and they married. Others simply said that they married for love.

Although formal ceremonies were uncommon, an ideal process for marriage existed (see Appendix C), involving the man sending messages and having discussions with the woman's aunt and parents, and making a series of payments culminating in bride-price (*chuma*). It was unusual to fulfil all possible steps before marriage, and some husbands continued to pay bride price as long as a decade afterwards³³. As F70's story demonstrates, the ideal process could be bypassed:

'My husband paid money to my aunt, and sent somebody with a message to my parents. Then he pleaded with my aunt, as he wanted to take me home openly, but he failed because he had no money. He begged them to give him his wife. He went to his father-in-law, who also refused, saying 'You have not yet finished paying. If somebody wants to take their wife openly, they should finish paying everything. That's when we will give you your wife. You have to hear us: don't think we are trying to delay you'. That was when he just took me to his house' F70, age 31

Bride price was supposed to demonstrate that a man could support his wife, and was a gesture of respect to a woman's family ('you can't get a woman for free, that would be stealing' (F9's husband)). Not all parents were seriously concerned about when they received it. Some said it should be paid when their son-in-law could afford it, or after a child was born. F70's husband did not pay bride price for his first wife until after their first child:

Interviewer: 'Why did he wait until the first baby was born to pay bride price?'

'They had to wait because their parents were not willing for them to get married. The reason was that they were very close neighbours and were related in some way, so their parents were refusing. Instead they just eloped, and their parents told them, 'Even though you love one another, you should know that you are related'. Their parents tried all sorts of ways and means of ending their relationship, but in vain... and after their parents failed to split them up they started paying bride price' F70, age 31

³³ An incident occurred in Chilumba during fieldwork when a man paid bride price *after* the death of his wife, in order to ensure she would be buried at his home. His wife's family had been preparing to take her body away unless he finished making the payment.

The first child's birth marked an acceptance that the marriage was not going to break up just because the parents wanted it to. Another husband was prompted to pay bride price to placate angry relatives thought to be bewitching the couple because of his failure to pay (F48).

For most women, the actual act of marriage involved them secretly 'eloping' (*kusomphola waka*) to their husband's home after dusk, often without their parents' knowledge. Even if their parents had agreed to the marriage, it was considered disrespectful to let them observe this departure. If a proportion of bride price had been paid, men could publicly 'take' their wives without incurring damages (paid to the wife's family in cases of elopement without payment). In the absence of a discrete, public marriage ritual, a couple were considered married when they lived together. Spending time at a man's house at night could be considered tantamount to marriage. F71 visited her boyfriend, and when she reached home, dusk had fallen, so her family sent her back to be his wife.

5.2.3 Married life

Residence after marriage was usually patrilocal, though some couples lived elsewhere, retaining land at home for farming or future use. Households typically included the husband's relatives, either in a close group of houses, or with yards and gardens in-between. Husbands and wives did not necessarily operate as a co-operative domestic unit. They might loan money to each other or sell goods to each other (Spring 1995), though the ideal was for couples to help each other (Watkins and Tawfik 2007). Once married, women contributed to all aspects of their husbands' households, looking after visitors and children (including stepchildren and relations' children), and growing crops. The nature of married life very much depended on which relatives the couple lived with, and how they treated the new wife. A taboo remained in more remote areas that women should not have direct contact with their father-in-law³⁴. Typical values for a 'good' wife and husband are summarised in this extract from group discussion 1 (married women):

Interviewer: The way we can recognise a good woman, what is her behaviour like?

³⁴Or, indeed, his brothers. A variety of mechanisms existed so that a daughter-in-law could serve her father-in-law whilst avoiding contact with him. These included leaving plates of food in a designated area for collection, or covering her head with a cloth when passing him.

She is humble in the presence of her friend [husband]... respectful...not a gossip... merciful, and good at caring for the family...she loves any relative of the man, without being choosy... and listens to what her husband says... she prepares his dinner and water for bathing on time... there should be no rudeness: if visitors come, you are not supposed to get annoyed, that is what they call a good wife.

Interviewer: So, we were talking about women, we were defending ourselves. What about men, what must a good man's behaviour be like?

He must take care of and clothe his wife... he must not have girlfriends... they have to help each other... they have to maybe make a business together... It isn't good for him to have a roving eye, always looking up and down... it isn't good for a wife to be worried at home... he must look after his family well... including his parents... he has to give both the husband's and wife's parents soap.

It was rare for women to use 'emotional' language in relation to their marriages³⁵. Descriptions of material flows proved more important for analysing marital dynamics. Women often evaluated their marriages through the domestic sphere, especially their husband's provision of assets such as soap and clothing ('men should dress their wife well and give her food'). Material support had symbolic as well as economic value, and was seen to embody the value men placed on relationships. A wife who complained that her husband did not buy her soap might be annoyed as she simply needed soap, but this was also a shared cultural symbol for her husband not caring for her properly. When F69's husband married another wife, he effectively abandoned her, and had not slept at her house for the past two years. She presented the height of his bad behaviour as being when he sold their shared property:

'All these things happened after my friend [husband] married another woman and squandered everything. At first he sold all the bricks, and a plough, so I was furious... I decided it would be better if I had my own house to look after my children in... I left him and came back two weeks later. That was when I went to the village headman. They judged the case, and said that I should go back to my husband. Now it's up to me to go back' F69, age 29

Once married, women did not always find the improvements they had hoped marriage would bring. F65 recounted the fears she had:

Interviewer: 'How did you feel when you had just got married?'

³⁵ The range of emotions expressed included love, jealousy, pain in the heart and feeling 'nothing' – just staying, but most women did not feel comfortable or familiar discussing emotions in more depth than this.

‘As you know, for us women, it becomes a problem when you face something you have never known before... I was sad and I used to run away...I even refused to sleep with him’

Interviewer: ‘So, how did you start to sleep in the house?’

‘Parents [*wapapi*: ‘elders’] advised me not to be afraid’ F65, age 32

Many women professed to regretting marrying so young. F43 said her desire to marry was ‘that of a young child’, and F58 said she married without ‘proper knowledge’. F76 had tried to return to school when two weeks after marrying she found out she had been selected for secondary school. She and her brothers wanted her to divorce and return to school, but her father disallowed it.

The mobility of married women varied greatly. Some left their marriages for weeks, months, or even years (following a disagreement, visiting their family, or to give birth; most often they went back home) without considering themselves permanently separated from their husbands. Other women’s husbands became jealous if they went anywhere alone, such as visiting traditional healers. The high degree of mobility required for some commercial activity (trading between towns, for instance) was seen as undesirable for married women, requiring them to be away from home and implying they were not properly supported by their husbands (it was presumed that otherwise they would not want to do this). Yet many LH women engaged in small-scale commercial activities such as brewing beer, or selling snacks or second hand clothes. They complained that this brought in only negligible profit, and they might only undertake these activities if they had not grown sufficient food. For all LH women, their own crops were the most important source of income and food. Many women worked in organised groups with neighbouring women or relatives, helping each other cultivate.

The extended family, neighbours or traditional courts could be enlisted to negotiate marital conflict if it occurred. F51’s husband was beating her and leaving her alone while he stayed with a girlfriend, so she took him to the traditional court. There, he persuaded them that he loved her, and the court encouraged her to remain married. She returned, but ultimately they separated. She painted a picture of a stereotypical ‘bad man’ who drank, was promiscuous, and shouted at her, and did *chikamwini* (staying

with a girlfriend³⁶). If a man stopped sleeping at his wife's house or otherwise neglected her, it could be difficult for her to confront him directly. Rather, she had to persuade the community or her family to intervene.

Seven LH women reported suffering violence from past or current husbands (others were insulted or had their clothes torn). F48 told us of one such incident:

‘In those days he liked beating me a lot... I had sold cassava in order to buy a bucket. He took the money even though I had told him the previous day that I would sell cassava... I asked him where my money was, and said ‘go and get my money’. Then we started quarrelling and he started beating me’ F48, age 24

Traditional courts could fine men for abuse, but a certain level of violence was tolerated. After being beaten, F22 approached her parents, and F13 asked for help from her brother. Neither immediately suggested action (F22's parents said, ‘that is marriage’). However, both families supported the women through their divorces when their situations worsened.

Thirteen LH women reported that they knew their past or current husbands had been unfaithful to them. F66's and F70's husbands had both made other women pregnant, and F25 felt powerless to do anything about her husband's numerous girlfriends, because ‘this is not my home [she was from Zambia] and his girlfriends might injure me’. F59 also believed her husband had many girlfriends; ‘you can't count them’, but did nothing about it, she ‘just feels tired and looks at him’. Women frequently felt they could not ask their husband what he was doing, and could not stop him even if they knew. Yet not all women portrayed themselves as powerless. When F37 married and found her husband to have a girlfriend, she refused to live there until his girlfriend had gone home. When F55 and F60 got fed up with their husband's bad behaviour, which included ‘womanising’, they decided to leave.

Female infidelity was rarely mentioned, although the idea that some infertile women might have sex with other men to try and get pregnant was discussed (see 9.2.2). Incidents of female infidelity that were mentioned during interviews had not been

³⁶ This is a Chichewa word relating to the matrilineal residence patterns of Southern Malawi (men move to their wife's household when they marry). Men ‘doing *chikimwini*’ is joked about and seen as undesirable, as it inverts usual gender norms by men staying with their girlfriends rather than living patrilocally.

tolerated by men. F39's husband's first wife was caught with another man, and was thrown out, never to see her children again.

5.2.4 Relationships with original family

Throughout women's marriages, women retained strong links with their original family if possible. When asked what she thought would happen in future, with regards to her long-term infertility, F48 answered 'my parents will know that I have stayed for a long time for nothing, so I can come back home and rest'. Despite five years of marriage, her first reaction was to refer to her parents. Women's families were seen to have their daughter's well-being closer to heart than their in-laws, who could not always be relied upon to treat them properly. Married women often returned home for several weeks or months if there was a family death, if their husband was away, or if they were ill. Returning from long stays, women were meant to bring gifts from their parents (usually buckets of flour), to thank their daughters' husbands and recompense them for allowing their wife to visit home. If husbands behaved badly and were fined by local courts, the money was paid to their wife's father. F20's siblings tried to help her in numerous ways during her long, unhappy marriage. Firstly her brother tried to facilitate her leaving her husband to marry her 'true love' (a boyfriend from school), but her parents stopped her. Her sisters then took her to be sterilised, without telling her husband, after her sixth child, as they worried for her health. Women's links with home could cause marital tension, partly because wives' duties could not be carried out whilst they were away. This precipitated divorce for two LH women, including F23, whose marriage ended after she visited her father when he was ill. Her husband became angry, and spread rumours that F23 was married to her father. Following these allegations of incest, local militia beat her father³⁷. Her father was so insulted that F23 left her marriage, leaving her child behind.

5.2.5 The importance of children in marriage

'It is important for us people to be many: if you are just two [a couple], you are nothing' F18

Marriage and having children were linguistically synonymous (both were referred to as *banja*, or family), and conceptually intertwined: 'it is a law written that when a woman

³⁷ Apparently these were the 'young pioneers'; the paramilitary youth wing of Banda's regime. Rural youths were organised into units who dispensed vigilante justice, although their official remit was helping to 'develop' Malawi.

marries, she has to be pregnant and have a child' (F52), and 'for a person to live at their married home, they must have children' (F51). In spite of recent small fertility declines, newly married couples wanted children as soon as possible. This urgency was demonstrated by the high frequency with which fertility medicines were sought, as early as one month after marriage (see chapter 6). Birth intervals were shortest in the younger age group, reflecting both physiological factors and social norms that expected high fertility at this stage in the life course (see Table 8). After conception, traditional medicines were often used to protect and nurture the pregnancy. The vast majority of women (99%) also attended ANC at some point during their pregnancy (KPS census data). In recent years women have been advised to attend Karonga district hospital for their first birth. For subsequent births they might attend local hospitals, or gave birth at home, with or without the assistance of a traditional birth attendant. Women often returned home to give birth.

Table 8 Mean birth intervals by age group (currently pregnant women, projecting forward to next birth)

Age group	Mean birth interval, years	N
Under 20	2.0	326
20-24	2.4	1249
25-29	2.9	1107
30-34	3.2	614
35-39	3.6	303
40+	3.8	103
Total	2.8	3702

After childbirth, mother and baby were usually confined to the house for a week with the baby, and more protective traditional medicines were used (Kornfield and Namate 1997a). Co-wives, children and neighbours helped during the post-partum period, as women were not meant to prepare food. Post-partum abstinence (PPA) from sexual intercourse was widely observed. The median length of abstinence following childbirth was 5.8 months (among women currently pregnant at ANC after their previous birth). PPA functions to space births, and had symbolic meaning, as women were considered polluted following childbirth (or miscarriage) until menses recommenced. This change of status (*kumeta*: 'becoming clean') was accompanied by rites such as shaving head and body hair.

Decisions such as how many children to have, and whether to use family planning, were important issues at this life course stage. A comprehensive evaluation of fertility intentions is beyond the scope of this thesis, but key aspects are discussed:

‘Children are our future, so a person can not hate a child... They can help you in many ways. Because I remain uneducated, perhaps if I had a child I would be helped with many problems, that is why we are looking for a child. You would like a child to draw water for you. Everyone needs a child. If the children come from playing, having dirtied their clothes, or if people are going to the under fives’ clinic, we admire them, and if you don’t have children, you can’t manage’ F52, age 19, one year of primary infertility

F52 stressed the commonly heard phrase: ‘one can not hate a child’. That some people might not want children was almost inconceivable. To emphasize her desire to have children, F52 even voiced her admiration for one of their less obviously desirable characteristics – their dirty clothes (having clean clothing is an important priority for local women). Numerous women hoped that their children would become educated and help them in future: ‘Some old people receive a car, and they come with plastic bags [groceries]. Is that not their children [doing this]?’ (F56).

Women often described themselves as ‘visitors’ to their husbands’ home. However long they were married, it never became truly their own home until perhaps their own sons were the heads of the household:

Interviewer: ‘At first, when you got married, how did you feel?’

‘When I eloped to his house, I started feeling sorry for myself, because I was staying there as if I was a visitor, and I was failing to make myself happy. It was a long time before I started to feel happy’ F70, age 31

Children were thus crucial for cementing their position. F38 asked us (rhetorically), ‘a woman at her husband’s village: can you stay there without a child?’ By having sons in particular, women contributed to the patriline’s continuation, and acquired legitimacy and a future stake in the household. Her sons, as future household heads, would hopefully be loyal and concerned about their mother. Having children was thought to make separated couples more likely to reunite: ‘you might get divorced, but if you have children, you might return’ (F47). F27 told of her co-wife, who left their husband for several years after she was angered by his marriage to F27. She eventually gave up

hoping he would divorce F27 and returned. Although she no longer had a friendly relationship with her husband, she lived at his household with their children, and was seen as his wife. Children might also contribute to marital stability by encouraging women to stay in unsatisfactory marriages, as this woman who had not counted on marrying a polygynous man described:

‘He just married me. He said ‘I don’t have a wife’ because his [first] wife had gone back [home]. But after my arrival she came back again... I become very annoyed when my co-wife came. Even my parents were very annoyed, and wanted to take me home. When my parents came they said ‘we will go with our child, she won’t remain here, it is better if she comes with us’. Unfortunately they found me pregnant, which was why they left me here. If I was not pregnant, I would have gone’ F72, age 23

Even if a couple divorced, and a mother lost custody of her children (and some of the immediate benefits that this entailed, such as their help and companionship), her maternal benefits were often realised in future, as women might return to live with their children later in life, or their children might return to live with her.

In addition to the concrete benefits of having children, there were other equally important, less tangible reasons for ‘admiring’ children. Especially in sparsely populated rural areas, young couples in quiet, isolated households without children complained of having ‘no one to chat to’. Having children alleviated the labour of farming and maintaining the household, and gave these efforts purpose by the pleasure of having children to work, talk, and pass the time with, and by the thought that the fruits of these labours would be passed on to someone in future. The psychosocial importance of having a large family was particularly pronounced in participants with small families owing to bereavements and fertility problems, such as F59 (a woman with primary infertility whose mother had died):

Interviewer: ‘How many children do you think you will have in the future?’

‘The number that God will give me’

Interviewer: ‘Perhaps God will give you 50, then would you give birth to up to 50?’

‘Yes’ [laughs]

Interviewer: ‘Why do you want as many as that?’

‘The way I am here, I am an orphan, so if I have 50 children, one of them will sit here, and the other one will sit here [demonstrated that she will be surrounded by children], which means I will be no longer be an orphan’ F59, age 22

Peopling a household and improving the household's physical structures were closely linked. The advent of F46's baby was cause for her husband to build a new, improved house, and M36 (the husband of a woman with primary infertility) complained that there was no point improving his household if there were no children to inherit it. Another man (with children) explained how having educated children 'developed your name' and increased your social standing:

'If children are educated, it means your name is developing... There are many good things about having a child; you send them [on errands]. To be happy here at home, if you build a house like this one, and then stay alone, it is not beautiful. Indeed, having a child is like having flowers, it's true' M42, age 29

Several women admired their peers with children for being able to attend ANC and the Under 5's clinic, a sociable occasion where women dressed in their best clothes. One of the reasons that infertility was so distressing for women was that it denied them participation in peer group events and the ability to talk about widely shared experiences, such as breastfeeding or caring for children (Mogobe 2005). Others said that children helped them to live well with their husband. This quotation shows how public recognition of the family unit was part of this:

'The goodness of having a child is that you live well with your husband. Even if you are poor, you are all together in the house and you have children. Everybody knows that that man is the husband of that woman, and the father of that child' F56, age 31

The importance of children was usually expressed through the domestic paradigm, such as by recounting the extensive range of tasks they helped with. Jobs were divided according to gender and age, and even pre-school children practiced their chores – carrying small sticks of wood or pails of water. Children helped sick people and post-partum women, lit fires, cooked, drew water, fetched vegetables, farmed, gathered wood, swept, ran messages, and so on. Having children allowed women to participate in 'the intergenerational bargain', the idea that young women comply with having low status and doing a disproportionate amount of work, in the implicit understanding that when they reach a senior household position, their children and daughters in-law will do the same for them. Children might also earn money for the household with small businesses such as selling sugarcane, buying and selling fish, and brewing beer. The

possibility of sending children to help relatives meant that they represented a resource for the extended family, not just the nuclear household.

Another indicator of the primary importance of childbearing for women was that several participants suggested pregnancy to be necessary for women's health. When F21 went to hospital because she was 'lacking blood', the doctor reportedly said it was because she had not been pregnant for years, and the 'blood had clotted'. F27 thought that pain during her second pregnancy might have been because she had not given birth for years: 'maybe the bones in my back were broken'. F45 was told that she had painful periods because she had fertility inside but was not using it.

Risks to children surviving to adulthood influenced the number of children that women wanted. Five life history women had had only one live child born, who later died in infancy, leaving them childless as they subsequently had secondary infertility or did not have a partner. One woman with only one living child worried about this happening to her:

'What I think is that, with one child, death might be there, so that's why I worry about only having one child. It would have been better to have two or three children, so with only one, that's why I worry so much about it' F25, age 30, 10 years of secondary infertility

Several people said that having numerous children was good because older children looked after their siblings if their parents died. In addition, one might want numerous children because one could not rely on all surviving children being helpful. They might end up unemployed or with 'bad behaviour' such as alcoholism and womanising:

'The advantages of having lots of children come according to how much luck God gives you. Some people have lots of children, but you see them and think 'I am better off than them, even though I don't have children'. Some people have lots of children, and you say 'aah, this friend of mine has made a lot of profit'. One [child] is working, one is in the UK, and one is somewhere else. Their mother is alone at home but her children have built her a big house ...But some people have given birth and invited problems. Out of nine children, some have got witchcraft, some beat their mothers, and some do other things, so it just depends on luck...God said that you have to go forth and multiply but some get multiplied in a good way, their children help them, but some get multiplied with problems, and you can say that those of us who stopped having more and more children are better off' F50, age 48

Families might also continue to have children to balance the sex ratio of their children. Sons and daughters both had advantages, and both were welcomed, but a mix of sexes was desired³⁸. F68's husband took another wife after she had had three daughters because he wanted a son, and F67, who had two daughters, also wanted two or three sons, as 'it is boys who build the village'. Only one case of explicit sex discrimination against a daughter was encountered during fieldwork: F71's husband said that having a daughter was, 'just like having no child', so their daughter lived with her grandmother.

5.2.6 Building and spacing a family

Although a strong ethos of 'loving children' was evident, most women at some stage considered birth spacing or limiting family size. When participants were asked the 'ideal number of children', most answers fell between three and five. Economic restraints were usually cited as limiting family size, such as perceived increasing difficulty in caring for children properly with 'prices going up'; decreasing availability of land and food; 'diseases of these days'; and difficulties in satisfying children's material aspirations for items such as nice clothes:

'Mostly, here in the village, the problem is finding money to take care of children, because to find money, farming is necessary. Here in Karonga most people grow cassava, and need to sell it at market. All of us sell cassava, yet very few people buy it. That means some of us stay there for a week, without selling the cassava, whilst at home you have seven or eight children waiting for your assistance, because most of our husbands are jobless, and we all depend on farming. Village life nowadays is [about] money. That is what we need to take care for our children. That is what we are lacking' WB, G5, age 24

There was wide awareness of government policy towards fertility reduction. Women reported that health centres or 'the government' told them they should only have three or four children. Health education talks and songs repeatedly warned women that if they had numerous children they would be overwhelmed with responsibilities and hardship, and would neglect their husband, leading to him being unfaithful and 'bringing home diseases'.

A number of traditional and modern methods were used by LH women, including the contraceptive pill and injection, condoms, 'the rope' or beads (tied around the waist to

³⁸ Although girls are generally more helpful to their mothers at home, they eventually got married and moved away, whereas grown up sons 'helped with problems at home' and 'built the village'.

prevent pregnancy) and herbal infusions. Women changed methods according to their situation as F69's case illustrates:

F69. Twenty-nine years old

Two years after her second child was born, F69 went to an elder person for traditional beads to prevent pregnancy. She wore them for a year, but her husband found them and would not agree to her wearing them. He untied the beads, and that month she became pregnant, as her husband was pestering her to have sex even though she wanted to abstain in order to 'care for the child'. People discouraged her from using modern contraception, saying that she would have miscarriages and problems giving birth in future. She visited the elder person again when her last child was born, but they refused to give her anything, saying she was too young and should carry on giving birth. So she went to the hospital and got the injection instead [likely to have been Depo-Provera], without telling her husband.

Talk of contraception was polarised between enthusiastic accounts of its benefits (possibly because women thought this was what interviewers wanted to hear, as many participants associated researchers with hospitals and family planning provision), and dramatic stories of side effects. Contraceptives were talked about in terms of protecting existing children by postponing the next pregnancy, rather than preventing future pregnancies³⁹, as closely spaced pregnancies were considered unwise:

'Children grow up healthily, but if you do not practice child spacing they do not look nice and you feel shy showing people that 'this is my child'. However, if you do family planning, children grow up healthily and their appearance tallies with their age, and you feel proud showing people that 'this is my child' WB, G5, age 24

Although women widely recognised the benefits of birth spacing, they frequently voiced fears of side effects, including 'sores, uterine cancer, and bleeding' (F76); pain, sickness and death (F68); and causing periods to stop (F55). Other women talked about how contraceptives can 'remove your fertility' (F49). F73 said that some people's blood 'fitted' with contraception, whereas others' did not: she stated that such women would have future problems giving birth, and their blood might clot and kill them.

The prevailing attitude towards family planning was that married women should only practice it for a good reason, such as child spacing; 'resting' after reproductive problems such as stillbirth or miscarriage; kick-starting periods to regain fertility; when they had

³⁹ When women were asked when they had used a contraceptive, the way they answered was to say which child they had used it after: e.g. 'wachizungu uwo pa mwana wa 1996 uyo'; I used the modern contraceptives for the child born in 1996.

enough children; or if there were health risks inherent in further pregnancies. Without a good reason, married women were expected to be willing to get pregnant, and it was almost inconceivable that a couple would marry and use contraceptives before having a child. In ANC data, only 2% of nulliparous women had used contraception, and qualitative data suggest this would probably have been before marriage (though this may underestimate condom use, which is often not reported as a family planning method, being seen instead as an HIV prevention method). The percentage of women who had ever used contraception rose to 14% in women attending ANC for their second pregnancy (those who had already had one birth). When F52 was asked if she wanted more than the two children she currently had, she simply replied, ‘can you hate a child?’ The alternative to not wanting more children seemed to be hating them. F44 had never become pregnant in her marriage, and her husband’s attitude was that if she had been deliberately stopping herself from having children (‘like some women with many children do’), he would have divorced her, but as their infertility was ‘the will of God’, he accepted the situation.

Not all women complied with the accepted circumstances for contraceptive use. What constituted a good enough reason for practicing family planning was often contested between husbands and wives, and so women might use hormonal contraceptives in particular without their husbands’ knowledge. F70 described how her second husband wanted a child, but she wanted to ‘rest’ after giving birth a year previously to her first husband’s child:

‘If a woman has a child, you have to say ‘father [husband], let us rest’. But my husband said ‘no, let us be giving birth, because bride price is for giving birth’...Tomorrow they will push you away [if you don’t give birth], so you can’t say ‘I can not give birth and I should rest first’ No, you have to give birth and then see how your life is going and at some point you can be closed [sterilised]. But at the moment I am still young’ F70, age 31

She secretly used traditional contraceptives, and when she did not conceive, her husband asked her ‘why aren’t you getting pregnant?’ and took her for a check up at hospital. After this she stopped using traditional contraception and had a child. Other women who used contraception outside marriage constructed what they thought were more morally acceptable reasons for doing so, such as avoiding pregnancy with boyfriends while they were still evaluating their reliability and ability to provide: ‘when they were not sure if their boyfriend would support them if they became pregnant’ (F7).

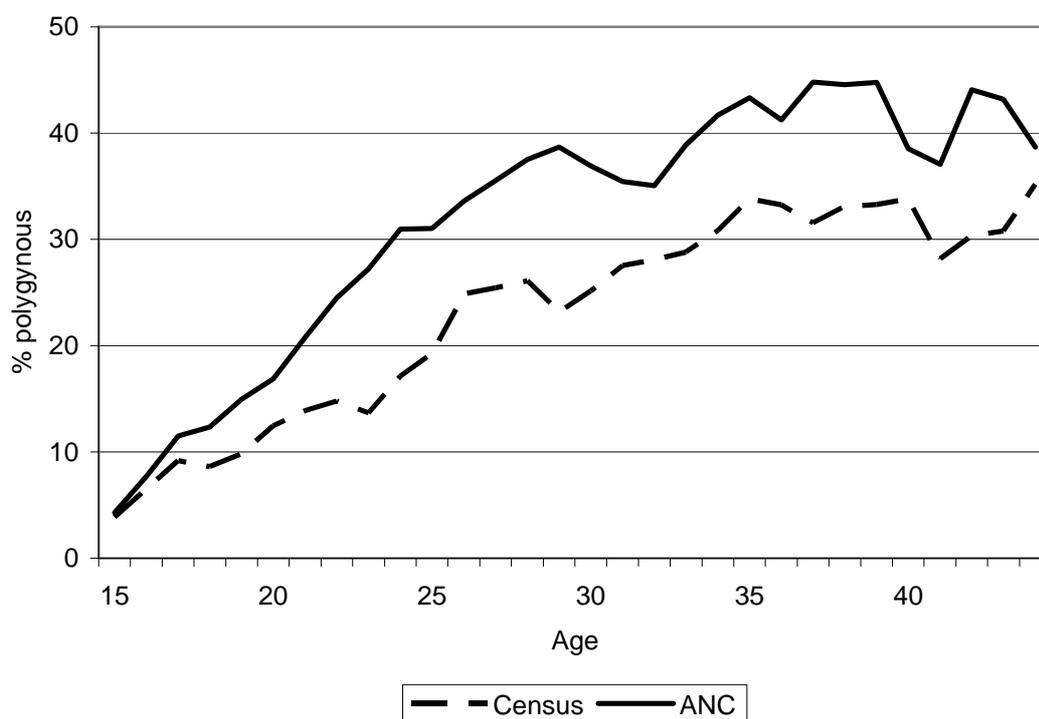
5.3 Potential developments within marriage

Getting married and having children with one's first husband was not the end point for many women's life histories. Gaining a co-wife, divorce and re-marriage were all common events considered in this section.

5.3.1 Polygyny

Although polygyny was widespread (14% of married men had more than one wife, and 24% of married women had at least one co-wife; KPS census data), it was not universally accepted⁴⁰. The proportion of women polygynously married increased with age (see Figure 9), although Census and ANC data did not concur exactly with each other (partly because of different data collection methods⁴¹, and partly because ANC and Census data represent different populations of women). While most young women started off life monogamously, if they follow the experience of preceding cohorts of women, around 40% might expect to have at least one co-wife by their mid-thirties.

Figure 9 Percentage of married women with polygynous husband, by age (three-year rolling averages), KPS census and ANC data.



⁴⁰ For instance, polygynists were not accepted as full members of the Catholic church.

⁴¹ The Census is likely to have underestimated polygyny as data on polygyny was calculated from male data (adding up the number of wives each man reported). Around 10% of married women could not be matched to a known spouse; hence whether their husbands were polygynous was unknown, and they were classed as monogamous women.

Polygynous men were routinely blamed in informal and group interviews for high birth rates and consequent land shortages. Some women were adamant they would never marry polygynously:

‘The way I see it is that men ill-treat us. Some husbands do not care for their wives. In the early days of marriage, they show their true love, but after some time you find he has married other wives. This makes most women unable to live happily in their families. They start thinking, ‘maybe if I were alone, things would be better, or if there were just the two of us, things could have been improving’... However, she fails to leave the marriage after considering who would take care of the children. Most of our friends have complained about this kind of life’ WB, G5, age 24

Some wives were not consulted (and did not necessarily expect to be informed) about their husband’s intention to bring a new wife home. Other wives gave their husbands their blessing to marry again. Women whose husbands took additional wives usually said that although their ‘heart pained’, there was nothing they could do, and they tried to welcome the new wife.

‘In my heart, after he married the third one, we stayed very well, but as usual deep down in my heart I was feeling pain: why had he married another woman? I did ask him... And he said that he was used to having two wives’ F70, age 31

Common fears around polygyny concerned jealousy and witchcraft from co-wives, and that household resources might be spread more thinly. Other women worried that new wives introduced risk of STIs, especially if they were thought to have a mysterious or promiscuous background. However, a new wife was preferable to husbands having girlfriends, who posed a greater risk as their behaviour was unknown.

The distinction between men having extra-marital affairs (which were undesirable though tacitly accepted by many women) and courting new wives was unclear. This ambiguity implicitly sanctioned men’s extra-marital relationships, as they could always be legitimately looking for another wife (whereas women had no such rationale for infidelity). When F47’s husband had a girlfriend, F47 told him he ought to marry her, because his girlfriend was married and was thus ‘cheating her husband’. He justified the ongoing relationship by saying he intended to marry his girlfriend eventually.

Women described why they thought some men liked polygyny: there would be more development and work done at his household, and more land could be farmed; some men were just copying their friends; others were unhappy with their current wife. Some women from harmonious polygynous households saw it as a way of reducing household vulnerability to illness or food shortages. F74a and F74b (a pair of co-wives) told us that if one wife ran out of food, the other would cook. When asked what they would do if they heard their husband had a girlfriend, the senior wife replied:

‘When my co-wife came here, I said ‘my friend we have to understand each other’... I told her that if a man is doing something wrong, we have to disagree with him... and us women will understand each other....As we are here, we can ask him, both of us, that we heard this and that [rumours], is this true? Both of us can ask him at the same time’ F74a, age 24

Co-wives often farmed together and looked after one other’s children if the other was away. If a marriage was effectively over, polygyny allowed women to remain at their husband’s household with their children without having to divorce, and usually with some degree of ongoing economic support from their husband.

Husbands shared time and resources between wives in different ways: some did so equally, others stayed predominantly with one wife. Ideally, time and resources were shared equally, and each wife had her own house and garden to farm:

‘Because each of us has our own dependents, we couldn’t manage with one garden, so each person has their own, because otherwise our children would have problems. One of them might say, ‘where is my mother’s garden?’... Everyone should dig for their own food, but we should eat together. But if we run out of food, if I have some in my bedroom, my friend [co-wife] can come in and take some, and even I can go to my friend’s bedroom and get some’ F21, age 45

In contrast, F51 described a troubled polygynous marriage, in which her husband had lots of girlfriends, had contracted syphilis, and drank heavily. F51 described him with an insult usually reserved for women: ‘he liked to marry and was a prostitute’. Polygyny could engage women in relations of competition and conflict: F64’s story showed how she had to negotiate greater economic autonomy in her marriage as she could not rely on her husband’s support, and was treated as inferior to her junior wife. She portrayed him as a man who was not managing polygyny well:

F64. Twenty-two years old

F64 was happy when she first married, but after just three months her husband married another wife. At first he did not buy F64 salt or clothes, and did not let her handle any money, but the situation had since improved and he gave her soap if she asked for it. At first, they farmed and ate together, but F64 had to beg for the smallest pail of rice or piece of soap from her husband, so she pleaded that the land be split into three so she could manage her own affairs, which he eventually agreed to. Even though each adult grew their own food, her husband come and ate all of hers, because 'he is a difficult man'. He continually favoured his second wife: F64 lived in a tumbledown house, with broken walls and roof, and very few possessions. Next door her co-wife's house stood newly built and plastered.

5.3.2 Divorce and separation

Divorce was common and could be initiated by a husband or wife. The census found 13% of women and 5% of men aged 20-45 to be currently divorced or separated. Forty percent of ANA women aged over 40 had had more than one previous husband (though a proportion of these women had been widowed) and 44% of similarly aged ANC women had been married more than once. 'Official' divorces and related bride price decisions went through traditional courts. However, most divorces were not officially marked: women decided to 'go home', or their parents fetched them, or their husbands told them to leave (although they had to have a good reason for making their wife leave, such as infidelity on her part). The end of marriage was not necessarily a clear or permanent change of status. Several LH women were separated from their husbands owing to disputes over co-wives and marital payments, and it was not clear whether they would return to their husbands or not. Some couples separated for years but eventually reunited, especially if they had children together. A spouse might leave following an argument, to attend a funeral, to nurse a sick relative, or on labour migration. Either partner might re-marry without the other's knowledge. This did not constitute bigamy, but for men represented the acquisition of a co-wife, and for women meant, by default, that they were divorced from their first husband. F21 described how her husband's first wife left him:

'Our husband, due to poverty... went to Zambia, to obtain blankets [an expression for labour migration and returning with consumer goods]. After he had been there for a year, he came back and found that his first wife had just married someone else. She had left a small child behind, who had just learnt to walk' F21, age 45

Divorce was not always owing to the couple's relationship breaking down. F7's second marriage ended after eight years because her husband moved away for work, and she

could not take her six children from her previous marriage with her. Rather than leave six children behind, she divorced her second husband, and the two children they had together went with him. F55 blamed her divorce on her co-wife, who she suspected of poisoning her, and F60 left her marriage because of her abusive brother-in-law. F70 was also driven from marriage owing to fears her uncle had bewitched her. Her parents were responsible for deciding to take her home:

Interviewer: 'How did your marriage stand, was it in the hands of your parents, or was it just a matter between you and your husband?'

'No, it was in the hands of my parents' F70, age 31

Other divorces were blamed on men's 'bad behaviour': drunkenness, violence, infidelity, or 'talking too much' (nagging/gossiping). F76's husband had many of these characteristics, and she decided that in spite of the pain of leaving her children, it was better to leave and 'have the chance to stay well':

'[He was] talkative. Sometimes the way a man's behaviour is, sometimes he insults you, sometimes he beats you and maybe you have disagreed about a small matter, and then he starts telling people about it' F76, age 32

Disputes over bride price were a common cause of divorce, especially during the early days of marriage. F27 became pregnant by her boyfriend at school who was too 'childish' to find money for her parents, which caused the marriage to end after eight months. F29's first husband also paid nothing, so her parents took her home a year later.

Circumstances around divorce affected what happened to bride price. Table 9's version of what *should* happen was not always adhered to:

Table 9 Bride price following divorce

	Divorce circumstances	Bride price paid back to husband?
Children	Divorce initiated by husband or wife for any reason	Not paid back if children stayed with father
		Husband might give wife option of taking children with her, in which case bride price paid back to man
No children	Woman decides to leave with 'no good reason'	Paid back to man
	Woman decides to leave but has a 'good reason'	Not paid back to man
	Man requests divorce	Half is paid back to man

Bride price was paid back by women's families, or their future husbands. Re-payment of bride price reassured childless women that their ex-husbands could not claim them in future: F51 went to court and paid back bride price as she wanted to freely re-marry. F45 had remained 'in the hands' of her first husband following her divorce, until her second husband paid back two cows bride price. She had good reason to leave (being beaten and insulted) but did not take her husband to court. If she had, she might have been excused from paying. Women with children either left their children behind, or, more rarely, had the chance to 'buy back' their children.

5.3.3 Child custody following marital breakdown

If requisite payments had been made to women's families, children belonged to their father's household if their mother 'went home' (divorced). In practice, a variety of custody arrangements arose. Following divorce, very young children stayed with their mothers, but between weaning and some time in childhood they usually returned to their father. Divorced women had no 'right' to their children, and the subsequent contact they had varied. F7 had only seen her young children twice in three years, since their father moved away, whereas F23 visited her child regularly and looked after him when he was ill. After F76 left her husband, her children lived with their father and his new wife, but when they too divorced, they went to live with their paternal grandparents. This reflects the view that single men were not considered suitable carers for children (which may have been an incentive for divorced men with young children to re-marry). During fieldwork, two women described choosing to have children 'in the bush' (with boyfriends), with unknown fathers, so that their children could not be taken from them, as had happened to them after previous marriages. Both women had jobs and were able

to support themselves and their children, which may have enabled them to make this decision.

In spite of norms that children should live with their fathers, many children of divorced women lived with their mother, or more frequently (if their mother re-married) with their maternal grandparents. Sometimes this was because there were no available paternal relatives. Some fathers had little interest in living with their children, and others failed to pay bride price to secure them. F22 talked about why her young stepson did not live with his father: her husband rejected him as ‘troublesome, a thief, and argumentative’. F60 described how her second husband had many children he had never claimed or paid for. He was ‘a womaniser’, living with ‘wives’ for short periods of time. Her account reflected the prevailing low opinion of men who were uninterested in their children. Men were expected to want to keep their children.

5.3.4 Separated women

Women usually returned to their parents or brother after divorce. Some started small businesses selling clothes, crops or fish, and could request land from village headmen, especially if they were looking after children. Women with no immediate family had few options but to remain married or try to establish their own household. F47 was asked if she had considered leaving her husband, as she blamed him for her infertility. She replied no – where would she have gone? Her family had dispersed following the death of her father, and one of the reasons she had married in the first place was that she had disliked moving around and living with different relatives. F38 had a typical reaction concerning the options open to her after divorce. She feared she would end up sleeping around (‘walking here and there’):

Interviewer: ‘Have you heard of married women sleeping with boyfriends to try and get pregnant?’

‘[Laughs] This does happen quite a lot, but since I have stayed here, I have never done that. Just because, umm, there are many diseases. If I thought that this marriage might fail, when they say ‘that woman doesn’t give birth’, I would think that it’s better to stay at home [with my parents]. I could find a man whom I can get used to, rather than walking here and there, because then I would catch a disease. I would have a big problem’ F38, age 21

For women trying to manage on their own, survival was difficult without support from family or boyfriends. F50 had a boyfriend when living in the capital city after her

divorce. She justified this by saying that her ‘blood was still working’ (she still had sexual desires), and that ‘when you are living alone, you need help buying soap’. Although she was working as a housekeeper, and could probably have bought her own soap, she used the soap metaphor in a similar way to married women, as a way of describing domestic support from men.

The social position of divorced women could be precarious. If they did not go home, they were presumed to be ‘walking here and there’. In some cases, returning home was not successful. F55’s father publicly insulted her by calling her a prostitute, so she decided to live on her own, with help from her brother and regular boyfriends. Married women feared that divorced women would sleep with their husbands, and often equated them with prostitutes, who were feared because ‘the whole world is theirs, there is no one in charge of them: all women should have a man above them’ (WC, G2). In order to be socially and sexually ‘safe’, women needed to be ‘in the hands of a man’ and settled down:

‘Some women become famous with the rumour that they are involved in prostitution and are too mobile, a wise man cannot dare to marry her and keep her in his house, it means he will die. Sometimes such women don’t secure marriage for their entire life’ WC, G5, age 27

5.3.5 Re-marriage

Demographic data from neighbouring Rumphu district support findings from qualitative data that remarriage was swift and widespread (Reniers, 2003). Little stigma was attached to marrying a divorcee, but her age and presumed ability to have more children were considered. F58 left her first marriage after three months and had no doubts about her ability to re-marry:

‘I got married while still young without proper knowledge. We were two wives, and I was very young. I saw that my co-wife was doing nothing, I was just working and cooking for the husband alone. She was not cooking for him. So I just came back home, thinking it was better to marry someone else...’ F58, age 22

The lack of emphasis on virginity at marriage, and great demand for wives, meant it was relatively easy for women to re-marry. However, some mothers in-law protested if their sons married older divorced women as their fertility might be in question. Most women were keen to re-marry, partly to escape their ambiguous status as divorcees. After her second marriage, F60 wanted to re-marry because ‘you get more respect if you are

married, and if you are at home unmarried, everyone can play with you'. At least four men were proposing to her at this time:

'This one [her third husband] started proposing to me sometime back, while I was staying at my older sister's place, but I was refusing him. So the way I got married was that he found me later at my brother's place. I just thought, 'this person is very persistent'. Then I just thought that I should marry him, rather than just staying at home' F60, age 36

Most women who re-married did so within a year or two. An exception was F53, who did not re-marry for four years until she was pressurised into marrying her long-term (already married) boyfriend:

Interviewer: 'How did you meet your second husband?'

'I was at home, so he proposed to me and I agreed, but I didn't want to get married: his wife was the one who made us get married. Myself, I didn't want to because I had my business... buying and selling fish from the lake... [his wife] insulted me, saying, 'you are going out with my husband'. So my parents said 'now you have to go [and get married]'' F53, age 31

F23 was also reluctant to re-marry. She refused many men's proposals because she had lived with and looked after her father for many years since her divorce, and she worried about leaving him alone. Several women talked about 'testing' men's suitability before re-marrying, such as F70 when she described how she met a man she had known at school. She remained his girlfriend for a year, and had been pregnant for five months before they eventually married:

'The reason we waited [before marrying] was to see first of all, how things were going to be... I had to see how we were going to stay together, whether there would be agreement between us, and after waiting for a long time that is when you can say, 'now I have waited'. You first know your husband's behaviour, how he behaves. So now we are married and we have got to know each other' F70, age 31

5.3.6 Widowhood

The experience of widowhood partly depended on age, and estimated ability to have children. Women might re-marry, return to their parents, or stay at their husband's home. In practice, women's property and inheritance rights are insecure following widowhood, even though equal rights are enshrined in law (Chiweza 2005). Widow

inheritance⁴², said to be common in the past, is generally thought by local people to be becoming rarer, partly in response to the AIDS epidemic. F69 told of two wives in her husband's family who refused to be inherited and went home, leaving their children behind. Some women did not re-marry owing to concerns about their children. It was widely thought that children could not 'stay well' with stepfathers, and they rarely accompanied their mothers to new marriages. Widows who took children home with them could request land from village headmen.

5.4 Getting older

'Becoming old' was indicated by the end of women's fertility, whether this was owing to menopause, the end of sexual activity, or secondary infertility. F18 'just stopped' having children. She did not use contraception, but after six children, at 31 years old, she did not conceive again. She did not want more children and accepted this as the natural end of her fertility. Pregnancy was seen as increasingly hazardous as women got older. They were thought to lose more blood, and 'find that they have lost all the strength they need to draw water'. It was considered embarrassing and dangerous if a woman over a certain age became pregnant (there were common stories about older women giving birth to monitor lizards):

'What happens is that that older women do not have monthly periods, so sperm from the man just accumulates inside' WA, G5, age 35

'[This rumour] is just an insult to make elders scared, so that they stop having sex, but I think that the blood just hardens up and therefore may look like a monitor lizard, so they just fear that if they have sex, they will bear a monitor lizard' WB, G5, age 24

Age is thought to enhance social status in sub-Saharan Africa, with post-menopausal women having more entitlements and influence than younger women, approaching those of men (Caldwell and Caldwell 1987). Once a woman's sons have married, not only does she have a junior woman to help around the house, but her role as a decision maker in household affairs grows. One young woman, F22, had been forbidden from visiting her sick mother by her husband. She then sought permission from her mother-in-law, who 'over-ruled' her son's decision, providing F22 with an alternative source of legitimacy for her trip. This system only worked when children lived nearby. With

⁴² When a widow re-marries her deceased husband's brother, thus remaining in the same household.

high marital instability and frequent migration for education or jobs, even a woman with several children might not have a child available when she needed one.

The relationship between age and status was complex. Group 2 talked about the conditionality of respecting older people: they were only respected if they ‘cared for themselves’ (dressed and spoke well), did not ‘proposition young women’, and ‘behaved well’. Older widowed or divorced women often remained ‘in a man’s hands’, though might also become heads of households or villages themselves. F50 was divorced and lived next door to her son. Even though she was in her sixties, she described herself as being ‘in her son’s hands’. Growing old with children and grandchildren could also bring heavy responsibilities. Older women frequently cared for numerous relatives, particularly their grandchildren. F15 (a village doctor in her sixties) cared for four orphaned teenaged grandchildren. She had cared for them since they were very young with no husband to help her and complained of the problems this had entailed, but was proud of the land she had secured for them:

‘My [grand]children, how will they grow up? Orphans, what will they grow up with? I will have problems, I hold [protect] my children, I hold these orphans, I will keep them well...So, I asked for land of my own here. A piece of land from the headman, there at the mango tree... Ah, I have a big piece of land, there is also a lot of food, when God gives it to me. That’s all that I get, it won’t help me, it is better that I walk naked [go without clothes for the sake of the children]. I have grandsons, they know that when they grow up, they will build here. Now I say thank you, Jesus Christ. What can I give them? What can I dress them in? I am a woman’ F15

5.5 Summary and discussion

This section summarises the normative life course, and departures from it, and discusses the social and economic context that shaped women’s life course options.

From childhood, girls were domestically and economically valuable, and prepared for what was seen as their future destiny to be a wife and mother. Their good behaviour, including ‘not moving too much’, was a reflection on their parents. In an internationally and locally mobile population, the high mobility of girl children in particular introduced them to networks of extended family, both through them helping others and being helped themselves. Although women aspired for their children to be educated as a means of escaping poverty, most had low educational attainment (compared with men) owing to obstacles that interrupted their schooling. These related to poverty, household

disruption through death or illness, or the process of 'growing up', which was often taken to mean a young woman was 'ready' for marriage and children.

Young women had a fair degree of independence and could conduct pre-marital relationships (though secretively), which often led to pregnancy and/or marriage. Even for teenagers, a socially unsanctioned pregnancy was thought to have potential benefits: she at least knew she was fertile, people might think her beautiful and grown up, her parents might be temporarily angry but tended to act pragmatically and often cared for the child. It did not ruin girls' lives or prevent them from marrying, because children were so highly valued, regardless of where they came from.

Many aspects of childhood and marriage illustrate the belief that women were destined, and needed, to be wives and mothers. During adolescence, women were judged by their readiness for reproduction, and most women married soon after reaching physical maturity, as that indicated readiness to have sex and have children. Young and near universal marriage for women was supported by social values, and demographic and economic factors. Marriage was the first, most realistic step to achieving adult status, the main way to secure land, a livelihood, and social recognition. Some women married to avoid moving around as teenagers, as they aspired to a stable, settled, life. Although parents had some influence over marriage in cases of pre-marital pregnancy, most spouses were freely chosen. Most marriages took place furtively as few husbands paid bride price fully beforehand. In the absence of a formal wedding ceremony, payments to the wife's family, namely bride price, demonstrated serious intent and a man's ability to provide for his wife, and also provided recompense to a woman's family. Bride price payments were often prompted by the first child's birth, which was thought of as a sign of the marriage being viable and likely to endure.

One obstacle to securing status and permanency within marriage was the very fragility and ambiguity of marriage. Simply 'being married' was not sufficient to feel secure, partly owing to the lack of concrete marriage and divorce procedures (which meant that a couple's marital status was always slightly ambiguous until they had either lived together for at least a year, or had children together, or had undergone a formal divorce), polygyny (which meant the line between girlfriends and wives was often unclear), and long term labour migration.

The patrilineal kinship system was important in structuring women's lives. In order to achieve marriage and motherhood, women had to leave their family and enter a new patriline. Patriline was the principal unit controlling arable land, which was the main means of production. With few employment or commercial opportunities available to women, access to land through husbands or male relatives was crucial. Patriline needed labour to make their land productive, and women and children were very valuable in this respect, demonstrated by the institution of bride price (paid by men to secure wives and children), the frequency with which children were requested to stay with other family members, and the desire of grandparents to hold on to their daughters' children if their daughters were unmarried. Thus marriage was not primarily about the couple, it was about what they brought to the patriline in terms of having children, developing and growing the household, and improving the social standing of the patriline. Patrilocal marital residence meant that women moved to new households when they were young and usually childless. Young women themselves at this stage in life often talked of themselves as being 'childlike' or 'having little knowledge'. The possible problems of being in a new household with relatively low status were recognised by women's families, who did not want them to marry far away in case they experienced problems. The acquisition of social status for women from this junior position was a sign of progression through the life course.

Women maintained strong links with their original family, as these ties provided protection and a place to go if their marriage ended. Becoming integrated and secure in a husband's household was related to the quality of relationships one had with one's husband and his family, and having children was an important part of this. Marriages were mainly evaluated through material flows from husbands to wives: material neglect was a major cause for concern amongst wives. If problems occurred (domestic violence, bad behaviour, or problems with co-wives) they could be discussed with elders or traditional courts. Married women were relatively free to move as they wished, though could be restricted from full participation in commercial activities, and their families were expected to recompense their husbands if they returned home for prolonged periods.

Although there were few 'respectable' alternative life courses for women owing to their relatively poor schooling, lack of jobs, and social norms, some women could not or did not want to comply with accepted norms. A small proportion of women did not marry,

or remained single after divorce. They tended to live and work in trading centres, and were seen to have very mobile lifestyles, requiring boyfriends in place of a husband. These deviations from the normative life course were not socially sanctioned and were generally morally ambiguous. Women who deviated from social ideals, such as divorcees, were under pressure to resume a normative life course (e.g. were pestered by men to marry them). If they chose not to, they risked social disapproval, but some were willing to pay that price and generally sought their livelihoods in the more diverse environments of trading centres.

In the words of a local phrase, ‘marriage went hand-in-hand with childbearing’, and childbearing was concentrated into the earlier stages of women’s overall reproductive life span. Childbearing was thought necessary for women’s health, and the terms for marriage and children were synonymous. Having children was thought to cement marriages, and women hoped that sons would be future household heads and would care for their mothers. Childbearing was also thought necessary for women’s health. The contemporary benefits of having children were numerous in terms of tasks they performed, and improvements they brought to quality of life. If a child grew up well, this reflected well on the parents, so children were an opportunity to demonstrate parents’ moral credentials. Life without children and marriage was seen as empty and pointless: the pitied person’s life would just comprise eating, sitting, and ‘doing nothing’.

The prevailing ethos of ‘loving the child’ made voluntary childlessness almost unimaginable. If children did not arrive promptly after marriage, contraceptive use (and thus marrying for the wrong reasons), or infertility, were suspected. Pregnancies and infants needed special care and protection, for example, through the use of traditional medicines and observing post partum abstinence. Children belonged to their father’s family if he had made requisite payments, and their mother’s family if they were born out of marriage and not claimed by their father’s family. A variety of risks to realising the benefits of children existed. Some children were ‘troublesome’, others died before reaching adulthood, and some women lost custody of their children following pre-marital pregnancies or failed marriages.

After giving birth, women might consider family planning, which was talked about in terms of caring for existing children rather than preventing future births. Contraceptive

use was only approved of publicly in ‘child loving’ contexts. Women rarely said that they did not want more children, rather, they described the economic or health constraints that rendered them unable to have more children. Husbands and wives often disagreed over family planning, and thus clandestine contraceptive use was widely reported. The strength of the prevailing attitude towards ‘loving children’ helped explain norms around contraceptive use, and why infertility was so problematic.

Gaining a co-wife was a constant possibility for married women. For some women, polygyny proved a supportive institution, but for many, it was the source of jealousy and conflict. Divorce was common, though not always owing to the deterioration of the marital relationship: it could be because of witchcraft fears or wider familial conflict. After divorce, women usually returned home. Bride price repayments at the end of marriages reflected whether or not a couple had children, and the reasons for their divorce. Most women with children did not have the choice of returning bride price, so they lost custody of their children (though they might re-unite with their children, and possibly their husband, in future).

Women might divorce if married life threatened their wellbeing to the extent that this overwhelmed the costs of leaving. Women’s options were constrained by which patriline were available to them (e.g. whether they could return to their natal home or whether they could find a suitable husband), and, in cases of divorce, the price of having to leave their children behind or pay back bride price. In addition, gender norms discouraged excessive mobility in women. Women being ‘movious’ (a Chitumbuka speakers’ English word for ‘being highly mobile’) beyond a certain age was associated with negative gender norms such as failing in marriage, having boyfriends, and being obliged to do business due to being without a man to support them. Single women were seen as particularly ‘movious’, and married women as more stable: having children mitigated movement, as women with children could not move around as easily (someone needed to care for their children at home). Although single women faced social disapproval if they remained unmarried and were deemed to not be ‘in a man’s hands’, little stigma was attached to being divorced on the marriage market. There was no shortage of potential men to re-marry, and re-marriage was usually swift, though some women found it difficult to find the characteristics they desired in a new husband.

Women's experiences of marriage and childbirth continued to affect their lives as they grew older. What happened in their twenties, particularly in terms of marriage and childbearing, would influence their position as sixty year olds. Having accumulated knowledge and experience across the life course, at the end of their reproductive lives, women's social position and influence was elevated from that of the young, childless women who had joined the household a daughter in-law. However, having children was no guarantee that older women would have families to help them, and older women might retain heavy responsibilities in terms of supporting younger children.

In conclusion, there were strong, shared ideas about what constituted a 'normal' passage through life, and marriage and motherhood represented the only viable passage into adulthood for most women. Across their lives, women moved between households and patriline: initially, according to their usefulness as children, and later, in their attempts to make the best of their situation through negotiating marriage, reproduction, divorce and re-marriage. Women's life courses are best understood in terms of these attempts to establish livelihoods and social standing within the framework of a normative life course, and in an insecure and impoverished rural subsistence economy with patriarchal, patrilocal and gerontocratic norms. Within the confines of this patriarchal society, and with few economic options beyond marriage, women had some freedom to manipulate their options as best they could in order to achieve current well-being and future security, and 'stay well'. 'Staying well' was the phrase used to describe a certain level of quality of life that people aspired to. It meant slightly different things to different women, but key components were a certain standard of material well-being; harmonious social relations in and around the marital household; 'feeling free' and 'feeling at home' (not feeling like a visitor); and having long term security (including enough land for themselves and their children). It was a modest but valued state of wellbeing, with social, physical, economic and metaphysical components. The next chapter examines what happened when women experienced infertility, a worrying threat to 'staying well'.

6 Infertility

6.1 Introduction

‘Even a slight acquaintance with ethnological literature is enough to convince anyone that ...the physiological phases of human life, and, above all, its crises, such as conception, pregnancy, birth, puberty, marriage, and death, form the nuclei of numerous rites and beliefs.’

(Malinowski 1948; 19)

The meaning of infertility differs across the world, and rarely corresponds with demographic and medical understandings of infertility. This chapter outlines the meaning of infertility in northern Malawi, and what constituted infertility; beliefs about its causes; treatment-seeking; and how the extended family was involved in managing infertility. Findings set the scene for subsequent chapters on infertility’s impact on women’s life courses. Infertility was experienced within a complex social and moral universe, in which infertile women sought to distance themselves from associations with fertility-damaging contraceptives or STIs by constructing alternative narratives around witchcraft and physical abnormalities. In a position of relatively low social status and with little expert knowledge about reproduction, young women’s experiences of infertility were largely defined by other members of their social networks, who directed lengthy and demanding treatment-seeking regimes.

Before introducing these findings, the estimated prevalence of childlessness in this population is presented (Table 10). ‘Proportion of ever-married women childless’ is a fairly accurate proxy measure for primary infertility (Larsen and Menken 1989), if several assumptions hold: that there is little or no voluntary childlessness in married women, and that by age 25 most married women have had at least one year’s exposure to pregnancy (usually the minimum period required to be considered infertile). These conditions hold for most women in this population given early and almost universal marriage, and negligible contraceptive use in marriage before the first pregnancy. The levels of childlessness between age groups were significantly different ($p=0.029$). The increase in proportion childless in the over 35 year olds probably reflects higher levels of acquired infertility amongst these women, as they had lived through an era in which the use of antibiotics was not as widespread.

Table 10 Proportion of ever-married women with no live births, 2002-05 KPS Census

Age group	Number childless	Total
25-29	56 (5%)	1,202
30-34	37 (4%)	907
35-39	49 (7%)	715
40-44	39 (7%)	594
Total	181 (5%)	3,418

6.2 What constituted infertility

There was no equivalent word for infertility in Chitumbuka, but two types of infertility were recognised in the study area. The first was when women took ‘too long’ to conceive, and the second was when women were completely incapable of conceiving. These women were described as *chumba*, a word roughly meaning ‘barren’, which was often used as an insult. The quality of having ‘fertility’ (*mphapo*; also the word for ‘womb’) ultimately determined women’s ability to conceive. Women born without it would never conceive, whereas women with fertility, or ‘many children inside’, could have children, though their fertility might be blocked or damaged, resulting in delayed conception. Women who had conceived, but miscarried or had stillbirths, could likewise not be considered *chumba*. The only way for women to know whether they were *chumba* was for them to keep trying to become pregnant. Treatment-seeking accounts revealed a sense of obligation to keep trying different medicines until a child was born, or until they ‘really knew’ that they had no fertility. During interviews, women were never asked if they were *chumba*, as this was potentially offensive; rather, they were asked if there had ever been a time when they wanted to become pregnant but it had taken a long time.

People recognised that the time it took to conceive varied, as some women’s fertility was very ‘close’ or ‘shallow’, whereas in others it was ‘far away’:

‘Some women just get married, and the same month they get pregnant... they have shallow fertility. Some women are hard, they don’t get pregnant quickly, after four months they are still without a pregnancy, and they have to look for herbs [traditional medicines]. People will just say ‘this one is failing’ because she has a problem with fertility’ WD, G4, age 25

Concern arose if women were not pregnant shortly after marriage, as married couples were expected to have children as soon as possible. Different factors prompted concern:

sometimes it arose within the couple if they ‘admired’ friends with children, and in other cases, relatives or neighbours raised the issue:

‘When I came here, I did not get pregnant, so what they do in the villages here, is go and look for medicine. Within a short time I got pregnant... if a person and his wife have stayed for a long time without getting pregnant, people start talking a lot in the villages here, which means you have to try and look for medicine: if it fails then you start to get worried’ F76, age 32

The amount of time before the situation was considered problematic varied, but by a year after marriage, almost all women who reported using fertility treatment before their first child had begun to do so, an indication that ‘too long’ had passed without getting pregnant (see Table 11). Several women had started to use fertility treatments as teenagers.

Table 11 Length of time after marriage nulliparous women waited before seeking fertility treatment (all women who sought treatment before their first child)

Length of time	Number of women	Cumulative %
Don't know	3	-
1-5 months	8	36
6-11 months	6	64
1 year	5	86
More than one year	3	100
TOTAL	22	100

Women potentially experienced two pressures in the timing of pregnancy. If they conceived too quickly, suspicion might arise that they were pregnant before they married (although pre-marital pregnancy was tolerated, it was not ideal). If they took too long, people also started to ask questions. This focus group participant described when a woman should ideally become pregnant:

‘Maybe two months should pass after getting married, so if the third [menstrual] cycle is never done there is no suspicion. Because under most conditions the very same month you get married, the following month you can be pregnant. Then they suspect that you were already pregnant before, and if you came already pregnant, then your blood was just too fast, and matched very fast with that of your husband. But in general two months should pass’ WB, G5, age 24

Some women sought fertility treatment, or said they had been advised to start using them, only a month after marriage. However, not conceiving within the first few months of marriage did not constitute a serious problem akin to infertility. Early treatment was more like a tonic to encourage conception and ‘open the path’ than an infertility treatment. It was also a way for couples to demonstrate to any potential commentators (such as family and neighbours) that they were willing, and actively trying, to have a child. If more and more months passed after marriage, and if several rounds of treatment had failed, the situation was progressively viewed more gravely. Only after several years, and prolonged treatment-seeking, did some of the longer-term infertile women say that they ‘accepted’ themselves to be *chumba*.

Women with at least one live birth experienced less public scrutiny over the length of time it took them to become pregnant again, as they had demonstrated they were not *chumba*. Length of post-partum infecundability varied according to length of breast feeding, post-partum abstinence, and contraceptive use, which complicated diagnosis of fertility problems by outside observers. Several scenarios constituted problematic secondary infertility, such as if women took ‘too long’ to have a first child with a new partner, or if it took them ‘too long’ to have as many children as they wanted. If they wanted more children, women with secondary infertility sought treatment in the same way as those with primary infertility. However, secondary infertility was accepted as the natural conclusion of childbearing, and meant that women had become ‘old’, if they had ‘enough’ children, even if they were pre-menopausal and sexually active. M42 told us that his wife’s body used to seem young and ‘good’, but now she ‘seemed old’, which he linked to her secondary infertility, even though she was only in her twenties.

Even if women conceived, this was no guarantee of a live birth. Pregnancy was a dangerous time. Almost all fertility risks and obstacles to conception described in this chapter were also present during pregnancy, such as bewitchment, possession by spirits, or harm from disease. In two cases, women reported their pregnancies ‘disappearing’. F60 believed that she had once been pregnant, but blamed her husband’s negligence for its loss:

‘That time I took that [fertility] medicine... It was like I was pregnant for four months, even my dress started to become tight, and people also started wondering. In the end, I just found that my stomach went back to normal... [My sister in-law] had said, ‘If you notice any changes, you

should come to the traditional healer with your husband'. But when those things happened my husband didn't attend. So that pregnancy was lost' F60, age 36

Several women had also experienced miscarriages. After miscarriage, women observed similar restrictions to those following childbirth. All seven LH women who reported miscarriages said that they had sought hospital treatment, even though this might mean travelling considerable distances:

'I got pregnant in February, then I miscarried in May... I felt pain down here, so I told the elder people, then after I'd told those elder people, I just saw blood was coming out. So they took me to Sangilo hospital, from Sangilo they told us to go to a bigger hospital, so we went to Livingstonia where they did a D and C' F73, age 23

Thus, treatment for miscarriage was one area in which women accessed hospital treatment in favour of traditional medicine. In all cases, at least some treatment was reported to have been administered (injections or surgical procedures). Although these lost pregnancies were not seen in the same light as being *chumba*, they still provoked similar concern as they led to the same ultimate problem of not having a child, or as many children as one wanted.

6.3 Explanations of infertility

6.3.1 Male versus female factor infertility

Couples, their social networks, and therapeutic providers, evaluated whether infertility was caused by male, female or couple factors through circumstantial evidence. However, as there was rarely any direct evidence suggesting male factors, infertility was usually thought to lie with women by default. Men were rarely examined or offered treatment, though they sometimes took medicines in conjunction with their wives to improve their strength or rid themselves of witchcraft. F48 believed her husband to have at least contributed towards their infertility. She said that if she were the only infertile party, then her husband would have had children 'outside', because he had girlfriends and had been married to another wife for a while. Accordingly, he drank medicine along with her. In another case, F31's husband was treated for 'lack of power', which related to his sexual potency: 'My husband too had a problem... They said that his problem was that his power was weak... So they gave him herbs for drinking'.

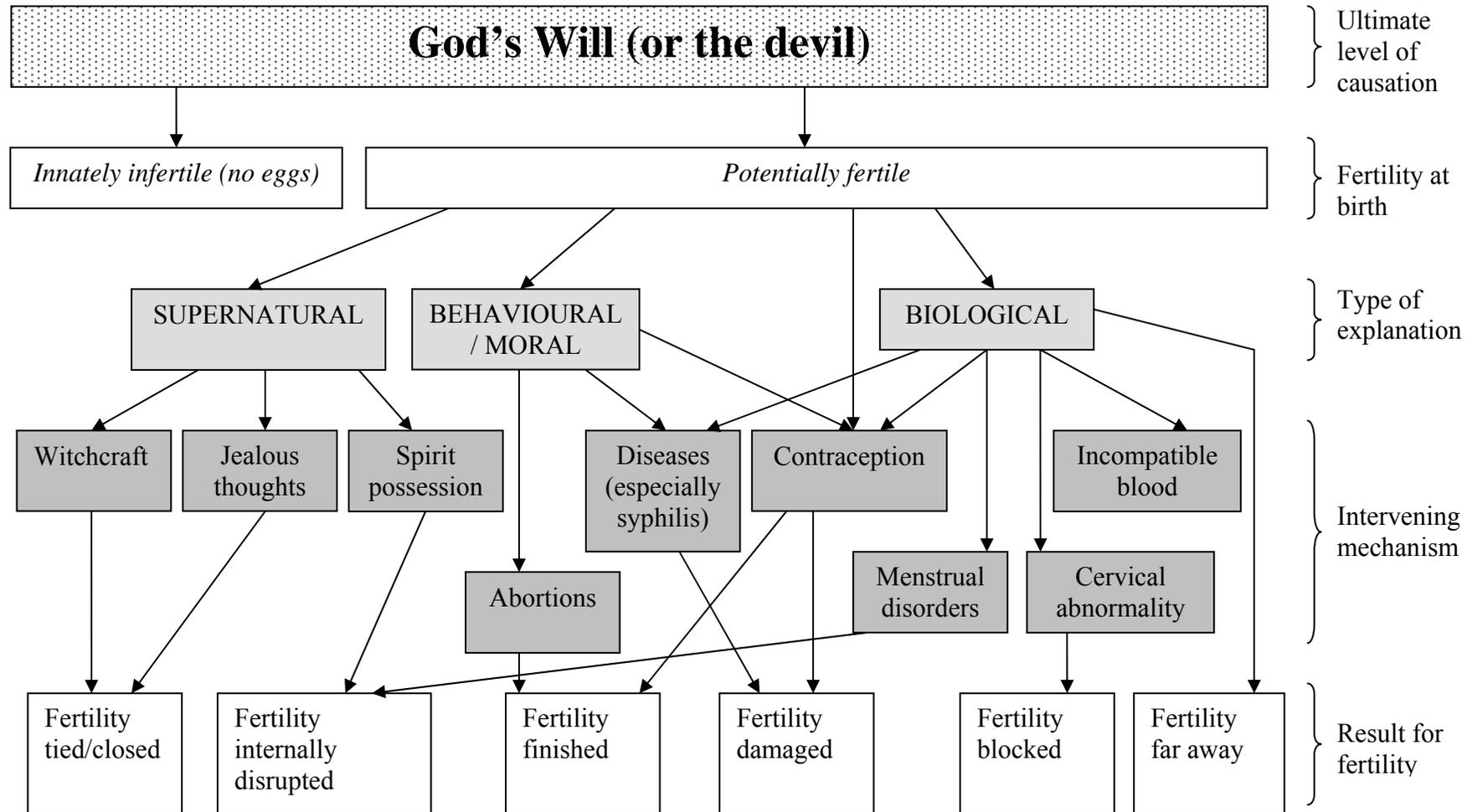
Male factors were suspected if men had several wives or girlfriends and none had children, or if infertility appeared to run in their families. F38 reported that people had not gossiped much about her infertility because her husband had been quite old (in his late twenties) when they married, yet had not had any children ‘in the bush’ (out of marriage), as might have been expected, so his fertility was as unproven as hers. A woman village doctor stressed that men could also be infertile, and that she treated men as well as women. The focus of traditional medicines for men was to make their blood (sperm) strong, and male infertility was generally linked to weak sexual potency (several women told of how, in the recent past, it was the aunt’s job to sit outside the newly-weds’ bedroom and listen to the husband’s sexual performance to ensure it was sufficient for conception). Only two women (F47 and F48) blamed infertility directly on their husbands. From the day F47 married, people warned her that her husband’s brothers were not having children. She believed the problem was caused by witchcraft from her husband’s home village. In spite of this, she said that ‘because of the way we take medicine’ (that women always take them) she also drank it.

In general, it was rare for male factor infertility to be considered, and some men were reluctant to do so. F25 tried to persuade her husband to present himself for treatment at the hospital alongside her, but he refused, telling her that he was not ‘sick’. Because the ultimate determinant of fertility (*mphapo*) lay with women, and their bodies were seen as the locus of fertility problems, women underwent most infertility treatments. The rest of the chapter thus focuses on women.

6.3.2 The will of God and the devil

Affected women or couples, their relatives, or traditional healers might attempt to identify the cause of infertility. Diagnosis was not usually through physical examination. Some traditional healers ‘just looked’ at their patients. Others communicated with the spirit world by holding patients’ hands, going into a trance, ‘searching through the wind’, or using ‘traditional electricity’ to see inside the body. Internal examinations were only performed by other women (relatives or traditional healers). Figure 10 schematically represents how fertility was attributed to different causal factors (witchcraft, God’s will) through intervening mechanisms (cervical abnormalities, diseases). Two or more causes could contribute to infertility concurrently.

Figure 10 Schematic representation of infertility aetiologies



God ultimately determined whether women were born with fertility, or with a physical abnormality preventing pregnancy, and determined the timing of pregnancy. 'It is up to God' and 'God is still [to provide a child]' (*Chiuta achali*) were pervasive but relatively under-developed hypotheses for explaining infertility (in that they stood alone as explanations and were not elaborated upon). When women said that their situation was 'up to God', this sometimes seemed to be the first phrase that came to mind: a normative response that stressed their Christian credentials, or a satisfactory answer when they did not want to respond in greater detail. After citing God's will, most women went on to talk about other intervening causes, for instance, F43 said that God stopped her from having more children through her illness (tuberculosis). An alternative explanation was that infertility was caused by evil, the devil, or 'the power of Satan'.

Just because God ultimately determined events, women were not fatalistic about their infertility. In spite of 'depending on God' or 'waiting for God to open them', they still visited traditional healers. 'God's will' remained a mystery, and they did not know how, or when, God would help them. It was only if traditional medicine failed that women could be sure that God did not want them to have children, and medicines would only work if God allowed the underlying problem to be 'finished'.

6.3.3 Supernatural influences

'Some people may be jealous of you, thinking, 'that girl, the way she has grown up, she should not give birth, as beautiful as she is. I shall fight as much as possible to bewitch her so that even if she gets married she should not give birth' and then it really happens like that. If you forget your menstrual pads and these bad wishers get hold of them, they take a piece of cloth from the pads and use traditional medicine to make you fail to conceive' WB, G4, age 26

Two types of supernatural force caused infertility, though the distinction between them was not always clear. One was witchcraft (*uhawi*), the practice of trying to influence another person's body using herbs or incantations. The other was harmful 'jealous thoughts' (*wodinginyika*): 'hiding something in your heart without [the other person] knowing'. Both phenomena reflected disrupted or soured social relations in the physical realm. Various parties were blamed for inflicting supernatural harm: women's grandmothers or aunts (usually if they were unhappy with their relatives' marriages), women's ex-husbands, or husbands' families. Belief in witchcraft motivated many social acts: migrations, family disputes, and treatment-seeking for illnesses. Witchcraft provided a compelling and very real explanation of infertility for many women, often

overriding plausible biomedical explanations. F52's uterus tore when delivering her first child, and while doctors had warned her that it might take her a long time to conceive again, she still blamed witchcraft for her subsequent infertility.

Witchcraft could be carried out consciously or subconsciously. Herbs might be placed on a path, in a water pot or food, or in a cooking hearth; or sympathetic magic could be used, as this woman with secondary infertility described when explaining what a traditional healer told her husband:

'[Her ex-husband] is the one who is doing this [causing the infertility]. He took sand from your wife's footprint, and put it inside a reed, so that she couldn't give birth anymore, unless she went back to him.' F27, age 28

Items of clothing or menstrual cloths could also be used for this purpose. Witchcraft could be diagnosed by a traditional healer, who might not identify its source, claiming that they did not want to cause trouble. Women also recognised witchcraft themselves by noticing medicine in their pots, food or fireplace; or they inferred its influence after experiencing a series of suspicious or unfortunate events. Witchcraft could 'hold', 'tie', or 'close' the womb or path, or turn the womb upside down, preventing conception or disrupting the menstrual cycle, and causing lower back pain. Witchcraft could also 'hold' a pregnancy, delaying childbirth, and threatening the mother and baby's life:

'A woman can be pregnant. But instead of giving birth at nine months, they fail to give birth, after even ten or eleven months. They come here... because witches are holding onto her. So, with me, I give them medicine so that the things that are holding her become loosened, and they give birth soon afterwards' M1, elderly traditional healer

An elderly woman described how someone 'tied' her daughter around the waist using medicine called *makola*, causing her daughter to give birth to two 'things that were not children' (deformed foetuses). Women also used *makola* medicine to prevent miscarriage or premature delivery by 'securing' the pregnancy.

Several women complained of ex-husbands punishing them or trying to win them back by causing infertility with witchcraft. F22 was anxious that people might be doing witchcraft on her old clothes:

‘Do I think that I don’t have children because somebody is preventing me? ...I think that [the witchcraft is] coming from my home, or from my previous husband...because I left all my clothes there’ F22, age 21

After M42 and his first wife divorced, his first wife had secondary infertility in her next marriage. Her parents thought M42 was ‘holding’ her and accused him of causing the infertility through ‘jealous thoughts’. Although he denied this, he was not indignant about the accusation: people could unintentionally harm others with their thoughts. Jealous thoughts were revoked by asking forgiveness from the jealous person, so his first wife’s parents came to apologise to him, a formal process called *kupepeskanga*. This involved visiting the ‘jealous’ person and their extended family; publicly apologising; and giving gifts as reparations. Even if the cause of the jealousy had been petty or unreasonable, the harmed party still had to seek forgiveness from the jealous person. Even then, the harm could not always be retracted, especially if the jealous person died before the situation was resolved (although relatives could try to forgive on the deceased’s behalf).

At one point in F21’s long history of primary infertility she wondered whether someone in her family was ‘holding’ her because her husband paid bride price late:

‘I called my parents [relatives in her father’s generation]. Firstly, I called my father. I started asking him questions: ‘What is the main thing I have done wrong?’ Then there was my aunt; she said to us, ‘No, we don’t have anything against you’. My mother said that she wasn’t thinking [harmful thoughts] about anything, she had no worries. She said, ‘...My husband passed away a long time ago. Bride price is not important to me’. My aunt said that her brother was the one who had worries... Yes, we started talking, and I told him, ‘But you have been paid bride price now’. He said ‘yes’, and that was when he started talking to the spirits. I was annoyed with him, and he said ‘No, my child, you will be free of all of the things that I was saying’” F21, age 45

Her uncle talked to spirits to free F21 from his harmful thoughts. From the subsequent structure of F21’s interview, it appeared that she viewed this ‘forgiveness’ as a necessary part of her therapeutic process, but it was not until she had received further traditional medicines that she eventually became pregnant.

The complex social contexts of narratives concerning witchcraft and infertility are illustrated by the following case of three brothers who had married at a similar time. One brother, and two of the other brothers’ wives, were interviewed during this study.

All three wives had failed to conceive during the first five years of their marriages (though one wife eventually gave birth). The two wives believed that harmful thoughts from the brothers' family were 'holding' their wombs whilst at their marriages. This was the only case in which woman argued that the problem lay 'on their husbands' side': their bodies were targeted by association. F47 had two possible explanations for her husband's family's anger. Firstly:

'Sometime back there was a story that my father in-law was fighting with my mother in-law... their children were trying to stop them fighting. Because they were trying to stop the fight, my father in-law said 'you have beaten me', and since then my father in-law has died' F47, age 22

A taboo against children getting involved in parental disputes meant that their father felt that his sons had treated him improperly ('beaten him'). Because he had since died, his anger could not be directly assuaged. Alternatively, F47 suggested that her father in-law's other wives were jealous of her husband's mother, as she had had several sons whilst they had only had daughters, and they saw 'all the riches' going to another woman's sons. She believed the co-wives' jealousy was 'punishing them'. F47's sister in-law, F48, was also told by traditional healers that her deceased father in-law 'had worries', so she and her husband called the remaining elders of his generation and apologised. After this, and further courses of traditional medicine, 'God helped them' (F48 had a child). Both women stressed that no aspect of the infertility was attributable to them. They had been rendered infertile by jealous thoughts emanating from past generations in their husbands' family.

6.3.4 Vimbuza

Vimbuza is a widely held belief that best translates as spirit possession (Morris 2000). Spirits were thought to enter the body with either benign or malign effects, potentially (though not inevitably) disrupting fertility or pregnancy. Two women had been told by traditional healers that *vimbuza* featured in their infertility. After eight months of marriage without conceiving, F29 underwent *vimbuza* therapy to drive out spirits. This involved wearing a white beaded bracelet and dancing all night whilst community members clapped, drummed and danced⁴³. She became pregnant the following month after receiving additional medicines from another healer, although her baby was

⁴³ Other parts of the ritual might involve reciting certain words, putting beads in a drum and laying down money. Such dances regularly take place at traditional healers' camps.

stillborn. If therapy was correctly performed and a woman still failed to conceive, *vimbuza* was rejected as a possible cause of infertility.

6.3.5 Abnormalities that closed the ‘path’

The word ‘path’ (*nthowa*) was used to describe the birth canal. Many women located their infertility within their physical body in the form of abnormalities of the path (when the path was narrow, ‘bad’ or swollen), which prevented sperm (*ndopa*, also meaning ‘blood’) entering the womb. Path abnormalities were not thought of as diseases; rather, women were born with them (‘given by God’, ‘how God created you’). The most common were:

- *Nguli*: ‘Like a stone blocking the path’, or the path being bent, stiff or narrow.
- *Jalawe*: Cervical blockage ‘like hard fat on meat’.
- *Kawinkha*: Blocked path, causing sperm to be ‘pushed out’ too soon.

One focus group participant volunteered this account of her blocked path:

‘When I got married I stayed for four months [without getting pregnant], then they started saying, ‘Oh! He has married a barren woman’. As time went by, they started saying ‘No, she has *kawinkha*’. We visited traditional healers and they said ‘No, maybe you have *jalawe*’. We continued seeing traditional healers but to no avail. My mother in-law made some medicine saying I had amenorrhoea... then she prepared medicine for me to insert into the vagina. After some time she gave us herbs to drink and that was when we had our first child, but it was a stillbirth. We repeated the traditional medicine, and this child was born without using any herbs, and they say the cervix is now open, that’s what the elders are saying.’ WD, G4, age 25

Like many other women, WD (above) referred to ‘elders’ when describing the management of her infertility. These conditions were usually diagnosed by older female relatives (such as aunts or sisters in-law), female traditional healers, or at the hospital. If their finger could not enter the path, a blockage was diagnosed. This was treated with herbs inserted vaginally. *Jalawe* and *nguli* could also develop later in life, causing problems if they closed the path during pregnancy. Several women with these diagnoses reported that sperm came out ‘too soon’ after sex, as they believed that sperm needed to remain inside for sufficient time to ensure conception.

Local understandings of the female body were revealed through explanations of infertility. Fertility was impaired when the body’s natural flow was blocked by hard and impenetrable abnormalities, as this traditional healer’s wife describes:

‘There are some internal diseases, such as when the path is closed and it produces pus, but it’s not an infectious disease. It’s like, could you spend all day with your mouth closed? ...You would get sores, because we are used to brushing our teeth and always eating, talking, and fresh air is coming in, and air is coming out. So us women are like that too, the path needs to be opened every day. When you’re having your monthly period, blood must come out clearly. When you get pregnant, the path must be clean. If you suddenly find that the path is closed, can the insides be alright? Because it becomes hot. That is a disease, which means there will be sores and pus will be produced. The traditional doctors say that they can give us medicine, but I don’t know...’ F50, age 48

Through the path being open, enabling a continuous flow of menstrual blood, women’s insides were thought to remain clean and healthy.

6.3.6 Menstrual disorders

Menstrual problems featured regularly in infertility accounts, including infrequent or overly frequent menstruation, chronic menstrual pain, phases of continuous bleeding, and amenorrhea, which could severely disrupt women’s lives. Women desired regular menstruation, and wanted the dates of their period to remain similar each month. Menstrual irregularities could indicate fertility problems. F18 attributed a past spell of secondary infertility to continuous bleeding. A traditional healer had told her that ‘someone’ was destroying her insides (through malevolent thoughts). She spent a month with her mother due to her subsequent lack of blood and inability to work. After drinking traditional medicine, the bleeding stopped within a week, and she was pregnant the next month. Other women linked their infertility to irregular or absent periods. One missed her periods for six months and the hospital said her blood had ‘clotted’. Another suggested several possible reasons for her infertility (including ‘diseases’, and not burying her deceased baby according to correct procedures), and added that her amenorrhea might also have been a cause:

‘I do not know exactly why [I have stopped giving birth] because most of the time, I do not menstruate even though I have never used contraceptives before...but I do not know the whole truth’ F51, age 29, seven years of primary infertility

Contraceptives were commonly believed to stop periods, which was why F51 stressed the fact that she had never used them. Irregular menstruation was particularly distressing for women with fertility problems, as it often led them to believe, mistakenly, that they were pregnant. F44 had been married for seven years without conceiving and regularly had pregnancy tests at hospital, each time her period was late.

In other cases, lower abdominal or back pain associated with menstruation (*cheka*) was believed to cause infertility. Symptoms were ‘pain cutting like a knife in the stomach’, or back pain just before menstruation. Several women complained of being ‘infected’ with *cheka* by sharing a bathing stone⁴⁴, clothes, or a ‘contaminated’ labour ward with an infected woman. The pain could, ‘cause everything [sperm] inside to scatter when you meet a man’ thus contributing to infertility. It was generally treated with traditional medicine. F45, with over ten years of primary infertility, reported ‘a severe case’ of *cheka*. A traditional healer told her she suffered from it because she had never used her innate fertility:

‘Now I have developed a condition whereby when I menstruate, I feel *cheka*, and after menses, it’s like another disease, it becomes worse. We visited a traditional healer who said that the *cheka* is an indication that I have fertility, and I feel pain because it has never been used. Yesterday I had severe abdominal pains to the extent that I could neither wake up nor go to the farm. I spent the day sleeping’ F45, age 28

This quotation supports the existence of an idea that for women to remain healthy, they should use their fertility and bear children, in much the same way that menstrual blood should not remain inside ‘clotting’, but should regularly flow out.

6.3.7 Sexually transmitted infections

The most widely known sexually transmitted diseases (*mathenda yapasilana*) were buboes (*mabomo*), gonorrhoea (*kaswendi*), and syphilis (*chizonono* or *chindoko*). Of these, syphilis was most commonly thought to cause infertility through stomach pain and/or sores, which eventually ‘destroyed’ the insides, producing discharge containing blood and pus. Most women thought swift traditional and/or hospital treatment could cure syphilis. However, if a woman ‘hid’ the disease, once pus and blood were discharged this indicated that she was ‘rotten inside’ and hence infertile. The most notable finding in relation to STIs and infertility was that no women appeared to know that several STIs could harm fertility before visible symptoms were apparent. Women associated infertility with later, more severe, stages of infection, by which point damage to fertility might be irreversible and untreatable.

⁴⁴ A large pumice stone.

STIs were often referred to as diseases of ‘sleeping around’ (*zabweka bweka*), and they were firmly linked to promiscuous sex in the public imagination: ‘elders say it’s bad to be a prostitute, that it leads to diseases’ (F21). Because syphilis was known as a common cause of infertility, and STIs were thought to be caught by ‘walking here and there’ (promiscuity), infertility and amoral sexual behaviour were associated with one another. For instance, F67 said that she had heard that ‘if you have seven or eight marriages you might have problems having children’. Although she did not mention diseases directly, they were the implicit link between multiple sexual partners and subsequent infertility. The link between morally ambiguous sex and infertility was also made through talk of abortions, and (in the second quote below) through prostitutes losing their ability to detect ‘good sperm’ due to promiscuity:

‘Sometimes, if you are doing prostitution, you never know the people you are sleeping with, and it might happen that others have diseases and they end up giving them to you. So if you have the disease it is difficult for you to get pregnant’ WB, G5, age 24

‘[Prostitution] can cause a person to be infertile. Maybe you have slept with ten men. So you won’t recognise good blood [sperm] that can carry out fertilisation. So that can cause a person to be infertile. Because when doing prostitution, you can get pregnant, maybe you might have an abortion, which would mean that you have destroyed your insides’ WC, G2, age 17

Young, unmarried women’s bodies were thought of as particularly vulnerable to damage from disease. F28 said that diseases caused infertility if women had sex with infected men when they were ‘too young’, suggesting she believed that youthful sex with infected men, rather than sex with infected men *per se*, was dangerous. A teenaged girl in a group discussion (WA, G2) specifically linked diseases to infertility but added the condition: ‘if you have sex before marriage’.

It was in relation to STIs that infertile women’s explanations of their infertility differed from explanatory models of infertility suggested by unaffected people. STIs were one of the most common causes of infertility given by unaffected people, whilst none of the infertile women referred to their sexual history, and few mentioned diseases as possible causes (and even then, they were always diseases their husbands might have given them). Because STIs were so firmly associated with immoral sexual behaviour, being ‘rotten’ inside and having failed to seek treatment in time, it is unsurprising that infertile women were more likely to choose explanatory models that cast them as innocent

victims of witchcraft, rather than explanations involving STIs, which were always seen as affecting 'other' women.

6.3.8 Induced abortion

Abortions carried out by unqualified people (as they are likely to be in Malawi as abortion is severely restricted) jeopardise subsequent fertility. Although none of the 1817 women interviewed during KPS ANC data collection reported ever having had an abortion, they are likely to occur in the study area. During fieldwork, one death was attributed to post-abortion infection in the study area, which was reported anecdotally to the principal investigator. It would have been useful to learn more about local abortion practices, but discussing abortion was highly problematic as it was a taboo subject. Women were extremely unlikely to admit experience of abortion, and direct questions about abortion risked shocking or offending women. Plans to ask questions about abortion were abandoned, though issues around abortion were discussed during focus group discussions. No life history women volunteered personal experiences of abortion, but other participants talked about their opinions on abortion and infertility, usually with reference to young girls 'throwing away' pregnancies. As with STIs, this represented a divergence between unaffected and affected individuals' explanations of infertility. Infertile women never mentioned abortions, whilst abortions as a cause of infertility commonly emerged during group discussions.

Abortions, like STIs, were talked about in association with morally ambiguous sex, and in particular, pre-marital sex (married women were presumed not to have abortions, unless, perhaps, they worked as prostitutes). Young women's bodies were also thought to be particularly vulnerable to harm from abortions, as they were with STIs. F35, an elderly woman, declared that abortions were common amongst 'troublesome girls' who wanted to continue their education. A typical comment on women who had abortions was that 'God would touch their fertility' as a punishment. Others warned that when women who had had abortions married, people would say they had been bewitched, as they would not become pregnant. In one group discussion, two girls debated how 'abortions when young' led to infertility: one argued that abortions destroyed eggs, another that they destroyed the womb. Another girl said that traditional abortion medicines might keep working afterwards, causing future miscarriages. Another believed abortions used up a woman's eggs:

‘If you sleep with men every day then you will find that you are pregnant, then you abort, you get pregnant again, and you abort again. Maybe you find that when you get married you have already aborted ten pregnancies, and when you get married, you have no eggs in the stomach.’
WC, G3, age 19

6.3.9 Contraception

Many participants saw both traditional and modern contraceptives as threatening fertility due to the damage they might cause reproductive organs (e.g. sores, or causing blood to ‘clot’ inside). This concern formed part of the overall moral ambiguity surrounding family planning:

‘Some of us say, when we go to the clinic, those injections which they give us, they destroy our insides. It starts giving us a big clot of blood, and some say the stomach starts moving. So that is why some of us fail to go there, we fear that we will die’ WB, G4, age 26

Yet only one woman linked her own fertility problems to use of hormonal contraceptives. After having her first child (out of marriage), F27 used the injection for two years while in a relationship with her future husband. When she failed to conceive within two years of marrying him, people started accusing her of having ‘removed her fertility’:

‘At first, I had been using pills, but then I discovered that taking pills wasn’t good for me. Every day, I might not use them properly [forget to take them], that’s why I started using the injection...I wasn’t infertile, it wasn’t that I had lost my fertility, but it was just... ah, I was thinking that maybe it was because of the injection which I had been given’ F27, age 28

Traditional family planning methods (such as the rope tied around the waist) were also thought to cause infertility if misused. Several women described the dangers of the rope inadvertently breaking and being lost:

‘This happened to my aunt. Maybe her rope was cut and lost. She stayed for five years without giving birth. She went back to the traditional healer and got some other medicine. After that, she had another child’ WE, G2, age 16

‘If the rope gets lost in the bush, it means that is the end, you will never give birth again because it was lost from your waist’ F67, age 27

6.3.10 Other causes of infertility

Other causes of infertility were mentioned which did not fit into the aforementioned categories. Each was described by only one or two people. They thus probably represent anecdotal and peripheral beliefs, rather than widely shared understandings:

Womb upside down. F31 was told that this was causing her infertility.

Uterus too big. F21 had two periods a month. A traditional healer told her this indicated that her uterus was ‘too big’ to hold sperm inside.

Air in stomach. A traditional healer told F27 that although she had fertility inside her, she had air in her stomach, which made sperm scatter.

Haemorrhoids. A female traditional healer cut F45’s haemorrhoids off with a razor and said that she would then be able to give birth.

Woman not having matured properly. F11 knew a woman who was ‘old’ but had never menstruated and had never had children.

Fallen path. This could be caused by not having sex for a long time (F11). F58 was told by some people that she had a fallen path.

Bambala (enlarged spleen, caused by repeated bouts of malaria). Thought to be caused by blood clotting inside, which could lead to illness and death, unless the blood was pumped out at hospital: ‘the womb grows big as though you are pregnant’ (F14).

Vikanga. White vaginal discharge (F50)

Blood related problems. Blood pressure weakens with age, so women married to older men might not conceive because of differing blood pressures (M1). A couple with different blood groups might have problems having a child together⁴⁵ (F28). F51 thought her blood might differ from her husband’s, so she tried to get pregnant with another man.

Having sex too young. F21’s husband thought her infertility might be because he had married her when she was young, and her blood or eggs may not have been ready. One focus group participant described how pre-marital sex could cause infertility by ‘disturbing’ the youthful body:

‘...their bones and eggs are not yet matured, but they have already started sleeping with boys before the time their eggs come out [menarche]. So you have started shaking the eggs early on, and you disturb everything inside that person, so this will cause problems giving birth in future’ WB, G5, age 24

6.4 Treatment-seeking

Seeking treatment for infertility was usually described as ‘walking’ or ‘searching’ for medicines. People used traditional medicine, hospital medicine, and in one instance, visited a church pastor. Several components were involved: finding a suitable traditional

⁴⁵ People with different blood groups were also thought by some people to have different physiological attributes, for instance, people from some blood groups might die, or lose weight, more quickly than others if infected with HIV.

healer or hospital, diagnosis, securing social support necessary for treatment, and publicly demonstrating willingness to be 'helped'. Until women became pregnant, or gave up hope of conceiving, they felt obliged to continue looking for medicine: 'this is what you do in the village, look for medicine', 'you have to love looking for medicine'. Seeking treatment represented not only a couple's personal desire for children, but was also a public demonstration that the problem was being actively addressed, refuting suspicions that they might 'hate children' or be using contraception. This was especially important before the first child. If married woman were suspected of remaining voluntarily childless, they risked suspicion of just marrying for sex and enjoyment without having children; a state for which there was a particular (derogatory) Chitumbuka verb, *kukhuluzganenge waka nthena*, which F31 was taunted with:

'Some people were saying that, 'she can't give birth, they will be just sleeping together without having children like this...'. They will remain like that [without children]' F31, age 25

Publicly affirming desire for children was an important reason for visiting traditional healers, even if women doubted their efficacy or tired of visiting them. One infertile woman doubted their usefulness and believed her situation was only 'up to the power of God'. However, she still sought medicines as others told her that she had to:

'Those people [traditional healers] are liars, but because people tell you that you have to seek help [you visit them]... they talk about you behind your back, saying that you have to seek help. Our relatives here, our mother-in-law, she is the one who says you have to seek help. So I spoke to my husband, and he said you have to go [to the traditional healer]' F58, age 22

Almost every couple living near relatives had been encouraged, or pressed, into looking for traditional medicines. Complying with this advice demonstrated 'good behaviour' in terms of wanting children and listening to elders. The frequency with which treatment was sought was demonstrated in the ANA data. By two to four years of marital duration, almost half of married ANA women (women who had not had a birth in the past four years) were using fertility treatments (Table 12). After this, the proportion declined, with only 6% of women married for ten years or more using treatments, because women gave up hope, successfully had children, or were not included in this table because they were not currently married.

Table 12 Percentage of married ANA women reporting current use of traditional fertility treatments, by age group

Marital duration	Using fertility treatments	N
<1 year	27 (19%)	143
1 year	22 (38%)	58
2-4 years	27 (49%)	55
5-9 years	12 (19%)	62
10+ years	18 (6%)	296
Total	106 (17%)	614

6.4.1 Traditional medicine

A variety of people dispensed traditional medicines and diagnoses to infertile women:

Type of practitioner	Characteristics
Traditional healer (<i>ng'anga</i>)	Usually male. Most had 'clinics' (no more than a typical dwelling room) for seeing patients, with comprehensive stocks of traditional medicine. They were supposed to be government registered (but often were not).
Village doctor (<i>dokotala wa m'mudzi</i>)	Female expert in fertility, childbirth and childhood diseases.
People with self-declared 'knowledge of herbs' (e.g. traditional healer's wife and assistant; secondary school teacher).	Male or female. Many people picked up knowledge from spouses or relatives, and gained a reputation for treating certain conditions. They practiced on an ad hoc basis.
Female relatives (aunts, sister-in-law, mother)	Examined woman and collected 'over the counter' medicines from herbalists, often to 'open the path'.
Self-medication	One woman dreamt of the correct herbs to 'open her path'; another treated her <i>cheka</i> with herbs.

Women usually visited the same traditional healer several times. Diagnosis was made on the first visit, and subsequent visits were made to collect supplies of medicine. These treatment cycles ranged in length and intensity. One woman walked four hours daily for three months to visit a village doctor who administered medicine vaginally, but more usually, women went back monthly or bi-weekly to collect herbal medicines. F45's description of treatment-seeking was typical of women who had visited several traditional healers:

'Suppose you go and collect medicine two or three times and it does not work, you definitely know that this [healer] has not helped. You may wait for a month, and someone refers you to another traditional healer saying 'that one will help you'. You go there and collect medicine four times but you find that still nothing happens, and so on' F45, age 28

Medicines were usually taken orally, by boiling herbs and drinking the water or cooking porridge with it. Herbs were boiled and drunk repeatedly until they became 'tasteless'. Two women wore herbs on a string around their hips, and four made herbal vaginal pessaries. One woman inhaled smoke from burnt herbs twice a day and another had a reed inserted into her vagina, which was used to blow medicine 'to her back'. Belief in the traditional healer and social harmony at home were required to ensure the treatment's success, as traditional medicine was not thought to work if there was 'noise' (arguments or tension) at home. 'Staying well' together as a couple was an important part of the therapeutic process.

A month's rest period was necessary for the previous traditional healer's medicine to leave the body before starting treatment with a new traditional healer. After prolonged treatment-seeking, women became 'tired' of looking for medicine, which entailed travelling for miles, usually by foot, to different traditional healers, and preparing herbal medicines up to three times a day (boiling bark and cooking porridge with the resulting infusion, or inserting vaginal pessaries). Treatments interfered with daily life, as certain foods were forbidden (particular vegetables and meat), and women could not attend funerals whilst taking fertility medicines (likewise, fertility treatments could not be started if women were in mourning for a close relative). After tiring and then resting, women started looking for treatment again, or tried a new strategy such as visiting a hospital. The pressures of daily life also hindered treatment-seeking. F40 was not using medicine because she was too busy farming at her husband's village where they were experiencing food shortages. In addition, she did not know anyone who could give them medicines, she could not talk to her mother about it as she was too shy, and 'the walking was too tiring'. For her, seeking fertility treatment was too arduous to prioritise over other family difficulties.

Traditional healers usually charged a small amount (around \$0.40 US) for the initial consultation, which was seen as a token amount to 'wake the spirits' (if spirits were used for diagnosis). Purchasing imported exotic medicines or rare herbs was more expensive. Healers rarely expected full payment (usually a goat or equivalent goods or money) unless a baby was born, and had survived for several months. Government

registered traditional healers were meant to have a fixed price list, but one traditional healer claimed not to charge the full amount to poor people⁴⁶.

Some traditional healers operated in-patient camps, which could be very expensive. Six months after getting married, M36 and his wife stayed at one such camp for three months, then visited a different camp for four months. They had to sell household items to pay for treatment. Visiting a camp so soon after marriage was unusual: most people would not regard six months without conceiving to require such a drastic response (his two brothers were the only other participants to have stayed in camps with their wives). Because M36 and his brothers believed themselves to be bewitched, this, rather than infertility, may have been his primary concern. He may have had concerns about witchcraft even before his marriage. In this case, the brothers thought they were victims of the same bewitchment, and were in close communication with each other, so it is understandable that they sought similar treatment.

Numerous women attributed at least some credit for successful pregnancies to traditional medicine. In a couple of cases, this came after years of traditional treatments when they believed they had finally found the right medicine. In addition, six women took ‘path opening’ medicine early in marriage and became pregnant the following month. Two other women said that although they failed to conceive, traditional treatment had corrected aspects of their problems, such as straightening the path such that sperm no longer came out ‘too soon’. Success stories affirmed the abilities of particular traditional healers, some of whom became ‘famous’ for treating infertility.

Although traditional medicine was the most common source of infertility treatment, many women expressed distrust in the efficacy, diagnoses and truthfulness of traditional healers, especially those healers who demanded money without delivering results. One woman’s husband (F27) paid \$50 US for ineffectual medicine that only succeeded in causing violent nausea. Another complained that ‘traditional healers tell you that you are bewitched, but it is just lies to get money; yet if God allows you to get better, the healer claims all credit’ (F19). F22 still felt disgruntled, and had not yet visited another healer, a year after a course of traditional medicine had failed:

⁴⁶ One patient in another traditional healer camp had not experienced this benevolence: he had a large bill to settle before he was able to leave, although he had recovered from his illness.

Interviewer: 'You haven't been to another doctor yet, or are you still going to that woman?'

'No, we have stopped going there, ah, they just cheated us [laughs]... We paid a chicken, a big one. It still pains me, even now... they didn't reveal [who was bewitching me], they are liars, they just wanted to eat our money' F22, age 21

Yet this had not destroyed her faith in traditional medicine entirely. Later in the interview, F22 said that if she found a 'really powerful' doctor who could reveal who was bewitching her, then she would try again. Women displayed a pragmatic approach to interpreting what healers told them and did not accept their verdicts without question. F25 was told that witchcraft was causing her secondary infertility, but did not believe this, as she had previously caught an STI from her husband, and had reasonable grounds for believing that this was the cause. F28 said that people needed to 'think for themselves' whether they have been bewitched, by looking for clues such as whether their menstrual cloths had been stolen.

There were exceptions to the typical pattern of seeking fertility treatment. Several women had husbands who did not encourage them to look for medicines. F55's husband was already married with children and would not give her money she needed for medicines. F60 chose not to seek treatment with her second husband because she did not want a child with him, as she was afraid of him abandoning her, as 'he never paid for any of his children' (see F60's case study in section 9.2.1).

6.4.2 Religious help

Although many women prayed for a child, F33 was the only LH woman to seek help from her pastor. She first married a year previously at age 34, and had only recently moved to the area. She complained that she did not have anyone to recommend a healer to her. She did not want to wander 'here and there' looking for medicine as she had seen other women do, so she approached her pastor, who she had heard had cured other infertile people. He gave her medicine and prayed for her, and recommended a traditional healer. However, he lived far away and her husband said they could not afford to go there.

6.4.3 Wazungu medicine

Wazungu (literally, 'of white people') is a phrase used to describe all non-traditional medicine in pharmacies and government and private health clinics. Eleven women had

visited a hospital for their fertility problems; for five women, it was the first place they had sought help. Several cited superior diagnostic facilities at hospitals: ‘they examined me well, using a machine [speculum] on the path’. Another couple wanted an x-ray but repeatedly failed to have one because of staff shortages and the facility being shut down. Five women, often those with amenorrhea or irregular periods, said they had been prescribed contraceptive pills for infertility by hospitals. Some were confused about why they had been prescribed fertility inhibiting medicines, particularly as they had health fears associated with hormonal contraceptives. F59 went to Livingstonia hospital, and although she said the pills they gave her were ‘not good’, she finished the course she was given. Nothing happened, so she tried traditional medicine:

‘So we went to the hospital at Livingstonia. They examined me, and said ‘Ooh, we can’t see anything here, we can’t even see what is wrong with your stomach’. Then we came back and took traditional herbs...’

Interviewer: ‘Did the doctor give you medicine at Livingstonia?’

‘The doctor gave me medicine, but they didn’t give me good medicine, they gave me contraceptives’

Interviewer: ‘How did you know that they were bad [medicines]?’

‘Why would I use contraceptives?’ F59, age 22

F52 was given contraceptive pills after six months of amenorrhea, which may have been an attempt to ‘kick-start’ her menstrual cycle

‘I stopped having monthly periods for some six months. I went to Jetty Hospital thinking ‘maybe I am pregnant’... they told me I wasn’t pregnant but my blood had just clotted, so they gave me contraceptive pills. I took those pills and started having monthly periods again’ F52, age 19

One couple had travelled to a hospital in Mzuzu for infertility diagnosis, but no participants had ventured any further than this for *wazungu* medicine. No participants mentioned new reproductive technologies (which are not available in Malawi), which are not widely known about.

At least ten women with fertility problems had not tried *wazungu* medicine. Five had not been to hospital because they did not know that there was medicine for infertility or ‘the path’ there, and another had not gone because everyone told her that she specifically needed traditional medicine. F22 had not been because she was not ‘seriously sick’. She saw the hospital as somewhere for ill people and did not consider herself to have an illness, rather, her path was closed by witchcraft. Two women had been forbidden from visiting the hospital: one by her husband, and another by her mother, who believed that as F51 was in the process of splitting up with her husband, she had a higher risk of dying if she were treated at the hospital:

[We had not gone to the hospital] ‘...Because of money, we always used to say, we will go tomorrow, but then [my husband] would say no. I was told there was an English doctor at Livingstonia... Then my mother said no, she refused to let me go. She said ‘there you are quarrelling [with your husband], which means if you go there, you will go straight to the operating theatre, and you will have to choose between life and death, which means you will end up where? There [dead]’ F51, age 29

Four women said the main reason that they had not attended was the cost of fees, food, and travel. F48 seemed to have confidence in hospital treatment but could not afford the transport costs:

Interviewer: ‘What type of help do you think a doctor can give to our friends who fail to give birth?’

‘They have to go to the doctor who can examine them inside to see how they are, how their eggs are. After examining, the doctor knows how to give medicine according to the problem which he has found... if it is witchcraft, the doctors cannot cure it, but if it is from God, they can cure it’

Interviewer: ‘Have you ever been to the hospital so that you could get pregnant fast?’

‘No, but recently the Father [Catholic priest] said ‘I have heard your complaint’. After this he said ‘you have to come so that I can give you transport to Livingstonia hospital. But that same month I got pregnant’ F48, age 24

People were keen to attend district government hospitals (with their higher travel costs) or private clinics, as opposed to local rural hospitals, as they hoped for better treatment:

‘Even you, my sister, you know the way we are living nowadays, there is nothing at the government hospital... when we go to the private hospital, you will be helped. Some time back I remember there was a woman, God did not give her a child, she didn’t give birth. When she went through traditional healers, they told her that she needed to go to hospital. That woman went to the government hospital at Karonga, and she was helped. Then there was also our friend who went recently, she just came back without help, nothing was done. Now you see that at the hospital at Jetty, they fail to give us enough medicine to drink. So for the disease which I have [*cheka*], can I get help? So there, that’s why I have failed to go to hospital’ F45, age 28

6.4.4 Interaction between traditional and *wazungu* medicine

All women who had visited hospital for infertility had also used traditional medicine. Women tried whatever they thought might work, with traditional and *wazungu* medicines having different strengths and weaknesses. There was rarely a perceived contradiction in simultaneously having Christian faith, having belief in supernatural aspects of infertility and traditional medicines, and acknowledging the potential benefits of *wazungu* medicine. F38’s husband was the only participant to report disliking traditional medicine because he was Catholic. The spheres frequently complemented each other: after F38 failed to understand what the hospital had told her about her stomach problem, she went to a traditional healer to interpret the diagnosis. In another example, F21 tried numerous traditional healers, and was eventually diagnosed with a narrow path at the hospital. Her mother knew how to cure that condition, and successfully administered traditional medicine (F21 conceived a month later).

Practitioners from different sectors frequently referred patients to one another. F52 reported that hospital staff had told her there was nothing wrong with her, and she would be better off going to traditional healers. If this had actually happened, it is difficult to know whether hospital staff said this because they really believed traditional medicines to be more effective. Two other women described hospitals referring patients to traditional healers, though these cases did not involve infertility. In the first, a hospital doctor believed that F55’s co-wife had poisoned her. He recommended she leave her marriage and return to her parents, which she did. In the second case, F70 talked about the time when she sickened and swelled. She went to three hospitals, who said ‘this is a disease for African medicine’. She then stayed with a traditional healer, who also told her to leave her marriage, in case the uncle who had bewitched her hurt her again. Her parents agreed it was better for them to pay back bride price and for her to return home, than to let her die at her marriage.

Traditional healers also referred women to hospital. F45 had been to many traditional healers: ‘Everywhere I went they said, ‘You have to go to the hospital. They need to clean you, then you might start giving birth’’. However, she did not go, due to lack of money. F28, a traditional healer’s wife, said that if traditional ‘blocked path’ medicine failed, and a woman’s fertility was damaged, *wazungu* medicine was needed. Her husband, the traditional healer, referred the patient to hospital, with a letter explaining their diagnosis. If a patient wanted treatment for amenorrhea, they sent her to hospital to obtain a stamped letter confirming she was not pregnant, as this treatment could cause abortions, and F28 suspected that some women requested the treatment in order to terminate unwanted pregnancies.

6.4.5 Social support

Treatment-seeking narratives were often characterised by uncertainty or confusion. Women did not necessarily expect to know what medicines they were taking and why, or could not explain what traditional healers or hospital staff had told them about their infertility. Some were not given a diagnosis, or were told nothing was wrong with them. Several women could not say what the problem was because they were ‘still young’. Younger people had lower expectations of understanding their situation, as knowledge of reproductive matters was thought to come with age and experience. Many women therefore deferred control of infertility treatment to others. This could be seen as a form of social support, but could also be perceived as an unwelcome intrusion. At the start of married life, especially if neither person had been married before, the couple were seen as young and ‘with little knowledge’, and others around them felt obliged to help. Infertility was not just the business of affected individuals, but drew involvement from the extended family and wider community, who were often the first to indicate to a couple that their infertility was beginning to be considered problematic. They might advise which traditional healers to visit, offer diagnoses, participate in *vimbuza* dances (ridding women of spirits), or fetch medicine. As people mainly heard about traditional healers via personal recommendations, being connected into a social network was important for sourcing therapy and medicines.

Women were almost always accompanied by their husbands to traditional healers, partly because ‘it is our culture, as the husband knows family problems’, and also because most traditional healers would not accept a women attending alone. As household heads, husbands were meant to know what their wives were doing, so accompanying

them could be an act of surveillance as well as support. There was a common concern that women – especially young, rural women – would be unable to explain themselves properly when they attended a clinic or traditional healer, and their husband or relatives were needed as advocates. Rumours of traditional healers sleeping with patients were also voiced (a woman village doctor wanted to ‘reassure’ us that she did not do this), which could motivate men to accompany their wives, as might the fact that male factors were thought to contribute to some cases of infertility. Husbands who did not accompany their wives, or refused to take them to a traditional healer, were portrayed as negligent in this and other respects. For example, F25’s husband was a ‘womaniser’ who had already infected her with an STI, yet he refused to go to hospital with her, denying he had a problem. Instead, F25 once went to a traditional healer with a friend, but had not been since, blaming her lack of social network for her limited treatment-seeking options as she came from Zambia:

‘Because I am a visitor here, and I don’t know any traditional doctors from afar, so that’s why I have failed to walk [for medicines], because I am alone. If I had a friend who knew some places, we could have gone, like that time when my friend showed me’ F25, age 30

The woman’s maternal aunt (and sometimes the husband’s aunt) had a recognised role in helping to ensure the success of a marriage⁴⁷. In accounts of how things ‘should be done’, aunts were important in the early days of marriage, ensuring that sex took place so that children were conceived, advising women how to please their husbands and behave well sexually and domestically, and escorting the new bride to her husband’s home. It was not socially acceptable to discuss sexual matters with one’s own mother, so the aunt was a source of guidance. In reality, many people did not have an aunt, lived a long way from her, or were embarrassed about the ‘traditional’ relationship they were meant to have. Only three aunts had an explicit role in examining or advising women in relation to infertility. One had approached her niece a month after marriage, advising her that she had to have children to get on well in marriage. She examined her and said that she did not have a path, and took her to a traditional healer to get medicine.

Three women reported discussing infertility with their mothers, in spite of a supposed taboo against this. F21’s mother gave her medicine for a narrow path once this had been

⁴⁷ In Chichewa (one of the national languages of Malawi) they call this role ‘Anamukungwi’ though Chitumbuka does not have a specific term for it.

diagnosed at hospital; F51's mother vetoed her trip to hospital as she feared she would die there; and F58 approached her mother when she first started to worry about infertility, who advised her which traditional healer to visit. Two women were helped by sisters in-law. F27's sisters in-law examined her, said she lacked a path, and fetched medicine. F60's sister in-law did not examine her but brought her medicine after her husband had failed to help her look for medicines. Other women were advised by grandmothers or mothers in-law, or were accompanied by them when they sought treatment.

6.4.6 Adoption

There was no evidence of infertile couples or individual women adopting or formally fostering children. Fostering was usually temporary (i.e. visiting nephews or nieces), and the closest infertile women got to motherhood was when they cared for their husbands' other children. Adoption does take place in Malawi, and exists in Malawian law, but in the study area people often said they had never heard of formal adoption (when they were given a description of what this entailed), saying that people would not want to give their children away (one participant was aware that this might happen in southern Malawi). When women were asked whether they had ever lived with children who were not their own, their replies were often ambiguous and required further probing. Sometimes the fact that a child had lived with them did not emerge until later in the interview: they had not thought the event noteworthy, as the child's residence was always temporary. There was no sense that living with a child was a substitute for having one's own child, it did not constitute earning parenthood. Some infertile women left their husband's children behind when they divorced, after caring for them for many years. They would typically not see those children again, though some hoped that the children would remember them in the future.

Adoption was an implausible strategy for infertile women, since women rarely 'owned' their own children anyway. Even the idea of men adopting children was at odds with the logic of the kinship system and concepts of parenthood. Work in other parts of sub-Saharan Africa has discussed how a key aspect of parenthood is bestowing the patriline upon the child. This semi-biological function of parenthood cannot be over-ruled, as the child 'belongs' to a larger unit than just the couple (Goody 1982). The biological parenthood of the whole patriline would have to be removed in order to transfer a child to another family. With extended family members commonly requesting children to stay

with them, there was little reason for families to give children away to different lineages, unless the extended family and patriline had broken down, diffused, or was poverty stricken to such an extent that nobody staked a claim on a child.

6.5 Conclusions

6.5.1 Summary

In northern Malawi, where expectations of high and youthful fertility prevailed, ‘taking too long’ to conceive, or being *chumba* (without fertility) were serious social and health problems. The lifetime prevalence of 5% childlessness among women under represents the much higher prevalence of experience of different fertility problems across the life course. As time from marriage passed, ‘taking too long’ to become pregnant was an increasing public and private concern. Within a year, almost all couples started to seek fertility treatment. Early treatment focused on ‘opening the path’ and did not necessarily reflect a serious fertility problem: couples wanted to encourage conception and demonstrate willingness to have children. However, if women’s fertility could not be ‘opened’, after several years they might accept they were truly without fertility. Secondary infertility was problematic if it came before the desired end of women’s reproductive lives, such as if women wanted children with a new partner, or wanted a larger family. Numerous threats to pregnancy existed, including pregnancies disappearing, but these were not viewed as infertility as such. Women’s bodies were the focus of infertility treatments, but male factors were recognised as contributing in some cases, usually only if there was circumstantial evidence implicating them.

Beliefs about causes of infertility incorporated the overall determining power of God, and a variety of biological, supernatural and behavioural mechanisms by which women’s fertility could be lost, damaged, blocked or delayed. Supernatural harm resulting from social conflict was thought as dangerous to fertility as infectious diseases. Women affected by infertility were often confused about diagnoses or received multiple conflicting explanations, including witchcraft, congenital abnormalities and menstrual disorders. The public discourse on infertility focused on behavioural factors as causes, namely, promiscuity leading to STIs and abortions. Some women feared that hormonal contraceptives had harmed, or could harm, their fertility. Problems with the path being ‘tied’, ‘moving’, shaking, and other internal disturbances were thought to disturb fertility, through diseases such as *cheka*, stomach pain, spirits such as *vimbuza*,

or the upsetting effect of sex at too young an age. STIs also threatened the cleanliness of the body. They were seen as polluting or dirty, and could lead to the womb ‘rotting’ unless treatment was promptly sought. The belief that a woman’s eggs may be ‘finished’ after several abortions, pregnancies and/or miscarriages, which has also been reported in Tanzania (Roth Allen 2001), was also prevalent.

Fertility problems were treated within resource-poor and pluralistic health systems far removed from the new reproductive technologies and sophisticated diagnoses available in richer countries. Traditional and hospital spheres interacted and women pragmatically switched between the two. Treatment-seeking (‘searching for medicine’) was almost universal and felt to be obligatory, and women used traditional and hospital sectors. Many eventually used both. Traditional healers were the main treatment provider, and only one woman visited a pastor for help. Many responses to infertility were public signs of ‘making an effort’ to have a child, involving public participation (witnessing ‘asking forgiveness’ from jealous relatives, or in *vimbuza* dances), such as visiting numerous doctors searching for medicine; staying at traditional healer camps; and observing behavioural and food taboos. Traditional healers ranged from registered practitioners to amateurs. Women were usually accompanied by their husbands or other relatives and would undergo treatment cycles involving drinking or inserting herbs. The process of walking to healers, staying in camps, and using these medicines was perceived as arduous and testing, and after several treatment cycles women were compelled to ‘rest’, to recuperate and allow medicines to leave the body. Although success stories of traditional medicine treating infertility abounded (which must bolster the ongoing importance given to traditional medicine) scepticism was also expressed by women who had paid money to healers without success.

Hospitals offered few infertility services. Some of the larger hospitals had basic diagnostic equipment (though this was inaccessible to most women), but the only therapeutic options reported were treating STIs and prescribing contraceptive pills, perhaps in response to menstrual problems. Many infertile women never attended hospital due to lack of money, or because they believed hospital services to be inappropriate for tackling their problem. There was considerable interaction between traditional healers and hospitals, as they referred patients to each other if a problem fell under the other’s expertise.

Women did not present themselves as having a great deal of control or insight into the management and treatment of their infertility. Members of the extended family (aunts and sisters-in-law in particular) advised young newly married couples, who were seen to be lacking in knowledge and unable to manage infertility alone. Although mothers were not meant to talk to their daughters about personal matters, they were involved in managing infertility in some instances. Husbands were usually concerned about their wives' fertility, and mediated their access to treatment, unless women had other friends or relatives to support them.

Adoption was not a realistic strategy for infertile women and couples. Although infertile women often lived with their husband's other children or relatives, examples of the permanent transference of children to infertile women or couples were not found and would not have been consistent with prevailing kinship norms.

6.5.2 Discussion

As multiple and often competing hypotheses of the causes of their infertility were available to women, which they chose to respond to, and which they chose to recount during interview, reflected resources available to them (advice or money), how the cause reflected on them, and how much they understood about that particular cause. Most affected individuals accounted for their infertility in ways that distanced themselves from personal liability for their condition. They rarely presented themselves as suffering from the effects of diseases, perhaps due to negative moral and behavioural characteristics associated with STIs. While infertile women cited congenital abnormalities and witchcraft as causes of their infertility, unaffected women associated infertility with morally ambiguous or immoral behaviour, by linking infertility to contraceptives, abortions, promiscuity, or STIs. Thus whilst in general women had some (not necessarily accurate) knowledge of risk factors for acquired infertility, affected women did not mention these risk factors in their infertility narratives. Witchcraft placed the cause of infertility above the individual level and situated infertile women as victims of broader social disruption, caused by ex-husbands or women's families who were unhappy with circumstances around their daughter's marriage. Inflicting infertility was seen as an effective way of punishing women and/or their husbands, and destabilising their marriages.

The local construction and understanding of infertility had implications for how treatment was sought, how people believed they could protect their fertility, and perceived risks to fertility. Particularly important to consider are beliefs and knowledge around STIs, as they represent a major cause of acquired infertility. Although women recognised that diseases such as syphilis could cause infertility, they were unaware that they could do so without causing symptoms, a belief that could delay treatment-seeking and further endanger fertility. The secrecy surrounding STIs, and their association with immoral behaviour and dirtiness may also have discouraged women from seeking prompt treatment. Despite awareness of STIs, most women had few realistic ways to protect themselves, as condom use was rare in marriage and inconsistent in extra-marital relationships. In terms of health consequences, if infertility was seen solely as a social and supernatural problem, rather than one with often preventable and treatable biological causes, women might not appreciate the possibility of, or seek treatment for, these underlying causes.

The traditional medical sphere was, for many women, the only one in which action – so important in order to demonstrate public commitment to fertility – could be taken, as so few services were available at hospitals. The importance of traditional medicines in infertility treatment was also stressed by the only other known author to mention the subject in northern Malawi (Peltzer 1987). Traditional healers took fertility problems seriously and offered a tangible course of action. The alternative was sitting at home ‘just staying’, or fruitlessly seeking hospital interventions. For treatments to work, women required social harmony at home and with relatives. If they became pregnant, foetuses were subject to a variety of holding and strengthening processes, and needed ongoing social support and investment from others. Traditional and medical practitioners also got involved in their patients’ personal lives, directing them to leave their marriages if these were thought to be harming their health. Traditional and biomedical models existed alongside each other, as alternative and competing hypotheses, and given a minimal level of biomedical knowledge and access to services, people attended hospitals as well as traditional healers, even though therapeutic options there were scarce. This interaction and collaboration between spheres has also been found in studies of infertility in neighbouring countries (Pool and Washija 2001).

Fears about the potential harm that contraceptives could cause to fertility are also important in understanding the full context of women’s reproductive health in the study

area. Similar fears have been reported from other parts of sub-Saharan Africa, and several women thought traditional methods to be as potentially damaging as hormonal contraceptives. Modern contraceptive technologies in themselves were not necessarily the only cause for concern, but the very practice of preventing pregnancy was feared to cause ‘blood to clot’, and ‘eggs to finish’. These beliefs could potentially dissuade women who would otherwise consider using hormonal contraceptives from doing so.

Finally, the experience and treatment of infertility were influenced by the beliefs and motivations of women’s husbands, families, healers and neighbours. Contemporary and historical social relations of both conflict and support also played a role in interpretations and experience of infertility, through witchcraft, social support needed to find medicines, and relationships with traditional healers. Access to therapy was influenced by social as well as economic constraints. Women usually required the support of their husbands to access treatment. People did not trust traditional medicine implicitly, and did not know whether hospitals were realistically able to help them, so they relied on word of mouth and advice from elders about the best course of action. Those who were new to the area, young people, and those who were not confident about expressing themselves and explaining their problem, could face barriers in accessing traditional medicine. It could be as difficult for them to negotiate the traditional system as the hospital system. Much ‘technical’ knowledge or supernatural insight was confined to traditional healers, hospital staff, or experienced older people, and young couples needed help or advice from them to make sense of their problem. Couples often did not have a diagnosis for the cause of their infertility. They left it up to the traditional healer and took treatment as directed. Older, expert people considered it unnecessary to explain or diagnose problems clearly. Traditional healers were no more transparent in this respect than hospitals. Just because some aetiologies were ‘local’ or ‘traditional’, they were not necessarily widely understood. Women expected to acquire knowledge over the course of their life, through experience. By not having pregnancies and children of their own, they were denied deepening knowledge in this field.

PART 3: RESULTS – INFERTILITY AND THE LIFE COURSE

The following chapters examine the effects of infertility on the life histories of 27 women with past or current infertility. Marital histories dominated their narratives, as marriage was the principle institution affecting their socioeconomic activities, social status and residential patterns. The next two chapters (Chapters 7 and 8), are organised according to how infertility related to marital stability, and marital instability. Marital instability is defined as when a woman left her marriage permanently (in the case of divorce) or temporarily, due to problems in the marital relationship or household. Inversely, marital stability is defined as an uninterrupted spell of marriage. As well as being important for understanding women's life courses and well-being, marital stability is also of epidemiological interest as it is a key factor in determining women's risk of HIV infection in this area. The relationship between infertility, sexual risk and other aspects of women's health is considered in Chapter 9, the final results chapter.

Fifteen women who did not consider themselves to have experienced infertility (though some had used fertility treatments) also took part in life history interviews, and were asked about problems and treatment related to pregnancy and childbirth. Comparisons with this fertile group are made throughout the next three chapters. Their cases demonstrated numerous other ways in which women's lives could deviate from the normative life course through marital disruption, health problems, or losing children. Without considering these data from fertile women, it was difficult to judge whether infertile women's experiences were particular to women with fertility problems, or whether fertile women reported comparable experiences with regard to their marriages, reproductive health, and treatment-seeking concerns.

7 Infertility and Marital Stability

7.1 Introduction

In the academic literature, infertility is frequently associated with divorce or polygyny. Participants in the study also frequently made this association. Children were thought to play an integral role in marriage, such that childless couples were presumed destined for failure. Yet women's life histories suggested that this was not always the case. This chapter explores the marital dynamics of *currently stable* infertile marriages, marriages that had often endured for many years without ending or becoming polygynous. This was in spite of high levels of marital instability, strong pressure for couples to have children, and the high frequency of polygyny. Infertile LH women's stories showed that alternative bases for marriage existed, apart from having children. Yet childless marriages often provoked disdain from those around them, especially their parents, and often left women in a socially ambiguous position. Even if they were loved by their husbands, they faced wider disapproval. Spousal support was insufficient to ensure that they 'stayed well', especially because in their visions of the future, they rarely expected their husbands to remain as committed towards them.

Women in monogamous marriages are presented according to whether they lived with children or not, as this proved important in understanding marital dynamics. Women who married *into* polygynous marriages are considered separately from women whose marriages *became* polygynous. These women are considered in Chapter 8: 'Marital Instability and Polygyny', because gaining a co-wife represented a change in the original status of the marriage. Cases studies are thus organised as follows:

- 1) Women in monogamous marriages
 - living with children (either their own, if they had secondary infertility, or their husband's children)
 - living without children
- 2) Women who married *into* polygynous marriages

Some of these women had primary, and others had secondary, infertility. Of the cases of secondary infertility, these women had only one living child at most, or had lost custody of their children.

7.2 Stable monogamous marriages with children

Table 13 Summary of infertile women in ‘stable’ monogamous marriages living with children

	Children in household	Infertility status
F22	Eleven year old step-daughter from husband’s deceased wife	Primary: no pregnancy in first marriage (nine months) or two years of current marriage
F25	Her and her husband’s ten year old son	Secondary: no pregnancy for last ten years of her eleven year marriage
F29	Step-son (aged ten) and step-daughter (aged eight) from husband’s ex-wife	Primary: stillbirth in first marriage, no pregnancy in three years of marriage
F33	Three teenaged step-children from husband’s ex-wife	Primary: no pregnancy in one year of marriage
F39	Step-son (aged seven) and step-daughter (aged five) from husband’s ex-wife	Primary: no pregnancy in six years of marriage
F58	Five year old step-daughter from husband’s pre-marital relationship	Primary: no pregnancy in four years of marriage

Of women in monogamous marriages with children, five had primary infertility and lived with their husband’s child(ren) from their previous relationships, and one had secondary infertility and lived with her only child. In all cases, the presence of children, even though they were not necessarily the women’s own, seemed to contribute to marital stability. Women were valued for caring for children, and in turn, might have been disinclined to leave a marriage with children where they could ‘live well’.

The case of F39 stood out because she was less distressed about infertility than any other LH woman interviewed. Six years without a pregnancy would have been discussed very solemnly by most people, but she laughed and smiled throughout the interview, and did not accord great significance to infertility in shaping her life:

F39. Twenty-three years old

F39 married into a polygynous marriage at age 16. Her husband already had two children with his first wife. Shortly after F39 arrived, his first wife was divorced and sent home after she was discovered sleeping with another man. Her children stayed with their father and F39, and had not seen their mother since. When asked whether she considered them to be her own children, F39 replied, laughing:

‘My friend’s [co-wife’s] children, can they be mine? [*her tone implied that the answer was ‘no’*] Now who can I say their owner is? I have taken care of them since they were young, especially this girl, her mother left her when she was very small. She doesn’t even know her mother’

Her husband had never insulted her over their problem ('No, we do not quarrel because of our failure to have children, does quarrelling produce children, isn't that God?'). They had sought fertility treatment from numerous traditional healers over the previous five years, but had abandoned hospital investigations at St Anne's clinic because it was too expensive (\$5 US). She believed that she had a problem with her path, but also mentioned that many men at her husband's home were 'like that' (also had fertility problems). At the time of interview, she was resting from treatment, but planned to look for a new traditional healer soon. One of the reasons that she and her husband had recently moved from his natal home to rent rice plots at their current house was because they had heard there were good traditional healers nearby. When asked what his relatives (who lived in another district) thought about her lack of a child, she simply replied, 'I can not know what is in their hearts'.

In spite of her positive attitude, F39 acknowledged that certain aspects of her life had been affected by infertility, namely prolonged treatment-seeking and moving house to access better treatment. Priced out of hospital treatments, her hopes now lay with traditional medicine. However, F39 stressed that infertility had not affected her marriage. She thought it unlikely that her husband would take another wife, and said that her stepchildren helped them to 'stay well' together. Either she was presenting a stoical face, or she was genuinely less anxious about her situation than many other women. Several aspects of her story suggest that the latter interpretation is plausible. Firstly, her husband's family lived far, so she did not have to face her in-laws' disapproval (a problem reported by many other women). In addition, F39 believed her husband to be partially responsible for their infertility, which relieved her of the full burden of blame that most women carried. She had mentioned her husband's family's history of infertility, and after the interview, when the digital recorder had been switched off, she asked the interviewer if she knew her husband's brother, who lived locally. The interviewer indeed knew the man, and F39 pointed out that he, too, had been married for years without children. This remark stressed that infertility affected the wider patriline, which fitted with a metaphysical interpretation of infertility (in which whole families are affected by witchcraft). A final reason for F39 continuing to 'stay well' in her marriage was the presence of stepchildren, who fulfilled some of the functions of having her own children, such as companionship and helping around the house. However, this was no substitute for having one's own children. Although F39's stepchildren did not know their own mother, and F39 had cared for them for years, she found the suggestion that she might consider them 'her own children' laughable.

The next life history describes a woman in a similar position to F39. Both women described supportive marriages, but F58's account was characterised by anxiety about the future:

F58. Twenty-two years old, four years into second marriage without conceiving

F58 married her first husband, who she had believed to be single, when she was 17 years old. As soon as she arrived, her husband's ex-wife returned, and F58 found herself to have a co-wife. After four months, she decided to leave and marry someone else, because her senior wife did no work or cooking. She added that if she had had a child with her first husband she would have stayed:

'If a person has a child they think differently, because if you have children then get married somewhere else, it means you will be counting children from different fathers'

She then married a man who had never married, but had had a child with a girlfriend the previous year. His mother had forbidden him from marrying the mother of his child, though F58 did not know why. After the baby was weaned, and compensation had been paid to the mother's family, F58 told her husband to go and fetch his daughter. F58 then looked after her as if she were her own: 'I'm caring for her because her father cares for me well, so I will care for her without any problem'. The little girl did not recognise her own mother, even though she lived nearby and passed to draw water every day⁴⁸. F58 hoped that her step-daughter would forget that she was not her biological mother:

'His daughter came here when she was very young, she had just stopped breast feeding, she was not eating *nsima* (maize meal), and she was just suffering because she was living there [with her mother]. Then I said, 'go and get her for me'. When she came, she didn't even know how to go to the toilet. Even now, she doesn't know her own mother, if [her real mother] calls her, 'come here!', she refuses, saying, 'if I come there, what I am going to do?'

Although F58's husband was supportive of her and they looked for traditional medicines together, she was pessimistic about the future if her infertility persisted:

'What will happen is that he will say, 'my friend, may you pack and go, we have to share our properties out, do you have anything here?' Which means that he has started to see another woman outside, he's thinking that he has to give birth, he'll say, 'my friend you go, you have built the house for nothing'. Then I will just pack my things to go home.'

Interviewer: 'Why hasn't he married another wife or why isn't he chasing you to go back home yet?'

⁴⁸ This is likely to explain why F58's husband's mother was not happy for him to marry the mother of his daughter. His girlfriend may have been too closely related to him as they lived in the same 'line' (group of houses) and were therefore likely to be extended relatives.

‘I don’t know exactly about that. What happens is that you can be faithful for five years, up to six or seven years, then you will get tired and fail to be faithful’

Infertility had not contributed directly to the end of F58’s first marriage, as four months of marriage was not usually long enough to start seriously worrying about fertility problems. However, her lack of swift conception, which may have been an indication of underlying fertility problems, meant that she was more inclined to leave her marriage following difficulties with her co-wife. In this way, infertility could indirectly destabilise marriages, especially during the early days of marriage when the relationship was still relatively fragile, particularly if bride price had not been paid, or if secrets such as the existence of co-wives were emerging. A comparable case, in which pregnancy served to stabilise a marriage in its early, shaky, days, was heard from a LH women in the ‘fertile’ sample. F32’s father was unhappy with her marriage, as he had quarrelled with her husband’s father in the past. Initially, F32’s husband had suggested that F32 should pretend to be pregnant so that she could marry him, as he was keen to secure her as his wife. She refused, as she realised that people would soon realise that she was not actually pregnant, and decided to elope without her father’s consent. Soon afterwards, her parents decided to bring her home. However, by this time, she really was pregnant, and they abandoned their efforts to retrieve her. Thus in the uncertainty of the early days of marriage, pregnancy, or lack of it, could make or break a marriage.

F58 re-married quickly, and then played an active role in bringing her husband’s daughter to their house. As well as directly requesting that her husband brought his daughter home, her very presence enabled this to happen. Her husband had already paid *chibadala* (damages) to his daughter’s mother’s family, so he clearly planned to claim his daughter, but without a wife, his daughter would have lived with her mother, or with her paternal grandparents, until she was much older. F58’s arrival meant that a woman was available to look after the child. She cared for her stepdaughter as if she were her own, and they were observed interacting together very affectionately before and after interview. Yet she, like F39 above, lacked parental rights. If the marriage ended, she would leave the child behind.

F58 appeared to have a good relationship with her husband. After interview he approached the interviewer and he and his wife talked openly about infertility together.

He was interested in discussing the research, expressed concern for his wife, and asked for advice. This contrasted with most husbands of LH women, who generally kept their distance. F58 and her husband had an open and communicative relationship, as many couples would not discuss personal matters publicly. In spite of this, F58 worried about the future. She feared that after several years her husband would seek children elsewhere and she would be forced to leave.

The following life history was recounted by F33, a women who had married at a relatively late age, and who had experienced an unusual life course:

F33. Thirty-six years old, one year into her first marriage without conceiving.

F33 came from a relatively well-off family. Some of her brothers had worked in professional jobs, she had finished secondary school, and had spent most of her life in the capital city with relatives. She had recently returned to her home village to care for her sick mother. She married soon afterwards. Her husband lived with the three children he had had with his ex-wife. After they divorced, he married F33 who subsequently cared for them. She had started to seek advice about traditional healers for fertility treatment and had recently visited a pastor for help. F33 had not heard any negative comments about her infertility, but feared that she might in future:

[Laughing] ‘Children are important, so if the family doesn’t have children, your husband can still love you, but his relatives are often the ones who might confuse him with their talking’

F33’s was a marriage with caring for children at its centre. Her relatively late age at marriage suggested that her husband was not primarily concerned with having more children. After all, he had three surviving children, and could have married a younger woman if future fecundity had been an essential quality when selecting a new wife⁴⁹. He did not seem concerned about her infertility as he had not helped her look for treatment in the first year of marriage, as most husbands did. F33 had other desirable qualities, such as looking after his existing children, and having relatively high socioeconomic status. In addition, her husband was a middle-aged man and the head of his household, so did not have to deal with relatives commenting on his wife’s infertility.

In these situations, couples ‘stayed well’ together in spite of infertility. In each case, the household had motherless children, and infertile women had essential and valued roles

⁴⁹ Although 34 might seem young enough to be relatively sure of having children, this was a late age to marry in the study area and was seen as well beyond the reproductive prime.

caring for children, even if they failed to have their own. Yet not all stable marriages were happy marriages. F25 was not 'staying well', but did not want to divorce, because she only had one child and thought she could have no more. Returning home to Zambia would have entailed losing her son:

F25. Thirty years old, ten years of secondary infertility

F25 was born in Zambia, where she met her husband, a Malawian who was working there. She married at nineteen, and her son was born a year later. She had not become pregnant during the next ten years. They came to Malawi five years ago, to live patrilocally with her husband's brother and wives. Since arriving in Malawi, her husband had had many girlfriends, which she felt angry yet resigned about (see 5.3.3). F25 believed that he had girlfriends in order to have more children. She had only been to one traditional healer, partly because she was scared of traditional medicines' side effects, and partly because her husband refused to go with her. Also, she saw herself as a 'visitor', and lacked social networks to locate a good traditional healer (see 6.5.5). Her in-laws talked about her behind her back, and repeatedly told her husband to marry another wife. She hated only having only one child, as if he died she would be left with none. In spite of the 'little love' F25 had with her husband, and her fears about diseases he brought home (they had both been treated for syphilis), she had not returned to Zambia because her son would have to stay in Malawi, and she lacked money to travel.

F25 linked many of her problems to her infertility and her long distance from home, including the deterioration of her relationship with her husband, and the poor relationship she had with her in-laws, who saw her as inadequate. She was sure that her husband had extra-marital relationships to 'get children from outside' rather than just to 'have fun'. As men could compensate pregnant girlfriends' families to secure ownership of their children, it would not have been necessary for F25's husband to re-marry in order to have more children. Alternatively, he could have married a girlfriend when and if she had become pregnant, though thus far this had not happened. Thus men were in a much more flexible position than women when it came to acquiring children in an infertile partnership, though this was only successful if they were not the infertile party. F25 felt she lacked power to change her situation. Far from the protective influence of her family, she felt at risk of diseases from her husband, and did not have the sympathy of his extended family. If she had left her husband, she would have lost her son, so felt little choice but to remain married. Thus marital stability was not necessarily an indicator of a good couple relationship or a woman's well-being. At a population level, remaining in a first marriage was protective against HIV infection among young women

in this area⁵⁰ (Zaba, pers. comm, 2005), but in this case F25 may have been at greater risk staying in her marriage, considering her concern about her husband’s risky sexual behaviour.

7.3 *Stable monogamous marriages without children*

Table 14 Summary of infertile women in ‘stable’ monogamous marriages living without children

	Current infertility position	Current marital Duration (years)
F13	Secondary: three children living with first husband; no pregnancy since marrying second husband.	5
F26	Previous primary: married nine years before first child born	10
F24	Primary	3
F37	Previous primary: married four years before first child born	5
F38	Previous primary: married two years before first child born	3
F47	Primary	5
F40	Primary	11
F71	Three years secondary since last child died (daughter lived elsewhere with grandmother, three children died)	9
M36	Male participant: primary for five years before wife’s first pregnancy (pregnant at time of follow-up visit)	5

Women in the previous section had a clear role caring for children in their marriages. This section considers what kept seven LH women and one male interviewee in stable monogamous marriages without any children over several years of infertility.

F13. Thirty-three years old. Secondary infertility throughout her second five-year marriage⁵¹

F13 left her first marriage after suffering years of violence from her husband. Their three children remained with their father. F13 re-married two years later to a man whose first wife and four of their five young children had just previously died in quick succession. After F13 married him, his last child died. Though they had been married for five years she had not become pregnant. One traditional healer said that the infant deaths, the death of her husband’s previous wife, and F13’s infertility, were caused by the same witchcraft from someone at her husband’s household. F13 believed the diagnosis, because she had been to many traditional healers without success.

⁵⁰ A recent analysis on ANC data (awaiting publication) found that for ANC attenders aged under 25, those who had re-married had odds of 2.84 of being HIV positive compared with women in their first marriage (95% CIs 1.94 – 4.17).

⁵¹ This interview was carried out during the pilot stage of fieldwork and was not recorded or transcribed; simultaneous translation and notes before and immediately after the interview were used instead.

Child custody norms and infant mortality had rendered F13 and her husband effectively childless, and secondary infertility meant they could not rebuild a family. They believed witchcraft to be the source of their problems, so had not sought help at a hospital or clinic. This belief may have also contributed to F13 not facing blame or negative comments from her husband (as several women in the following chapters did). The source of the infertility was thought to be on her husband's side, and thus he would not have believed that divorcing F13 or marrying a new wife would not have improved his chances of having more children. Witchcraft was particularly prominent in interviews if people had suffered repeated misfortune, such as high infant mortality. This is increasingly associated with families affected by HIV (both in local discourse and epidemiologically). Witchcraft was a convincing way of explaining a series of tragedies, and was perhaps preferable to publicly considering the possibility that the family was affected by HIV. In this case, infertility was not seen as a discrete condition affecting F13, but as part of a series of misfortunes that had befallen the household.

F71 had experienced similar losses of children. Although she had a surviving daughter, she did not live with her. F71's life as a whole exemplified how local sociocultural norms (concerning child residence and age/gender power relations), other structural factors (poor female education, early marriage, prevalence of STDs), and sub-optimal usage and availability of RSH services combined to contribute to what was probably the worst-case scenario amongst LH women. Her life had been dominated by attempts to have children, and in spite of five pregnancies she remained without a child to live with:

F71. Twenty-four years old. Three years of secondary infertility.

F71 used the contraceptive pill for a year as a teenager before she married (her boyfriend stole them from his health worker aunt). After failing primary school exams twice, she left school, and married her boyfriend some days later, at age 15. She stopped taking the pill and became pregnant the following month. She gave birth to a son at home, at only seven months gestation. He died the same day. Afterwards, she used the pill for a month to kick-start her periods:

‘When the child was born and died, I was using the pill so that I could resume menses and then I stopped... The parents [elders] were the ones who said ‘when you have an abortion or a miscarriage you should resume menses quickly’

Her second pregnancy ended in miscarriage. Her third pregnancy resulted in another son, again born prematurely at six months gestation. She had not gone to hospital this time either: she went into labour during the night and ‘everything happened too quickly’. Her baby was born alive and cried at birth, but

died a few hours later. Again, she took the pill to resume menses quickly. Following these problems she went to the family planning clinic:

‘We went to the Banja la Mtsogolo⁵² clinic in Karonga. They referred us to the District hospital. They tested our blood for syphilis and we had it. We were treated... after that I conceived again’

Around this time she also sought treatment at a clinic for vaginal itching:

‘They gave me some tablets and told me to bring my husband to get an injection. It was a paying hospital and we failed to go back because we did not have the money. When we moved here, I went to Chilumba rural hospital. They gave me five tablets to insert vaginally’

Because of her previous premature births, when she was six months into her fourth pregnancy, her mother took her to Mzuzu. She gave birth at full term at the regional hospital, to a daughter who survived. After this, she used the contraceptive pill to ‘care for’ her child (to do birth spacing). When she later became pregnant with her last child:

‘My mother took my daughter [to Mzuzu] when I was pregnant... with the intention of relieving me, so that the child did not trouble me. My daughter is still there with her’

Her fourth child was born at St Anne’s hospital at seven months gestation. He survived for nine months:

‘At first he was ill. He had had diarrhoea, but just before he died, he had no significant illness. He had a fever, and two days before his death he stopped crying, but he was still breastfeeding’

F71 had not been able to conceive since then (three years previously) and had not menstruated for over a year. After her last child died, she went to hospital and told the doctor she wanted to conceive. He told her to take contraceptive pills ‘on and off’, alternately⁵³. He gave her a month’s supply which she stopped taking after three days because she started to bleed continuously. She had recently visited a traditional healer, who gave her medicine for ‘abdominal wash-out’ (a purgative).

F71 wanted to live with her daughter, but her husband said that since she was a girl, she should remain with her grandmother. It was not clear whether the child would return: F71 said her daughter might come back at any time, but she had not seen her for a year. Her husband wanted more children, especially a son. He had told F71 that he did not want her as a wife any more, and might marry another woman because of their problems. His relatives agreed:

‘They say he should really marry another woman in order to have more children. They say having a daughter is just the same as having no child at all, and he can’t stay without a child’

⁵²BLM: A leading NGO reproductive health care provider in Malawi affiliated with Marie Stopes International.

⁵³ This method of taking medicines is employed locally if the medicine is considered very strong.

Her husband was a welder and they were currently building a large new house near a trading centre. His family home was some miles away at a rural trading centre.

F71 had had an unconventional relationship with the contraceptive pill, in relation to its intended uses by manufacturers. They were not always prescribed by professionals, and were used not just to limit fertility, but to try to kick start it again by inducing an artificial period (which was thought to represent a return to fecundity). Neither were health services used optimally during F71's pregnancies. No action was taken concerning F71's apparent high risk of premature delivery until her third pregnancy, and it was not until after her second child's death that she sought medical treatment for underlying problems. However, her probable STD was not treated fully or promptly due to fees at the private clinic, and further help was not sought until they moved closer to a free government hospital. Her attendance at a BLM clinic (which offer contraceptive services or referral to local clinics for suspected STDs) was perhaps incongruous given that her problems comprised premature births and a miscarriage. She was not looking to limit her fertility, which is the widely perceived remit of BLM clinics. Yet it is not surprising that she hoped family planning services would help her, because family planning was thought of in terms of 'caring for children'. F71's mother finally intervened during her fourth pregnancy bringing F71 to Mzuzu, where she was 'looked after' properly, and accessed better maternity services. Women's mothers typically became involved when their daughters were at risk of, or recovering from, reproductive problems. This was in contrast to the distance mothers were meant to keep from their daughters over matters of sex and conception. Once grandchildren were involved, they helped their daughters with pregnancy, childbirth, and childcare.

It was unusual that F71's husband and his family actively did not want F71's daughter to be living with them, although it was fairly common for a couple's first daughter to stay with their maternal grandmother. F71 was not happy with the arrangement, which reflected her relative lack of influence in making household decisions about living arrangements, both in relation to her husband and his family, and even to her own mother. Throughout her life, 'elders' had greatly influenced her, instructing her to take pills, taking her to Mzuzu, and removing her daughter from her.

Many of F71's experiences related to poverty, including lack of access to good reproductive health services. However, relatively speaking, F71 was neither particularly poor nor residing in a remote household: she had lived in two different trading centres, both with easy access to clinics. Her husband had a business and they could afford to build a new brick house with a tin roof, a sign of relative affluence. It was largely the poverty of the local health infrastructure, combined with her lack of involvement and power in making decisions affecting her and her children's health, which meant that her problems had not been addressed effectively.

F71's marriage had remained stable during these nine years of reproductive problems, though this was not a happy marriage and her husband regularly threatened to acquire a co-wife. One possibility to consider (discussed further in section 7.5), is that finding a new wife might have been difficult for a man in his position. The family's misfortunes would have been widely known in this small trading centre community, and may have led to them being associated with disease, and possibly witchcraft, decreasing F71's husband's chances of attracting a new wife. In turn, F71's relative prosperity in this marriage may have deterred her from leaving an unhappy marriage.

The next case highlights the importance of the couple relationship in maintaining a childless marriage. In spite of abuse from her in-laws, F26's marriage had lasted for nine years without a pregnancy, because, F26 explained, of her husband's love for her:

F26. Twenty-seven years old, primary infertility for 9 years before first child born

F26 married at seventeen to a single man. After a year of marriage without getting pregnant, they started to worry, and went to the hospital. They examined her and told her that her path was small, but could not offer treatment. The next year they visited traditional healers, who diagnosed different conditions. She took many medicines, but stopped after some made her bleed profusely from the vagina. Only after stopping medicine did she become pregnant, nine years after getting married⁵⁴.

‘There wasn't any problem. My husband was encouraging me, that God will give us a child. I said that I should leave, but he said that we should live together, because we don't know about the future.’

In spite of F26 offering to leave the marriage, and her mother in-law insulting her (telling her that they would die barren, and that she was ‘just finishing all the food’), her husband encouraged her to stay

⁵⁴ Several ‘infertile’ women had a child by the time of interview, due to the delay between their reported use of fertility treatments in the ANA study, and the time they were followed up by the qualitative study.

because he loved her. Three children had lived with them temporarily over the years: her husband's nephew and her own sister's two children. The children had helped them around the house, and F26 and her husband had sent them to school.

The temporary child visitors in the house may have been some comfort to the childless couple, but in themselves were not a strong reason for the marriage's endurance: they all had other homes to go to where they could have lived and thus did not require the care of F26 as such. To resist the social pressures her husband was under, and the fact that F26 offered to leave, suggests that he must have had good reasons for wanting her to stay. This may have been love, as well as any of the other many benefits of having a wife (economic, sexual, social etc), regardless of whether she had children.

The strength of a couple's relationship undoubtedly affected their ability to withstand challenges such as infertility. Although structural, economic and other social factors were important in shaping people's lives, the degree of love and commitment within marriage was also an explanatory factor in marital dynamics, though it was difficult to pin down. As mentioned in section 5.2.3, it was difficult to assess the nature of marital relationships. Women rarely wanted, or were able, to express their feelings on the matter beyond frequently citing the importance of 'love' and 'staying well' as signs of their relationships' strength. Three other infertile women who lived in monogamous marriages with no children reported that their husbands continued to love and support them. When F37 was infertile, her husband's parents said that she was barren and 'just making the toilet full', but her husband refused to say anything bad about her. F38 had two years of infertility, and she asserted that men who married another woman in response to infertility 'did not love their wives properly', as they should know that women might take a long time to become fertile:

'Because you don't give birth, he marries another wife, which means that there is no love there. Why? Because he has lost hope fast in his friend [wife]... you may find that women can stay up to four years before they become fertile, and start giving birth' F38

Another factor that might have contributed to the endurance of monogamous childless marriages was if husbands were unable to find a co-wife. F47's husband had almost married another woman, but ultimately this had not occurred, and she remained in a monogamous marriage without children:

F47. Twenty-two years old, five years of marriage without becoming pregnant.

F47's father died when she was ten years old, and for the next seven years she moved around a lot, living with different relatives, and attending different schools. She decided it was better to get married: 'the bad thing about moving was that we were orphans without a father so trying to get by was a problem'. F47 was married to one of three brothers whose wives all had fertility problems caused by witchcraft from their home village (see 6.4.2). Her husband had openly had a girlfriend since they married; F47 knew all about her. His girlfriend had been a married woman who had temporarily returned home over a bride price dispute, during which time F47's husband had a relationship with her:

Interviewer: 'When they were going out with each other did you do anything or did you just accept it?'

'I did not do anything because he was saying that he was going to marry her, so I did not do anything, I only said, 'You should marry her', because that woman was cheating on her husband'

In the end, the woman went back to her own husband. F47 was reluctant to speculate about her husband's motivations in having a girlfriend, but said (when probed) that it might have been due to their infertility. As F47 believed her infertility to be due to her husband's family's anger, she was asked whether she had considered marrying elsewhere. Although she thought the witchcraft could not 'follow' her to other marriages, she replied that she did not want to leave her husband as she did not want another man.

In spite of people commonly saying that men just marry another wife in cases of infertility, and older relatives frequently recommending that their sons do just that, it was not always easy for men to find a new wife. F47's husband had almost married another woman, but it turned out his girlfriend was separated but married: 'in someone else's hands'. Well-known local rumours about witchcraft and the three brothers' infertility could have also deterred women from marrying into the family.

An additional factor in this case of marital stability might have been that F47 did not want to leave the marriage. She was tired of moving around, wanted stability, and did not want a new husband. Many women associated re-marriage with increased risk of diseases, especially HIV, so this fear may have also contributed to her reluctance to leave. Her brother in-law (M36), one of the 'infertile brothers', was also interviewed. He attributed his continued monogamy to this fear of diseases:

'Sometimes I think that maybe I should try to marry another wife, but some people say 'no, wait, because there are diseases around', so I don't know what I will do in my heart' M36

7.4 Stable polygynous marriages

The next section describes infertile women's experiences of polygynous marriages that were still enduring at the time of interview. Two different scenarios emerged which are discussed separately: women who entered marriages as a multiple order wife with subsequent fertility problems, and women who entered marriages as a multiple order wife with established or existing fertility problems. In the first scenario, women did not know that they would experience infertility, whereas in the second, women and their husbands knew that they would probably encounter fertility problems.

7.4.1 Women entering polygynous marriages with subsequent infertility

This section describes what happened to four women who entered polygynous marriages, with existing wives and children, as second or third wives, and subsequently had fertility problems (though three went on to have children).

Table 15 Summary of women who entered polygynous marriages with subsequent infertility

	Infertility status at interview	Description of polygynous marriage
F21	Previous primary: fourteen years in first marriage before first child born, now has two children.	Started as second wife, first wife died leaving two children, husband then married third wife and had two more children
F27	Previous secondary: had one child after first marriage; took three years to have child in second marriage.	Started as second wife, first wife had four children
F31	Previous secondary: had one child before marriage, then took two years for first child to be born in second marriage.	Started as second wife, first wife had four children
F44	Primary: 7 years in first marriage without becoming pregnant	Started as third wife, first and second wives had six children each

F21's story, along with observations made during the interview, helped to build a picture of why infertility might not destabilise a marriage in a polygynous household:

F21. Forty-five years old,⁵⁵ two children, infertile for the first nine years of marriage.

F21 married at 15 years old. Her husband already had a child from a previous marriage (this wife had left him while he was away in Zambia working), and a second wife with two children. He asked F21 to marry

⁵⁵ Interviewed during the pilot study, before the 20-30 age range was decided upon.

him so that she could care for his first, now motherless, child. All three wives were related to each other (cousins) in an arrangement called *mbilya* (her husband 'loved women from her village', and wanted to marry her as she would care for a relative's child better than an outsider would).

After two years of marriage, F21 and her husband started visiting numerous traditional healers for her infertility. After no success, she went to the local hospital. They referred her to the district hospital for a full examination. When asked how the situation affected her marriage, she said:

'I wasn't annoyed...because my husband was giving me advice. He was already old [grown up]. He was saying, 'Everything is up to God. It is not up to you, or me; all of us should pray to God. I have taken a young girl, perhaps her blood, or her eggs, were not ready'. As for myself, my heart was not annoyed. There wasn't a day that he insulted me because I wasn't having children...Most people were not insulting me. But I was insulted once...but not to my face. My husband's elder sister was saying, 'Why are you troubling my brother? You are just finishing off his blood for nothing. You got married long ago, but nothing is happening'. Then I said, 'How am I troubling him?'... I told my husband. He asked her, 'Is having a child like buying fish at the market? How can you know about things in our house? Maybe my blood and her blood are not compatible? Maybe there is a disease? Can you know? From today onwards I don't want to hear you talking about my wife again!'...she said, 'I was just joking', but is joking like that?'

Over the course of their marriage, her husband's second wife died, leaving two children. He then married a fourth wife (his deceased wife's sister) to look after them, and to keep F21 company (as she was not used to living without a co-wife). In addition, seven orphaned nieces and nephews lived with them for many years. Following hospital examinations and traditional treatments (see section 6.4.4) F21 eventually had two children.

F21's marriage lasted for more than fourteen years before she eventually gave birth, and her husband remained supportive throughout, accompanying her to various places for treatment, and defending her in front of his relatives. Although her subsequent success in having two children might have allowed her to reflect on the past more positively, the fact that her marriage endured was indisputable. F21's household was in many ways the model of a busy, bustling, productive rural household: it was full of children (and women looking after them), reportedly harmonious, and relatively prosperous. The local interviewer admired their 'beautiful' large brick house with attractive yard. The wives got on well together, and were related to each other, so did not resent living together as some co-wives did. They owned numerous animals, and farmed tobacco. The relatively large scale of economic operations underway made plain the importance of the agrarian household as the primary unit of economic production. The bigger the household, the greater its economic potential. For polygynous men, 'developing' their name, or

patriline, was synonymous with peopling their household with wives, children, and other relatives, all of whom might contribute to the household. F21 also expected future returns from their investment in a large household. Her husband had paid school fees for the orphans who lived with them, one of whom now lived in the capital city and had a good job. F21's productivity in this context was not limited to childbearing. Even as a childless woman, she was active with childcare and farming. The initial rationale for her marriage was that she would look after her cousin's child, a role undiminished by her failure to have children.

F44 was in a similar position to that which F21 had been in during the early years of her marriage. She lived with two other wives and their children, but was less positive about her situation and was very anxious to have children:

F44. Twenty-eight years old, first married as her husband's third wife, never pregnant in seven years of marriage.

When F44 married at age 21 she was her husband's third wife. Her co-wives lived in neighbouring houses, each with six children. Over the previous seven years she had visited different traditional healers every few months to treat her infertility. When asked what her husband thought about her not having children, she replied,

‘We just live like that. He said ‘had it been that it was your will [not to have children], I would have left you, but because it's God's will, and that's how you were born, we should live like that’

She reported getting on well with her co-wives: their children helped her with household chores like fetching water, and in turn she cooked for her co-wives after they had given birth. Her mother-in-law never said anything bad about her, and advised her about looking for traditional medicine. She never quarrelled with her husband, in fact, he spent every night sleeping at her house, because ‘he loves this house’, and only stayed with his other wives if F44 was away. Although her marriage seemed stable, F44 was sorrowful about not having children, and felt her parents would worry about not having grandchildren:

‘What is bad about not having children is that all your friends have children. I myself have two younger sisters. One of them has three children, the other one is pregnant... so I am just growing older, I'm just staying, doing nothing... this worries me every day.’

Three years after marrying, her husband had wanted to finish paying bride price. However, F44's family told him he should wait, as she had not given birth, so he remained with the balance outstanding.

F44 explained her family's reluctance to accept the balance of bride price by saying that 'you expect children with marriage'. Perhaps her family sincerely felt that it would be wrong to accept bride price because F44 had not delivered the expected children. Alternatively, her family may not have wanted bride price because they suspected the marriage would not last without children, and they would have to pay back bride price to her husband anyway.

F44's husband's preference for sleeping at his childless wife's house could have reflected several factors: sexual favouritism towards his most recent wife, his other wives being sexually unavailable during post-partum abstinence, or the fact that his other wives' small houses were filled with young children, making it hard to get a good night's sleep. The fact that he spent most nights with F44 did not necessarily mean that she was the preferred wife in all respects. Other aspects of married life, such as economic provisioning and social status within the extended family, were also important, though F44 did not complain of differential treatment.

Two other infertile women reported being the preferred wife in certain respects when they married into polygynous marriages and later found themselves with fertility problems:

F31. Twenty-five years old. Two years of secondary infertility in her first marriage.

F31 got pregnant at school but did not get married (see section 5.1.4). She met her husband while working at the market. He wanted to marry her because he was having problems with his first wife. F31 left her child behind with her parents and moved to her husband's home, where he lived with his first wife, their four children, and his parents and brothers. When, after a year, F31 had not become pregnant, she started to visit traditional healers with her husband. Her husband was told that he lacked strength, and F31 heard that her fertility was closed. People accused her of lying about ever having had a child:

'My husband's father was saying 'Aah! You have married a wife who is barren. You say that woman has a child, but maybe she doesn't have a child and she is telling lies. If she had a child, would she fail to give birth here? And at the moment, what are you doing? Years and months have passed, and you are just staying without getting pregnant, when will your blood meet together?''

Her co-wife called her a prostitute, and her father in-law constantly insulted her when he was drunk, which caused her heartache. She complained, 'Sometimes you love each other yourselves, but the problem is that the parents talk a lot'. She worried that her husband would return his attentions to his first wife after her co-wife's period of post-partum abstinence was over (she had recently had a baby): 'Because she has children, he's just passing the time with me [laughs]'. She suggested to her husband that

she should leave him; but he said that as he had married her, she had to listen to him, and he did not want her to leave. When asked whether her husband gave her fewer things because she did not have children she replied,

‘There I can’t tell lies. Although I didn’t have children, my husband was buying me more things than his wife who had children, because it seemed that he really loved me. So his parents were saying that maybe he could divorce me, but his heart was where? [with me]... I know it’s because of the love he had for me. Back then, we did not like my friend [co-wife]. All the time she was saying lots of things to her friends, telling lies to my mother in-law: she was saying that he was not providing for me. This [accusation] was paining him’

Two years after marrying she became pregnant and had a son. Relations had since improved with her co-wife, who cooked for her after she gave birth.

Like most women in her situation, F31 left her first child behind when she married, so when she suffered from infertility in her second marriage, she was under similar pressures to women with primary infertility from her husband’s family, though not from her husband himself, who supported her. After all, he knew that she really did have a child, and he had been partially blamed for their infertility, and he already had four young children. She credited her husband’s love for the favour she was held in, which was reflected in the material advantages she received, and her husband refusing to let his parents’ disapproval affect him. However, even though her husband loved her, F31 worried that he just wanted to ‘pass the time’ with her, and that they would be thought of as *kukhuluzganenge waka nthena* (just marrying to have sex for fun, not to have children). Before her child was born she had been concerned about the future, and how his family and the wider community viewed her.

F31’s account also describes what happened after the break down of her co-wife’s relationship with her husband. Even though they had been arguing, and her husband had married F31 and started a new and favoured marriage, F31’s co-wife remained living at the conjugal home, with her husband’s financial support and his family on her side. Yet several childless women said that they feared that if love died in their marriages, they would have to leave. Women with children were much less likely to leave, and it was usually a decision that they took themselves (even if they were effectively forced into it through mistreatment), because it was considered unfair, and could be referred to a traditional court, for a man to eject his wife from her conjugal home, and hence her farmland and children, without very good reason. Women with children thus had a

stronger claim, which they could invoke above the level of the marital relationship, to secure support at their husband's household even if their marriage was effectively over.

F27 also had trouble with her in-laws when she re-married, and her fertility (or lack of it) was at the centre of a wider family dispute, even though the difficulties began even before she considered herself to have a fertility problem:

F27. Twenty-eight years old, three years of secondary infertility in her second marriage.

F27 became pregnant at 14 years old whilst still at school. She married the child's father, but he failed to pay bride price and impregnated another girl, so her father brought her home before she gave birth. She gave birth at a clinic, where they said the baby was too big and had broken her womb. She stayed there for a month and was treated with tablets and injections. Some years later, she met her current husband. Her son remained living with her parents, as her ex-husband had not paid anything. Her husband was already married with four children, but he no longer got on well with his wife. For two years, he visited F27 as a girlfriend (did *chikamwini*) and she secretly used contraception, because she did not want to get pregnant again with a man who might not marry her. In 2001 he declared that he was tired of doing *chikamwini* and took her to his house.

Soon after F27 arrived, his first wife left the marriage in disapproval, and went back to her parents, leaving three of her four children in the care of F27 and her husband. The first wife wrongly believed that if she left him, her husband would beg her to come back, and would divorce F27 because of her infertility. The first wife thought F27 was infertile because she knew she had been going out with her husband for two years without becoming pregnant. F27's mother in-law was furious that her son had married a woman as old as F27 (though she was only 24). F27 tried to explain why:

Interviewer: 'Why do they say you are old?'

'Because of my first child who was born eleven years ago. They like insulting me because they don't want me. The only problem is that they liked his first wife, and his first wife and my husband do not get on with each other... My husband and I loved each other... but they thought I was too old'

Because F27 had only one child, many years previously, F27's mother in law thought she was too old to have more⁵⁶. When F27 did not become pregnant after a year, the family started insulting her, saying she was 'filling up the toilet for nothing'. F27 described how her husband comforted her by saying their situation was God's will, and that they should carry on living together in spite of everything. Eventually the feud that had started because of disagreements over F27 led to a family split: F27's husband left the

⁵⁶ Some women, in particular older women, might expect women to produce children regularly throughout their childbearing years until their eggs ran out or they were worn out. That there had been nine years between F27's first birth and her second marriage might have suggested to her mother in-law that F27 had already finished her childbearing career.

household and moved to a new area.

After three years of seeking treatment from traditional healers F27 became pregnant. Immediately she heard that F27 was pregnant, her husband's first wife returned, because she realised that her husband was now unlikely to divorce F27, and was not going to try to persuade her to return. In effect, she counted her losses and swallowed her pride in order to be with her children. F27 suffered great pain during the pregnancy, and went to a private clinic, where she was told that her pregnancy was 'close' and she should not work. Throughout the pregnancy, the abuse from her in-laws and co-wife continued:

'On the issue of my pregnancy they said many things: that my pregnancy was just pieces of cloth stuffed under my clothes [a false pregnancy]. They said, 'We will see if she will give birth'. They said, 'She is going die'. So, for the delivery, I ran away from here and gave birth in Rumphu ... so they couldn't know when I was in labour. They were challenging me, saying that I wouldn't give birth'

F27 was so afraid of her co-wife killing her and her baby through jealousy that she travelled 100km away to avoid their magic. F27's husband no longer slept with his first wife, but they were still married and he continued to support her and her children. The family were still divided over their opinions of F27, and her husband's brothers had recently beaten him up.

F27's reproductive life started with a schoolgirl pregnancy, a brief marriage, and what appears to have been serious childbirth-related morbidity, considering her lengthy stay in hospital. At only 14 years old she would have been at high risk of obstetric complications and adverse future outcomes, including infertility.

The arrival of F27 in her second marriage caused immense upheaval to her husband's first wife and extended family, partly because there was outrage that an old 'infertile' woman was now his preferred wife. The first wife was displeased that he had taken a new wife 'for love'. F27's fertility had come under public scrutiny and surveillance from her husband's wife and family even before her marriage, when they had thought she was infertile while she was using contraceptives. F27's potential fecundity was of great concern to her mother in-law, though this did not seem to be the case for her husband. He had been regularly sleeping with her for two years before they married, during which time he had not known that she was using contraceptives. Although she had not become pregnant during these two years, this did not deter him from marrying her. Thus the status and value that F27 held with her husband was completely at odds with the low esteem in which the rest of his family held her.

All four women who entered polygynous marriages and then experienced fertility problems reported supportive relationships with their husbands. However, two women received abuse from their in-laws, which their husbands ignored or rebuffed. In the case of F27, this led to her husband leaving his patriline and setting up his own household, which was a significant action considering the importance of the patriline. Husbands frequently did not seem as concerned with their wives' fertility as their families did, and in fact often favoured their supposedly infertile wife, though in all these cases the men already had children. These cases challenge the notion that having children together is vital for a married couple, though it seems that men could largely afford to extend this lack of concern if they already had children with other women. New wives, even if they were infertile, had a high 'romantic' status in the household that senior wives could not compete with. This point is even clearer in the following cases, in which men 'chased' women who they knew to be probably infertile, as they had had fertility problems in their first marriages.

7.4.2 Women with established infertility entering polygynous marriages

Table 16 Summary of women with established infertility who entered polygynous marriages

	Marital history	Situation at interview
F51	Divorced after seven years primary infertility	Re-married as second wife, co-wife with six children
F45	Divorced after ten years primary infertility	Re-married as third wife, two co-wives with nine children between them
F53	Divorced after five to eight years secondary infertility (only child died in infancy)	Re-married as second wife, co-wife had six children
F60	Divorced twice (marital durations unknown but at least six years), primary infertility	Re-married as second wife, first wife had seven children

F45's account of her second marriage shows how marriage need not be based on having children together:

F45. Twenty-nine years old. Primary infertility in 1st (ten years) and 2nd marriage (three years)

After ten unhappy, childless years in her first marriage, F45 returned to live with her mother and was ambivalent about re-marriage. She eventually married a man who had been persuading her to marry him for three months. She explained the delay in accepting:

'It was just that when I recalled the problems that I had had [in my first marriage], the way I was

insulted now and again, I just wanted to feel free. I did not want to face the same insults in future, because I was not sure if I was going to give birth'

Her second husband knew that she was childless:

'Yes, he definitely knew... I told him, 'You are proposing marriage to me, you have seen that ever since you started proposing to me I have been refusing because I am barren. I know what men are like: if I fail to give birth I shall face problems'

He already had two wives who lived in nearby houses; one had seven children and the other had two. She described her husband's reasoning:

'He himself has children. He says 'I did not marry you so that I should insult you here. I know that I already have children, and you already told me that you are barren, therefore I cannot insult you'. Only I wish that I could have a child'

F45 got on well with her co-wives, and their children ran errands for her: 'If I am sick, sleeping in my house... they cook *nsima* [maize meal] with vegetables and give it to me'. She described how her husband shared his time:

'Our husband can sleep there for two weeks then come here for the next two weeks. He can go there again for a week and come here for a week... only one wife's house is small so he fails to go there, since there are many children: imagine, seven children! The house is too small for him. But he manages to share his days equally... Once he leaves this place and goes looking for relish [food] he shares it equally. Be it soap, lotions, cooking oil, he does the same, but when it comes to money he does not do that. If I have problems at home, he rarely gives me [transport] money since it is far away... He shares things equally but when I see that my portion is very big, I feel pity and I take some of my relish and give it to my co-wife since she has many children'

F45 was still desperate for her own children to sit and chat with, and help her in the future. One of her young nephews had been to live with her as she was feeling lonely but he had not stayed for long.

Clearly men were not deterred by her infertility in seeking a relationship with F45. It was well known that F45 had been infertile for ten years during her first marriage, yet as soon as she returned home she received several offers of marriage. Her husband, who already had nine surviving children, clearly did not see probable fecundity as a requisite characteristic in his new wife. F45, meanwhile, was reluctant to re-marry following her troubled first marriage. That she decided to marry, in spite of her reservations, is testament to the strong social and economic pressures on single women to re-marry. Her husband's attempts at equally sharing household resources resulted in an inequitable

distribution of food, as he did not take the number of children each wife had into account. Again, this could be interpreted as favourable treatment towards F45, as she received the most per capita. F45 tried to remedy this by sharing her food, showing the considerable co-operation that went on in many polygynous households. Unlike some other accounts of households with one infertile wife and other wives with children, there was no mention of jealousy in F45's marriage. This variation in experiences of polygyny probably reflects personal views and expectations of polygyny, and women like F45 who married into polygynous households knew what they were getting involved in. Women whose marriages became polygynous were in a different position because they had not chosen that sort of lifestyle, and because of this there was greater potential for them to be unhappy with the changes foisted upon them.

Three other LH women were in similar situations: publicly known to be 'infertile' following childless marriages, they subsequently married men who knew about their past but were not concerned about their infertility:

F51. Twenty-nine years old. Divorced after seven+ years in childless marriage. Re-married for six months without becoming pregnant.

F51 had left her first husband because of his bad behaviour (see case study in section 8.3). After this,

'My second husband found me at home when I came back from my first marriage. He said, 'I want to marry you', but I wanted to come home. So I refused. That is when he said 'I love you', then I explained everything to him, what I was suffering from there, that I didn't give birth... So I said no, then he said, 'It is me who wants you'. So my mother refused, and my grandmother also refused, saying, 'Our child, don't get married, because of the way you were troubled there [in your previous marriage]'. But I said 'No: if I fail [to give birth], I will come back home'. So that's how I came here.'

F51 entered her second marriage with the hope that she could have children. She thought that perhaps her blood was different from her first husband's, and her second husband persuaded her to marry him by saying he wanted to have beautiful children with her. He already had one wife and six children, and she moved into the same small house with them all. She had only been married for six months and said that things were going well, 'because of the children' (of her co-wife). However, she feared that 'if the love ends, he will say 'You must go''. She was upset by not being given as many things by her husband as her co-wife, and by hearing her co-wife talk about her, saying that he had married a barren wife:

'It pains me a lot in my heart, it pains me if they are discussing me, so I just say that when any husband is tired of me, then I will go. But when I am telling my husband that, he just says, 'Is it

me who is talking about you? Is it not those people?'. I said yes, it pains me. that's why I was refusing what? [to marry again] All these people talk about me, that's why I was refusing'

F51 re-married with the attitude that she could return home again if she failed to give birth. The prospect of divorce did not dissuade her, as she wanted to keep trying for a child. Her attitude was only really possible because she lived in a society in which divorce, although far from a desirable outcome, was relatively easy to obtain and common, and in which divorced women were socially redeemable, largely through re-marriage. Although F51 had rapidly found a new spouse, her position as second wife seemed tenuous. Her husband had not built her a house, which was unusual. She was not subject to the strict 'equal' sharing of goods between wives that some polygynous men aimed for, and her husband was not particularly supportive when she complained about people talking about her. Like F58 (in section 7.2), she worried that given time, her husband would tire of her, in which case she would have to leave. This was in contrast to wives with children, who could usually remain at their husband's home even if their marital relationship had broken down.

F51's husband had asked the interviewer why he could not be present during the LH interview, as they were 'one body'. He explained that his church taught married couples to see themselves as such in an attempt to discourage polygyny. Although this message had clearly not discouraged him in this respect, he had interpreted the advice to mean that his wife should have no secrets, and he should thus be allowed to participate in the interview⁵⁷. This was an unusual way for men to talk about their wives. The only other man who did so was responsible for the single case of refusal to participate in the study, as he would not let his wife be interviewed in private; again, because they were 'one body'. This church teaching on the nature of the conjugal relationship contrasts with the prevailing perceptions in the area, in which the conjugal bond is relatively weak compared to the patriline, and husbands and wives maintain a degree of separateness in married life. They do not expect to know what the other is doing at all times, and men do not expect to control all of their wives' activities. If F51's husband saw marriage as a union of two individuals, this helps to explain why having children was not central to his choice of a second wife. This 'romantic' model of the marital relationship, derived from Judeo-Christian notions of the couple, may be fairly recent in the Malawian

⁵⁷ After explaining the reasons for the one-to-one interview, with reference to talking about 'women's issues', he did consent to the interview being conducted in private.

context, and may offer an alternative way of talking and thinking about marriage. This sort of relationship was also perhaps evident in the open communication about traditionally private subjects witnessed between F58 and her husband (section 7.2).

F53 was another woman whose second husband knew about her fertility problems, as they had been having a relationship for some time without her becoming pregnant, and she had been infertile in her first marriage. However, he was still happy to marry her when circumstances conspired to make this necessary:

F53. Thirty-one years old. Secondary infertility in first marriage, recently re-married for some months without becoming pregnant.

F53 had secondary infertility following her first baby's death around twelve years previously. She divorced, and went to live with her brothers. She had a boyfriend (a neighbour) who she was reluctant to marry as she had a business selling fish. However, her boyfriend's wife pressurised them into marriage by gossiping about them, which had led to her parents saying that she should marry. Her husband knew about her fertility problems in her previous marriage. She added that he 'accepted her' and already had six children. The couple had unusual living arrangements: F53 had her own house at her brother's household (where her husband sometimes stayed), but she also stayed at her husband's household just across the road, where she had been expected to help her mother-in-law since she married.

For F53, marriage had not held many attractions and she initially resisted it. Firstly, she had been insulted by her previous husband because of infertility. In addition, she had had her own business, which she had to stop doing on marriage. Before marriage, she received support from her boyfriend without corresponding duties at his household, and she lived with her brother, where she had a good brick house, with freedom to do what she wanted. But eventually social pressures got the better of her. F53's position captured the subtle change in status between being a girlfriend and a wife. Her husband had previously been doing *chikamwini* (staying at a girlfriend's house), but since they married she was expected to contribute to her husband's household, though she still lived at her brother's household.

Like the other men who married established infertile women, her husband already had a relatively large family. When F53 was followed up for a second interview, she was found to have left the area with her husband (but without his first wife and their six children). He was working as a migrant fisherman in southern Malawi. Unencumbered with children, F53 may have been a more convenient travel companion than her husband's first wife, hinting at another possible role for a wife without children.

The three established infertile women mentioned so far were reluctant to re-marry following bad experiences related to infertility in their previous marriages. However, social pressure or desire to try again for children had persuaded them to re-marry. F60 had a different attitude about re-marriage. She did not attribute a causal role to infertility in her two previous divorces (discussed in section 8.3), and had not been reluctant to re-marry. What was important to her was avoiding the dubious status of being a single woman:

F60. Thirty-six years old, twice divorced, re-married for some months, never pregnant.

F60 had entered her third marriage a few months before interview. At least three different men had been proposing marriage to her while she was single at home. She decided to marry again because of the social respect it brought, and to avoid being sexually propositioned by men. Her husband's first wife lived in a neighbouring household with their seven children. F60 explains why he had married a second wife:

‘Because it seems that they have quarrelled, so he doesn't go there, that is where the problem is. He doesn't go there. They have quarrelled because they were not sleeping together. So that is why he said ‘It is better to marry another wife because I am still young’

Although her husband had little to do with his first wife (he did not sleep with her or send her money, and there was animosity between them), they were still considered married and she lived nearby, farming her husband's land:

‘He sleeps here, he doesn't even give money to her. Since they quarrelled, he has lived where? Here. [If he goes to his other wife's house] she chases him away, saying ‘Go to your wife!’ So he stays where? Here’

F60 hoped that she might be able to have a child with her third husband, and said that if they could find money they might look for fertility treatments.

F60's statement that she had re-married in order to gain respect and avoid being in a situation where anyone could ‘play with her’ (see section 5.3.5) reflected the widely held belief that marriage protected women from men's advances, and from being perceived as promiscuous. Her new husband knew that she had not had a child in her past two marriages, but he already had seven children. Perhaps his priority was finding a new wife rather than having more children, since he had so dramatically fallen out with his first wife (another marriage in which the ‘love had died’, but the wife remained at her husband's household with her children). F60's comment that her husband had wanted a new wife ‘because he was still young’ was a local euphemism for someone

being young enough to still need sexual relationships: this might have been a perfectly good reason for her husband to want to marry her.

7.5 Summary and discussion

The marriages discussed in this chapter show it was not essential for women to have children (at least within the first few years of marriage) for marriages to endure. In some cases, many years of infertility had passed without the marital disruption that both local people, and other studies of infertility in comparable contexts, have presented as inevitable. This is not to say that these marriages would last indefinitely, but considering the social context (in which divorce, re-marriage and polygyny were common, and in which children were said to be the principal reason for, and even synonymous with, marriage), why did divorce or polygyny not occur earlier? Firstly, couples could be waiting for a child, in which case, how long do they wait, and what happens if they give up waiting? Secondly, in practice, having children might not be the sole basis for marriage after all. These cases challenge assumptions about women's status and fertility in sub-Saharan Africa, which typically argue that children determine women's status within marriage.

If a woman's fertility was thought to be blocked, people accepted it could take several years to remedy underlying (usually supernatural) problems. Both F21 and F26 took nine years to conceive, and stories like these gave other couples hope that they too might eventually have children. Thus in otherwise harmonious marriages (e.g. those with no trouble with co-wives and no disagreements over bride price), couples were willing to remain hopeful for several years before perhaps realising that they might not have children together.

Several reasons emerged for why couples remained married. Firstly, men did not actually need to divorce an infertile wife to bring children into their household. They could wait until girlfriends became pregnant before marrying them, or they could pay damages and claim children without even marrying. In addition, several men had children from previous relationships who needed looking after. In a social system in which mothers had to leave upon divorce, and divorce was common, households often needed additional women to care for children, a job for which single men were not considered to be suitable. If extended family members were unavailable to care for children, men risked being unable to live with their children unless they re-married. In

this situation, infertile wives performed a valuable role. In the context of a rural economy, infertile women were also valuable additions to men's households in other respects. They could farm land, and sell goods at market, equally as well as pregnant women or women with small children (if not better than them). They were also more readily available to accompany husbands on labour migration.

In some cases, infertile women were treated to more resources or attention from their husbands than wives with children, especially if relations with senior wives had broken down. In such cases, husbands frequently faced negative opinion from their extended family, but reassured their wives that their problem was 'up to God', and that marriage was not just about children. Several women even offered to leave their husbands and were persuaded not to. It may be that infertile women face fewer problems from their husbands than in the past, particularly in cases where couples described a 'love' match based on the romantic or Christian model of marriage. This stresses the importance of the couple over the demands of the patriline. However, even those women who talked about love often added that love might die. Love was not seen to be as strong and lasting a bond as having children together. Though women might be currently staying well, they feared for their long-term prospects. Case studies confirmed that having children together strengthened marriages in the absence of love: wives with children commonly remained at their husband's household even if the conjugal relationship had broken down. Marriage in this context was about a legitimate public bond between a man and woman that entitled women to certain resources.

Men who married older women, or women with a history of infertility, were probably not marrying with the main aim of having more children. Several men had pursued established infertile women, even when the women themselves were unwilling to re-marry. All such men had established families of more than the 3-5 children which was the normative 'ideal number', so all probably felt they had at least 'enough' children, even if they were not adverse to having more. Potential benefits of marrying an infertile wife could be inferred, some of which were alluded to by a couple of LH women, including the fact that their husbands preferred to sleep in their quiet houses (compared to those of their co-wives, which were full of children). In addition, infertile women were theoretically more sexually available than co-wives who were regularly bearing children. The mean birth interval was 2.8 years amongst ANC attenders in the study area, and the average duration of PPA was 5.8 months, so childbearing wives could be

sexually unavailable for up to a third of their fertile lifespan, because they were also meant to abstain during the last three months of pregnancy. This sexual unavailability provided a direct rationale for polygyny in some cases. During F67's post-partum abstinence following a miscarriage, her husband married a third wife:

‘I had a small baby [miscarriage], therefore he said ‘What can I do to be helped [with sexual needs]? So it is better to go out [and find another wife]’ F67

These hypotheses would need to be investigated further by talking to women's husbands. It would be interesting to see if marrying infertile women might even be a strategy on men's behalf to avoid increasing the size of their households further.

Thus far the positive aspects of remaining in an infertile marriage have been considered, but there were some marriages which seemed to continue monogamously only due to obstacles which made divorce or polygyny less likely. For instance, if men suspected themselves to be infertile, they would not expect divorce or polygyny to help him have children, and he risked exposing that the problem lay with him, as his wife might go on to have children with someone else, or his subsequent wives might also fail to have children. Other husbands may have been unable to acquire an additional wife even if they wanted one. Several husbands had threatened to, or almost, married another wife without it yet happening. Although infertility might prompt men to seek a new wife, there was high competition for wives, and infertile men might not have been an attractive option for marriage, as they may have been associated not only with fertility problems, but also with associated witchcraft or diseases.

So far, reasons for remaining married in spite of infertility have been considered from the husband's perspectives. However, women were theoretically free to decide whether to stay in a marriage or not, although various constraints might make enacting this decision difficult. Whether or not a woman decided to stay in her marriage depended on her ability to ‘stay well’ there, as well as her post-divorce options: whether she had somewhere to live, and how she assessed her post-divorce quality of life. There were several reasons why women might remain in infertile marriages. Some women had supportive or loving husbands who encouraged them to stay. If women did not have abusive in-laws, or were not directly ‘blamed’ for the infertility (i.e. if there were suspicions that male factors were at least part of the problem), this also made remaining in marriage easier. Women may have wanted to remain with their husband's children,

who added to their quality of life, even if they did not consider them to be their 'own' children. For F58, marriage allowed her the chance to acquire her husband's extra-marital child to live with.

As well as positive reasons for staying in marriage, there were also disincentives for women to divorce. Divorce may simply not have been feasible if women did not have family to return to. Women were generally reluctant to 'move around', 'marry here and there' or 'fail' in their marriage ('I failed in that marriage' was a common way of saying 'I got divorced'). The heightened status of being married would be lost, and women risked being 'played with' or perceived as promiscuous. If they were childless, they may have had to pay back at least some bride price. Secondary infertility had discouraged at least one woman from leaving an unhappy marriage, because of child custody norms that would have left her without her child if she had divorced. Thus marital stability should not be equated with 'staying well': women had to weigh up the possible costs of leaving marriages.

Even if women had stable marriages, this formed only part of her socioeconomic position. The social perception of women in infertile marriages was ambiguous. F31 worried that her husband just wanted to pass the time with her, and other women faced hostility from co-wives or in-laws. The clearest examples of how such relationships were seen came from separate interviews with two women in their sixties (not LH women). F49 explained that some childless couples only stayed together because infertile women managed to bewitch their husbands to make them fall in love with them, and F50 described how her in-laws had found it hard to believe that their son would voluntarily stay with her when she had secondary infertility, and presumed that she must be bewitching him. That a man might prefer, or fall in love with, an infertile woman went against what was 'normal', and had to be explained by witchcraft. The reluctance that three infertile women felt towards re-marriage reflected their fear of negative social reactions to childless marriages. If everyone knew they were unlikely to have children, people might suppose they had married for love or sexual gratification, which were not the 'correct' reasons for marriage, or they might suspect that the infertile woman had won her husband through witchcraft. Thus a good marital relationship was no guarantee of social well-being: how women were seen by others, and how they were treated within the patriline, was also very important. Additionally, even if childless women's marriages endured, this did not preclude future problems.

Their husband might die before them, leaving them without children at their husbands' household. One elderly lady interviewed during pilot work had never had children, and after her husband died she remained living with his family for a year. They then told her to leave as she had no children, and she returned to her nephew's house (her closest patrilineal relation) where she lived alone and in considerable poverty. Although the context in which the LH women will grow old will have changed since the time of this study, they may face similar problems.

The contrast between norms around marriage, and the reality of childless marriages, prompted intervention from elders and others. They acted in both supportive and disruptive ways. In-laws, rather than husbands, were the main problem for women in infertile marriages. The 'filling up the toilet for nothing' insult, also reported in other studies in sub-Saharan Africa, refers to the perception that infertile women use up household resources without producing anything. In-laws' frequent unwillingness to recognise infertile women's contributions to the household might be explained by the differing perspectives of the parties involved. The social, economic and companionship value of an infertile wife might be higher to a husband than to his elders, who might be more concerned about the long-term future of the patriline, which required children to be born. Even if in-laws were not abusive, they generally intervened in some way, usually through the sphere of encouraging treatment-seeking, as did women's own relatives. This reflected the concern that the extended family felt for women's fertility.

In summary, in spite of norms that demanded children in marriage, the reality was that childless marriages existed and endured. These unions rested on other qualities of marriage including love, childcare, and the value of women in other spheres of life. Such marriages may also have lasted due to obstacles to divorce or polygyny. Infertile marriages represented a divergence from the norm, which typically prompted elders to intervene. They wanted to restore the normative ideal, either through involvement in treatment-seeking, encouraging men to marry other wives, or trying to disrupt the marital relationship through unsympathetic treatment of wives. The married couple might thus be pitted against the wider patriline. Though women's marriages structured their lives to a large extent, status within marriage was insufficient to ensuring that they 'stayed well'. Infertile marriages left women in a socially ambiguous position. Though they may have felt loved by their husbands, they faced wider social disapproval, and feared for their future security, when their husband might die, or stop loving them.

8 Infertility, Polygyny and Marital Instability

8.1 Introduction

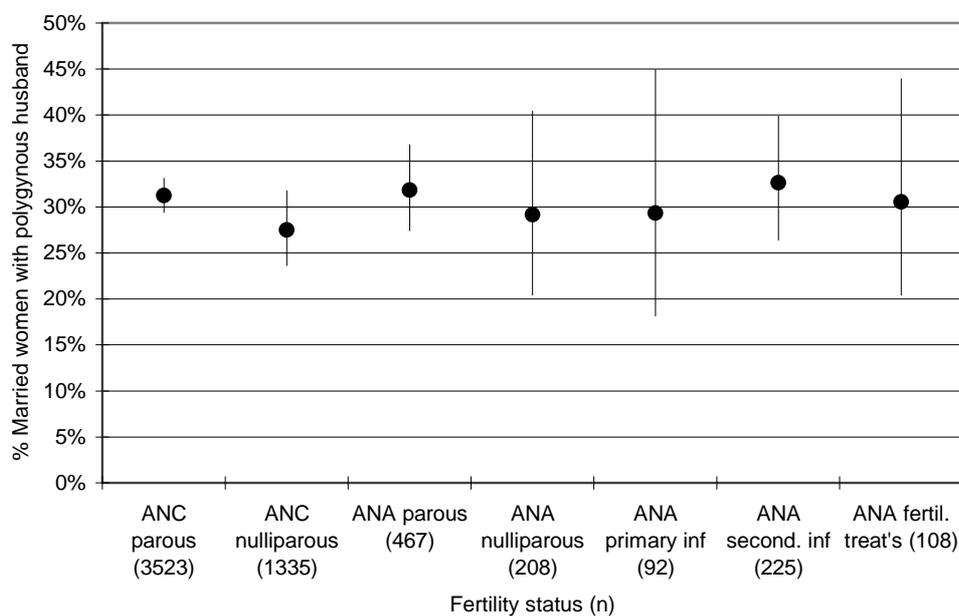
This chapter explores infertile marriages that underwent fundamental changes in their status, either by breaking down, or by husbands marrying additional wives. The literature on marriage in sub-Saharan African frequently cites polygyny and divorce as responses to infertility. However, this study found that infertile women were no more likely to be currently polygynously married than fertile women. This chapter discusses possible reasons for this unexpected finding. Divorce was more common in infertile women, and although infertility was rarely described as being a direct cause of divorce, the life histories presented in this chapter illustrate processes by which infertility could contribute towards marital breakdown.

8.2 Infertile women gaining a co-wife

When study participants were asked how people coped with infertility, one of the commonest responses was that men would marry additional wives ('if a husband feels pity for his infertile wife, he might get another wife, rather than divorcing her' (F18)). Yet there was no evidence from survey data that infertile women were more likely to be currently polygynously married than other married women (see Figure 11). Around 30% were currently polygynously married in each group, and the 95% confidence intervals overlap for all groups (see Appendix G for detailed results table).

This section investigates infertile women's experiences of polygyny, including whether and how polygyny occurred in response to infertility, and what effect this had on infertile wives. It also examines the disjuncture between the popular view that polygyny was a common response to infertility, and apparently contradictory findings from survey data. Women who started married life as the sole wife are analysed separately from women who married into polygynous marriages because the latter group's husbands had already shown a predisposition to polygyny, so it was harder to separate out the potential influence of infertility on their acquisition of additional wives.

Figure 11 Percentage of married women married to polygynous men, ANC and ANA, by fertility status (adjusted for age)



8.2.1 Monogamously married women who gained a co-wife

Table 17 Summary of monogamously married infertile women who gained a co-wife

	Infertility status at time husband took new wife	Circumstances around polygyny	Consequence
F46	Primary, one year	Husband married a new wife four months into their marriage	New wife left after two weeks, F46 remained married
F48	Primary, four years	Husband married second wife for less than a year after five years	Second wife left (without having become pregnant) when first wife (F48) had a child
F52	Primary, one to two years	Husband married second wife after one year	Series of events including new wife led to F52 leaving husband
F53	Secondary, eight years	Husband married second wife after several years	Husband stopped sleeping with F53 after marrying second wife so F53 left
F59	Primary, five years	Husband married second wife after three years	F59 temporarily left husband over bride price dispute

All five monogamous infertile marriages in which husbands married an additional wife had resulted in marital instability for the LH woman concerned: only one marriage

(F59's) was still intact and still polygynous at the time of interview, and even in this case, the couple had recently separated and re-united:

F59. Twenty-two years old, married for five years without becoming pregnant.

When F59 had not become pregnant three years into her marriage, her husband married another wife to try to have a child:

‘He told me, ‘My friend, we got married in 2000’; he got his [second] wife in 2003. So he said, ‘My friend, I have got married, I just want to try’. So he got married and had a child.’

Her husband's second wife had recently had her first child when F59 was first interviewed. This had prompted F59's husband to pay bride price for his second wife even though he had not paid anything for F59 (he had said he was saving up to pay for her). She was furious and had left her husband, returning to her father's house, where she was found to be staying when she was visited to book a LH interview. On that day, she happened to be unwell, so the interview was postponed. Some weeks later, when the interview was carried out, she had returned to her husband. In response to her leaving him, he had paid most of the bride price due to her father, including blankets, garden hoes and money.

F59's mother in-law complained about her because of her infertility, and F59 said that she could not ‘stay well’ in her marriage without a child. However, she denied any problems with her husband or co-wife relating to her childlessness. Although she had felt upset when her husband re-married, she said this feeling had passed. She wanted to stay with her husband rather than return to her father because at her husband's house, ‘I can do what I want’.

F59's husband had explicitly responded to infertility by marrying another wife. When his new wife had a child, this prompted him to make marital payments, probably to secure ownership of the child and the publicly demonstrate the seriousness of the marriage. F59 had not objected to polygyny in itself, but to the unequal treatment from her husband over bride price. She and her family considered her husband to have been completely unreasonable in paying bride price for his second wife when none had been paid for her. They believed bride price should be paid for a woman herself, and not just for ownership of the children. The function of bride price was thus subject to negotiation. F59's separation from her husband had been prompted by a relative change in her status. It was not her childlessness, but the material prejudice that her family had suffered as a result that angered her. F59 decided to leave of her own accord, reasoning that her husband would either pay for her properly, or they would divorce. Although she preferred the relative autonomy of marriage, she was not willing to remain married if it entailed accepting a compromised social position. This sort of manoeuvring in marriage,

in which F59 manipulated her husband to obtain a satisfactory outcome for herself and her family, demonstrated the strategies available to women even if they did not have children. F59 had the requisite resources to enact this strategy. She had a strong, confident personality, and was able to seek refuge and support at her father's house. The idea of the fundamental importance of fertility in marriage is challenged by this story, as even though F59 was childless and unpopular with her mother-in-law, her husband speedily responded to her departure by gathering the required bride price together.

In all other cases when infertile women's monogamous marriages became polygynous, either the infertile wife, or the new wife, eventually left the marriage. There were two examples of 'attempts' at polygyny collapsing, and the new wife leaving, in spite of the first wife being infertile. The first story starts off as a straightforward example of a man marrying an additional wife because his first wife was infertile, but ends with a surprising outcome:

F48. Twenty-four years old, married for five years without becoming pregnant.

F48 married at age 18. At the time of the ANA study, she was undergoing various traditional fertility treatments. By the time she was followed-up for a life history interview, her husband had married another wife (who had previously had a child and divorced). His new wife had lived some miles away with her mother-in-law.

Interviewer: 'Why did your husband marry another wife?'

'I don't know why, but I thought maybe it is because I have stayed for a long time without giving birth. The wife who he married has got a child already. So perhaps he was thinking maybe I will give birth with that woman, maybe'

She added that having a co-wife had sometimes made her feel angry: 'When you're eating, you find that your friend [co-wife] comes to grab your heart, you become angry' (she was concerned that there would be less food as it would be shared between two wives). There were some problems at first with her husband 'Walking between different wives' (how he shared his time). F48 nearly left her husband at this time, because he had been 'troubling her' about her childlessness. There were also other problems such as her husband propositioning other women and beating her.

Soon after her husband married his second wife, F48 became pregnant, whilst the second wife did not. While F48 was away at hospital giving birth, the second wife left their husband and went home. F48 did not want to (or could not) speculate on the reasons why, apart from saying that 'maybe they quarrelled'. At a follow-up interview, the baby had been born, and F48 said that she was very happy. Her husband was now living with her full time and no longer beating her.

Again, F48 was not averse to having a co-wife as such, but had concerns about sharing scarce resources and receiving equitable treatment from their husband. F48's husband married a second wife who had already demonstrated her fertility. Being divorced and having already had children had not diminished her chances of re-marrying, in fact, it might have made her more attractive to a childless man. F48 recalled that when she was childless, her husband was aggressive, and his attentions regularly strayed from her. She contrasted this with the present, in which her child's birth had redeemed her from this unhappy state. She directly linked the birth with a cessation in violence and quarrelling. Through her fertility, she restored her compromised position in the household. Her narrative accords with the widely stated view that couples stay well in marriage when they have a child together. Her husband had married a new wife specifically to have a child, and this purpose was undermined by F48 having a child first. In polygynous marriages, one wife's relationship with her husband was rarely independent from his relationships with other wives.

F46 also experienced a temporary period of polygyny, but outlasted her co-wife in spite of the fact that she was childless and her co-wife was pregnant:

F46. Twenty-two years old, married for three years before becoming pregnant

F46 married in 2002 aged 18. She did not become pregnant for three years, though at the time of interview was six months pregnant with her first child. A year after she married, her husband made another woman pregnant. Her family escorted this woman to his house in order to get married (*kuthula*). F46 initially said that she did not have strong feelings about his new wife's arrival, but later admitted concerns that 'each and everybody nowadays is afraid, where we live and where we walk, we fear diseases'. When asked to explain why she mentioned this in relation to her co-wife, she said:

'I was saying this because you cannot know how another person is. Maybe she has diseases, maybe she doesn't; maybe I have, or maybe I don't. Because I cannot know how she was living at her home, and she cannot know how I was living in my previous home, that was why I was saying so.'

She discussed her co-wife with her husband, who said that he trusted her, so she said, 'What can I do?' However, his second wife left after only two weeks, before the baby she was pregnant with was born. F46 mentioned several reasons why her co-wife had left. Her husband and his parents did not want her as she never did any work; her behaviour was not 'straight' (proper); and she just lay around all day, as she was ill with an ear infection. F46 also advised her husband to tell her to leave. In addition, her husband failed to pay full *chibadala* (he only paid half of the 4000MK (\$40 US) charged to him). After her co-wife left,

F46's husband still 'took care of her' (*awela*; in this context meaning that 'he provided financially') up until the baby's birth, but the child died during childbirth as 'the path was small and they were late in taking her to the hospital'.

When asked what her husband thought about their fertility problems, she reported:

'He asked me, 'What is the problem with you up until now?'. You answer him, but sometimes you don't want to answer him, so you just pass by [ignore him]. Sometimes you say, 'Don't ask me all of these questions', and off you go'

F46 had sought help at traditional healers, but had not felt very anxious about her infertility. She had left it 'up to God' and tried to ignore gossip about her:

'People were talking a lot, saying 'You don't give birth' and so on. But you can't concentrate on what people are saying, you have to forget them and continue with your life'

She never argued with her husband and was never insulted by him. At the time of interview, she and her husband were building a new house next door. F46's husband had started this development when they had found out about her pregnancy.

F46's husband had not planned to marry a second wife in order to overcome childlessness. He had only been married for about six months, and most men would not have been so greatly concerned about infertility after this relatively short period that they would have decided to marry a new wife for this reason alone. Additionally, F46's husband (and his new wife) appeared to have had little say in the matter of their marriage. Her family had presented his new wife to him, and he had simply (at least initially) gone along with this. After all, it was not necessary for him to marry a woman he did not want just to secure ownership of a child. Simply by paying the requisite *chibadala*, the child would have belonged to him anyway, and F46 would have almost certainly have cared for the child in the way that other infertile women in her position had done. He grudgingly accepted his pregnant girlfriend into his home, perhaps under the pressure of her family arriving on the doorstep, but she only lasted two weeks in the marriage, although it was not clear whether she chose to leave, or was pushed out.

Like F48, F46 had not objected to polygyny, but felt powerless about the sexual risk that her co-wife might have introduced into the marriage, which she could not confidently evaluate because she did not know 'how [her co-wife] was living'. She was also not willing to tolerate a co-wife who did not pull her weight. She presented herself

as a hardworking woman who was far preferable to her ‘lazy’, sickly, co-wife, even if her co-wife did happen to be pregnant. By contrasting their worth in terms of their behaviour and industriousness, F46 downplayed the importance of fertility. She had considerable influence in her marriage, advising her husband to get rid of his new wife, and standing up to him when he questioned her over her infertility, which was unusual. Most women expressed feelings of powerlessness in similar situations (‘What could I do?’ ‘I didn’t do anything’). That she was pregnant at the time of interview may have affected her interview responses, perhaps allowing her to reflect more positively on past events.

The following cases of monogamous infertile women acquiring co-wives ended in infertile women leaving their marriages, which was perceived to be a more frequent outcome. F53 directly attributed her divorce to her secondary infertility, because her infertility had prompted her husband to acquire another wife, who replaced F53 in his affections when she had children:

F53. Thirty-one years old, secondary infertility for 8 years before divorced

F53 lived in town with her first husband. They had a child soon after they married. The child died at a week old and she had no more pregnancies. Her husband married another wife some years later. F53 was not opposed to this, saying she realised that his other wife also needed a husband, so she just let him marry her. They lived together in the same house. Her co-wife went on to have two children. After they were born, things changed:

‘He said, ‘I don’t want you, you have to go back home, I don’t have any work [won’t have sex] with you any more’

She left her husband, came back to her brother’s home, and later re-married (see section 7.4.2).

F53 had not objected to her husband taking another wife, and drew on the ‘love fading’ discourse to explain why her husband tired of her, following his success in having children with his second wife. Although her husband had directly told her to leave, this should not be mistaken for him actually divorcing her. If a man wanted divorce, they had to visit their wife’s family at the very least, and possibly a traditional court. It was not socially acceptable to eject a wife from marriage without good reason, even if she was infertile. In the end, she made the decision to leave herself, although she was clearly pushed out. Two contextual factors in F53’s story can be referred to in understanding why she was vulnerable to divorce when she gained a co-wife. Firstly,

she shared a house with her co-wife, so any tensions between them, or inequalities in their treatment, would have been impossible to ignore. Secondly, they lived in an urban setting, where some of the other productive capabilities of women, such as their agricultural output, may not have been as pronounced. She may thus have been of relatively less value to her husband than infertile women in farming households.

The reasons for F52's marital separation following gaining a co-wife, and how this related to her infertility, were less clear. She described in detail the events following her husband's marriage to a second wife, which led to her leaving him:

F52. Nineteen years old. Primary infertility one year.

F52 had been married for a year or two. Her father had been unhappy when she married because she was still young and should have been at school. Additionally, her husband had not paid bride price, 'not even one tambala⁵⁸', and had not sent a message to inform her father of her whereabouts (the very least a husband should do). She was her husband's second wife, but the first had already 'gone back home'. Two children from his first marriage lived with them.

After a year without having children, she had started to seek fertility treatments when her husband married another woman who had already had a child. F52 said he did this, 'Because of my fertility problems'. She thought, 'He had done well, otherwise he might have died without having a child'. However, trouble soon followed. F52 had recently travelled away from home to sell cassava. When she returned, she found that:

'He had taken my properties to my friend's [co-wife's] bedroom... when I asked him, 'Where are my properties from my bedroom?', he said, 'I have sent them to your home'. Then I said, 'What about the pots?' He said, 'I have sold them'... So I did not say anything, I just left him like that. Then I said, 'Give me my underwear so that I can get dressed'. So he went to my friend's bedroom and came out with the underwear, so I wondered - because according to our culture, if a person takes underwear from another person's bedroom it means he doesn't want that person, because at any time your friend can kill you [with witchcraft, using the underwear]. Then he took one bag from my friend's bedroom and gave it to me. So I was disappointed, plus with what he had done at the beginning [failed to send a message/pay bride price]... that is how I came back'

F52 returned to her father. When asked whether she had left her husband because he had married another wife, she replied:

'No: firstly, he was troubling me; secondly, he hadn't said, 'It is us who has got her' [sent a

⁵⁸ The smallest unit of Malawian currency.

message] to my father where I was living. He had not paid *chibadala*, or bride price, but he started troubling me, and so I came back... sometimes he was not buying soap for me, I had to buy everything alone, so I just said that I am still a youngster, it is better to go back home and sit down [stay there for a while]'

Other problems included the fact that she knew that her husband had other girlfriends, because he used to spend nights away from home, but she could not do anything about it because these girlfriends were much older than she was, and might hurt her. Her husband had not insulted her directly because of her infertility, though in a second interview, she agreed with the interviewer's suggestion that his behaviour towards her might have been because she was childless. It was unclear whether she would return to her husband. He had been visiting her father's house to discuss matters, and was trying to persuade her to return to him.

F52's husband used his wife's childlessness to justify marrying another wife even though he already had two children, showing how men's aspirations differed. While some might have been satisfied with two children, others wanted more, or at least used infertility as a means of justifying marrying another wife. Like the other women in this section, F52 had not objected to her husband marrying another wife, and it was only after prompting that F52 agreed that infertility might have affected their marriage. There were many other reasons that she preferred to refer to when explaining why her marriage was on shaky ground. Her father had not fully endorsed the marriage from the beginning, and her husband had been behaving unacceptably. The arrival of a new wife only contributed to her problems as her husband treated them unequally, highlighting F52's feeling of neglect. Her husband's dishonesty and her fear of her co-wife bewitching her (with her husband's complicity) contributed to her decision to leave. One could also speculate that F52's lack of children gave her little incentive to stay in an unhappy marriage, and little bargaining power to dispute her husband's unreasonable behaviour. She also believed herself young enough to try marriage elsewhere (which supports the argument that as women get older they believe themselves less able to find a satisfactory husband). Yet it was not clear what would happen next. On one hand, she believed that her husband had wanted her to leave the marriage, because he had sold her pots, which are a married woman's own possessions. In addition, her husband had moved her belongings into her co-wife's room, leaving her vulnerable to bewitchment. Yet by the time of the second interview, her husband was trying to persuade her to return, which suggested that in spite of her ongoing infertility he still valued her as a wife.

LH women in the fertile group described how numerous other reasons, apart from infertility, could lead to monogamous marriages becoming polygynous. Several examples of men marrying a new wife when they had fallen out with their first, but keeping the first as a wife, have already been discussed. Polygyny was partly about a man's own identity and aspirations, and their ability to attract wives. It depended on whether they saw themselves as a 'traditional' man pursuing the growth of their household, and whether they could provide for a larger household. F70's husband, who carried on marrying new wives even when he already had seven children, was one such man. Traditional healers were notorious for 'liking to marry', and although F70's husband was not a registered traditional healer, people visited him for traditional medicine for ailments such as syphilis and gonorrhoea. He also had a full time administrative job, so the family had plenty to eat and did not have to sell any crops (self-sufficiency in food was highly valued). He therefore occupied a high socioeconomic position in the community, which probably went some way towards explaining his numerous wives and children.

Other husbands seemed to marry new wives when their wives wanted to take a break or 'rest' from childbearing. In these cases, polygyny might be related to men's fertility aspirations when they were impatient for more children. F69, from the fertile group of LH women, had started secretly using contraception after having four children, in spite of her husband's desire to have more children. Soon after this, he married a new wife. The husband of F63 (also in the 'fertile group') also married a new wife when she took a 'rest' from childbearing by using contraceptives after the neonatal deaths of two of her babies. If a man wanted a relatively large family, of perhaps six or more children, then he might need more than one wife, because women typically wanted to restrict their family to a smaller size, and implemented their wishes in ways that their husbands could not necessarily control, through the clandestine use of hormonal or traditional contraceptives.

What was different between the fertile and infertile women's experiences of polygyny was how women described their feelings about their husband bringing a new wife home. None of the infertile women said that they objected to their husband marrying a new wife in principle, whereas the fertile women all voiced negative feelings. F63 had to be reassured by elders not to leave her husband, F70 wondered why her husband had married another wife, and F69 said that her heart pained. It seemed that infertility made

the acquisition of additional wives more acceptable, at least in public versions of infertile women's feelings.

8.2.2 Polygynously married women gaining additional co-wives

Two women initially married into polygynous marriages and subsequently gained co-wives. One of these marriages (F21) was enduring whilst the other (F51) had ended in divorce. F21 had been happy when her husband married a new co-wife to take the place of her 'friend' who had died, and to enable her husband to try to have more children (see section 7.4.1). In reporting harmonious relations with her co-wife, she was an exceptional case. The circumstances of her marriage suggest clues as to why this might have been. She married with the express purpose of caring for her cousin's child (her cousin had left her husband), and was then joined by another cousin (carrying on the practice of *mbiliya*, or related females marrying the same man). That her co-wives were relatives, and the fact that they lived in a relatively prosperous household, might explain her lack of concern about witchcraft from her co-wives or having to share scarce household resources. Rather than marrying because of F21's infertility, her husband just seemed to 'like marrying'.

F51 (see section 8.3 below) married as a second wife, and her husband already had four children. After she failed to conceive, he went on to marry two more wives, both of whom also failed to have children. However, she presented his marrying extra wives as being primarily to do with his character ('he liked to marry', and had many girlfriends), and only secondarily to do with his desire to have more children with new wives (with which she sympathised). Because the marriage had started polygynously, she was not surprised or disappointed when he married more wives. Her co-wives did not feature in her explanation of their divorce: his bad behaviour relating to her infertility was the principal cause. However, his 'fondness for marrying' and sleeping around contributed to the list of his faults that she built up as the narrative went on, which served to construct an image of her ex-husband as a 'bad man', hence justifying her divorce from him.

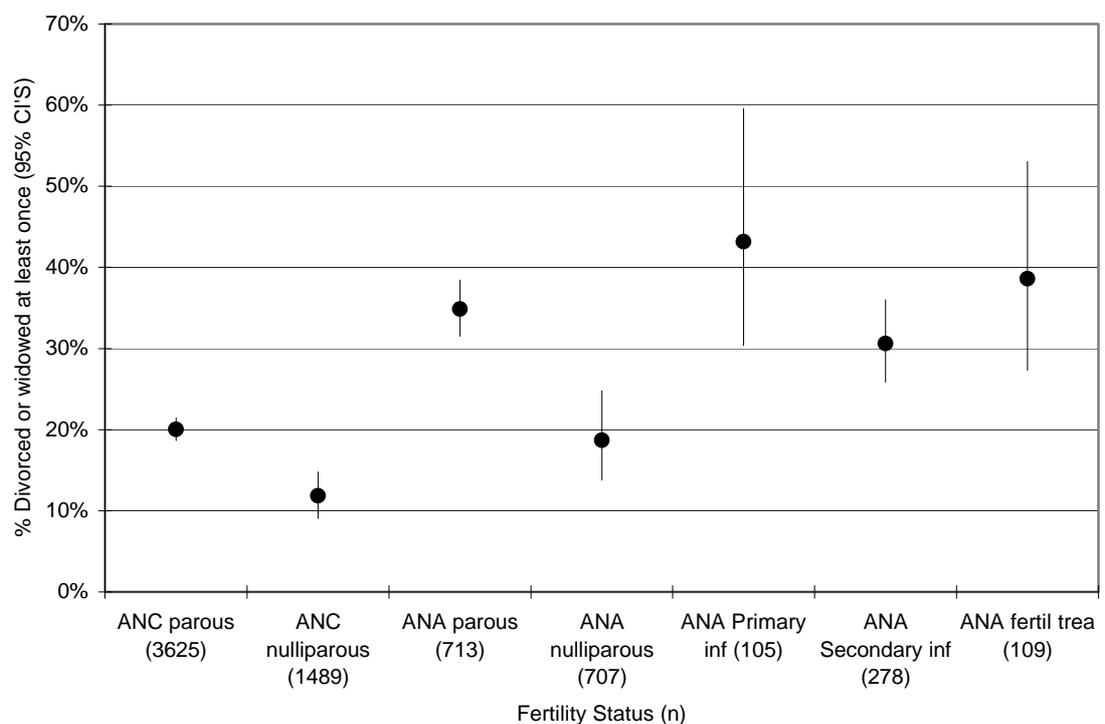
8.3 *Infertility and marital instability*

The idea that a couple could be labelled either married, divorced, or separated was not particularly useful when thinking about marital instability. As argued in chapter 5, the beginning and end of marriages, and periods of separation, were fluid and subject to

negotiation and re-interpretation. Hence the term ‘divorce’ is used with caution, as it indicates finality, whereas in reality couples who split up might always re-unite without formal procedures.

Infertility is cited as a major reason for divorce, both in the literature on marriage in sub-Saharan Africa, and by study participants. The recent census also provided evidence for a positive association between childlessness and divorce: 20% of ever-married childless women aged over 25 were currently divorced compared to 13% of women with at least one live birth (controlling for age; odds ratio 1.63, $p < 0.01$). More detailed marital history data from ANC and ANA show that infertile women were more likely to have been divorced or widowed at least once in the past: 20% of pregnant women who had had at least one child had been married more than once, compared with over 40% of ANA women with primary infertility (see Figure 12 and Appendix G for detailed results table). It was not possible to distinguish whether ANC women’s marriages had ended in divorce or widowhood, so these outcomes were grouped together. However, ANA data suggest that most women who had been married more than once were likely to be divorcees (30 ANA women who had re-married had been widowed, compared with 167 divorcees).

Figure 12 Percentage of women ‘married more than once’, ANC and ANA, by fertility status (age cohort and marital status adjusted rates)



The qualitative data provide possible explanations for this association. Of 31 women who reported past or current infertility, nine had experienced marital disruption (divorce or separation) during a period of primary or secondary infertility, and seven of these cited infertility as a related or causal factor. One woman had subsequently returned to her husband (F59), and one had only been separated from her husband for a week before she was interviewed, and her husband was still trying to persuade her to come back (F52). However, in most cases, events leading to divorce did not hinge solely on infertility. Whether infertile marriages ended in divorce was contingent on factors such as the quality of the couple's relationship, pressure from family members, the presence of other wives and children, and women's post-divorce residential and economic options. The following section looks at pathways by which experience of infertility was linked to marital instability.

Table 18 Summary of women ever divorced or separated from infertile marriages

	Fertility status at time of divorce & length of marriage	Reasons given for divorce	Situation at interview
F23	No pregnancy after a year in her second marriage	Co-wife bewitchment & infertility	Single
F29	No live birth in first marriage, did not know length of marriage	Bride price dispute	Re-married
F45	No pregnancy in ten years of marriage	Infertility	Re-married
F51	No pregnancy in over seven years of marriage	Infertility	Re-married
F52	No pregnancy in one to two years of marriage	Husband's poor behaviour, inadequate marriage procedures/payments and infertility	Currently separated
F53	Secondary infertility for eight years in first marriage	Infertility	Re-married
F55	Secondary infertility for three years of marriage	Co-wife bewitchment & infertility	Single
F59	No pregnancy in five years of marriage	Separated due to bride price dispute linked to her infertility	Re-united with husband
F60	No live births in at least six years of marriage	First divorce: violent brother in-law Second divorce: husband's bad behaviour	Re-married
M42's wife	No pregnancy in five years of second marriage	Left to try and get pregnant again with first husband	Living away from husband

The following case studies illustrate the variety of divorce experiences, and identify factors that precipitated divorce. F51's account suggested that infertility was not the sole factor in her divorce, and highlights the considerations that women had to address before deciding to leave:

F51. Twenty-nine years old. Primary infertility over 7 years.

F51 married at 18 years into a polygynous marriage where she was the second wife. She never became pregnant. Her husband's first wife had four children, but he wanted more, so she gave him her blessing to marry another wife:

'You can get married, and you can think that you are the last wife...but he said, 'I want to marry another wife, maybe she will have a child for me', so I said, 'you can marry''

However, his third wife also failed to have children. He then married a fourth wife, who also remained without children. This placed her husband's fertility in doubt as well as her own. She tried to get pregnant with a boyfriend while she was married, in case her blood was not compatible with her husband's. She met him 'in the bush' when her husband was out drinking beer, but failed to get pregnant. Her boyfriend knew about her 'problem', and told her that if she had a baby, she could keep it, as a gift from him.

Although life was fine during the first years of their marriage, her husband was a heavy drinker and womaniser (she called him a 'prostitute') with numerous girlfriends. He regularly came home drunk, insulting her that she was barren and a prostitute. She went to a traditional court because her husband had not stayed at her house for three months whilst doing *chikimwini* (staying at a girlfriend's house):

'I was very annoyed with what he was doing. But in the court he said, 'I love my wife. Even if I have beaten her or she is suffering I still love her'. And I replied, 'I am not going back there. Do you, the court, want me to die there, so that you can just come and carry my dead body away?'

Yet the court decided she should remain married, and advised her to return to the court if he misbehaved again. F51's father did not want her to remain married, but at this point she did not want to leave because she had almost finished building a brick house: it just needed the roof fitting. The wealth (cows and money) at her first husband's house also made her reluctant to leave. She eventually decided she could not cope and returned to her family. When asked why the marriage finally ended, she replied,

'Because of infertility, [if] you don't have a child, you go [back home], you are a prostitute. Because if a person has no child at her back, it means that everywhere she goes they will say, 'She went with a man''

When she returned home, she knew that she would have to go back to court to be freed from 'her husband's hands', as he had paid bride price for her. The court ordered her family to pay back bride price (two cows and the equivalent of \$8 US in cash), as F51 had gone against the court's judgement by leaving her husband. She eventually re-married a man who already had a wife and six children (see section 7.4.2).

Although F51's husband already had four children, he kept adding wives to his household in what turned out to be a futile attempt to have more children. But it was impossible to gauge whether he was primarily motivated by having more children. As F51 reported, her husband 'liked to marry'. LH women provided numerous examples of men who married co-wives when they already had children and good relationships with existing wives. Likewise, it is not possible to conclude that F51's divorce was caused by her infertility. She described a catalogue of faults with her husband, and although she ultimately blamed infertility for her divorce, perhaps this was because she knew that the study she was participating in was about infertility. Yet she did not believe that

infertility had meant her husband wanted to divorce her, as she reported that her husband told the court that he still loved and wanted her. Rather, she perceived that infertility had compromised her social identity within the wider community, saying that her sexual behaviour had been publicly commented on and she had been insulted because of her infertility, which made married life difficult for her.

F51 remained married for longer than she might have done, even though she was not getting on well with her husband and they did not have children together. This was because for some time, she judged that the benefits of remaining married were high, and she was reluctant to leave her relatively prosperous position. In addition, the traditional court ruled that she should remain married. Her unwillingness to leave was probably influenced by bride price repayment rules on divorce. If husbands initiated divorce from childless marriages, the wife's family usually paid back half the bride price. However, if wives left without 'good reason', or against the ruling of a traditional court, the woman's family were obliged to pay back full bride price (women with children had to leave their children behind but were free to leave without financial penalty). This system had two potential effects. Firstly, it placed a financial burden on the woman's family, or her future husband, if she decided to leave the marriage herself. This might discourage childless women from leaving unhappy or violent marriages. Secondly, it might act as a disincentive for men to initiate divorce, even if they did not want their wife anymore. If they officially divorced their wife, they only received half the bride price back, but if they managed to make their wife leave of her own accord, they had a good chance of getting full bride price back. This would be one explanation of F51's husband's protestations of love in the court, despite of his ongoing mistreatment of her. Several other women reported being 'driven out' of marriage through their husband's verbal and physical abuse, rather than their husband telling them directly to leave:

F45. Twenty-eight years old, ten years primary infertility in first marriage.

F45 first married aged 15. Her husband had been married before, but his first wife had left, leaving a child behind. After F45 failed to conceive, her first husband started regularly insulting and beating her. She was married for over ten years before she decided to leave, as she could not bear to be insulted any more.

'Oh, at my first marriage, life troubled me. If you live at a man's place without a child, it is a problem. Every day he would insult me: 'You're barren, you don't give birth, you're not a woman, it is better that you go back'. So I got fed up. I returned home'

She tried to take her household utensils with her, with the assistance of her neighbours, but her husband threatened to kill anyone found helping her, so the neighbours gave the utensils back and she left with only her clothes. She was reluctant to leave her stepchild who she had looked after for ten years, and she had not seen the child since. When asked how she felt about leaving the child, she said:

‘I felt pain in my heart because I was used to being with that child, so I felt like I was troubling him a lot [by leaving him]. But it was what was happening to me that forced me to go back to my home, because I was not living a good life’

She stressed again and again during the interview that she could no longer stand the abuse, and she was driven to leave as she was not living well. When she re-married, her second husband paid two cows as bride price back to her ex-husband.

Although F45’s husband had told her to leave, she ultimately made the decision to leave as he did not initiate formal divorce proceedings against her. She suffered the mistreatment from her husband so frequently reported in literature in relation to infertile women (and yet rarely reported in this Malawian setting), yet she still felt she had to justify why she had left. This reflects the expectation of stoical suffering that some parties felt married women should go through rather than ‘fail’ (divorce) in their marriages. It was difficult to understand why the marriage lasted as long as ten years before she decided to leave. F45 was asked whether she could explain this, but she could not. It seemed to be a case of her summoning up the will to leave, which suggests that it was harder for some women to divorce than others. Several factors could deter women from leaving marriages even if they were mistreated. In this case, barriers to leaving included the need to pay back bride price, not wanting to relinquish the few precious material possessions she owned, not wanting to leave her step-child behind, fear that her husband might be angered, with the potential for bewitchment that this entailed, and uncertainty about her future social and economic status. These factors did not seem to operate as strongly if divorce took place when women were still young and if marriages had not lasted long, but for F45, as each year went by, it was harder to leave, until she reached a stage where she could no longer bear it.

A male perspective on the impact of infertility on his wife’s marital history was gained from an interview carried out with an infertile woman’s husband. Upon travelling to a certain household, hoping to find a woman who had reported using fertility treatments in the ANA study, the interviewers found that she was currently staying at her parent’s home in Tanzania. As she was away, and her husband was interested in the research, he

was invited to take part in a life history interview instead (with adapted questions). M42's account provided a window on his wife's life history, and valuable insights were gained from hearing a man's perspective. He held his wife's infertility partly responsible for her marital instability:

M42. Twenty-nine years old. Wife left and failed to get pregnant for five years in her second marriage.

M42 first married in 1994 and paid a proportion of the agreed bride price. His wife soon became pregnant and returned to her parents' home in Tanzania to give birth to their son. M42 thought that she had stayed away for too long, and after two months married a second wife. His first wife heard about this and got very annoyed, so she stayed at her parents' home and married another man. In 1999, M42 went to Tanzania and brought their now five year-old son back with him. When asked what his first wife thought of this, he said:

'The child's mother refused, and she said, 'You can't go with my child'. But because she has no authority over my child, and I have paid the money, that is why I could take him'

M42 then married a third wife and had three more children. Three years later, the son he had with his first wife died. By this point, she had still not become pregnant with her second husband. His ex-wife's parents thought that her infertility must be due to him bewitching her. They came to visit him, 'apologised', and discussed the matter with his parents. Both sets of parents encouraged M42 to take his first wife back. He did not disagree with them ('because it was my parents'), and his ex-wife left her second husband and returned to M42.

When she returned, they went to traditional doctors together for fertility treatments, as he felt he should help her, but she did not become pregnant. M42 did not believe that his first wife was completely infertile, because she had had one child; rather, he believed that something or someone was blocking her fertility (though he did not believe it to be him). Throughout the interview, he expressed mixed views on the consequences of her infertility, saying firstly:

'There are differences between people. According to the law, marriage is between a woman and a man, the child just comes. Now us men, we differ: some may find that this woman has no child, and maybe is infertile... but if there is love between you and your wife, there is no problem'

But later adding:

'There is no peace [if you don't have children together]... if you marry another wife, and if your first wife goes, she will go for good: she won't come back again. But you may find that if you have children together, even if she goes... she will return to you, just because she gave birth here. Where my wife got married [the second time], there was nothing [no pregnancy].

Some people say, 'If I go back to my home, maybe I will give birth''

M42 told us that his first wife helped care for her co-wives' children as if they were her own. When asked to explain why his infertile wife had been away for several months at the time of interview he said that he had given her money to go back to her family to help with farming in December 2004. In his first interview in February 2005, she had not yet returned, and M42 did not know what was keeping her there. By May 2005, he had received demands from her family to finish paying bride price if he wanted her to return. He wanted to finish paying bride price and fetch his wife, but did not have enough money.

M42's marriage to his first wife had ended due to her displeasure with him marrying a second wife, and her second marriage ended because of her family's concern over her failure to have a child with her second husband. M42's family and his first wife's family orchestrated their re-marriage: it was not a decision taken by the couple. However, she complied with their decision, which meant returning to a marriage that she had initially rejected, and in spite of her dismay at him previously taking their child away from her. Her family feared he was blocking her fertility using witchcraft as a way of trying to make her return to him. Blocking a woman's fertility was seen as one of the worst actions that could be inflicted through witchcraft, and this fear was voiced in several other interviews. The involvement of M42's family in trying to resolve his first wife's fertility problems shows just how widely other parties could get involved in trying to manage and resolve fertility problems. Although M42 did not agree with their interpretation of the causes of her fertility problems, he said that he was happy to take her back, because they loved each other, and she had 'good behaviour'. Even though the one child that they had had together had died, their shared fertility history meant that she returned to his house. As M42 said, a woman with a child might return to her husband, as having children together conferred a degree of permanency onto the couple relationship.

Though M42 regretted the distress that infertility caused his first wife, he was not personally concerned about having an infertile wife. After all, he had children with his other wives, he valued his first wife for her 'good behaviour', and she contributed labour and childcare to the household. Alternatively, or additionally, he could have been trying to construct a positive image for himself during the interview, knowing that it was frowned upon to treat infertile women unkindly. Yet he had demonstrated material support for his wife, by giving her money to help her family, and accompanying her to traditional healers. He also still wanted to pay bride price for her, and without this, he

was unsure of her return. More than ten years after marrying, her family suddenly invoked unpaid bride price to justify their daughter's absence. This may have been an excuse for another, perhaps less legitimate reason why she had not returned to him. M42 did speculate at one point that perhaps 'she is more used to living there and her heart is there', because she grew up there. After more than a year of trying to overcome infertility with her first husband, perhaps she had simply given up hope there as well, and preferred to remain at home.

In addition to these cases in which infertility was a clear causal factor in divorce, two infertile women cited disturbances with their co-wives as being responsible for their divorce, with infertility playing a contributory role. Both F23 and F55 (see also 9.2.1 for further details of their life histories) left marriages after their co-wives (who had children) bewitched them:

F23. Thirty-four years old, two children in first marriage (one of whom died), secondary infertility in second marriage, now single.

Several years after her first divorce, F23 married a man with two wives who had several children each. She failed to get pregnant. After a year and a half, the marriage ended after she suspected her co-wives of witchcraft: she found a pair of her knickers torn at the crotch, and the water in her cooking pot had turned red (she suspected they had added traditional medicines to it). She feared the medicine would turn her into a prisoner, just looking after the children and doing all the work. When she confronted her husband,

'He was also chasing me away [from the marriage], when I asked about my knickers, then he started saying, 'You should just go: if you don't want to live here, you can go! Do you have a child here?' So that's why I came back'

She cited an additional reason for their divorce: her husband had failed to send *thenga* (a message) to her father at the start of their marriage.

F23's divorce was prompted by problems with her co-wives rather than direct problems with her husband. The fact that she, like F55, had to leave her marriage, rather than her co-wives who were accused of wrongdoing, reflects the fact that women with children were more firmly established in their marital households. F23 then mentioned improper marital procedures as a factor in their divorce, which further removed F23 from responsibility for her divorce, and placed responsibility with her husband. Because women who left marriages had ambiguous social status and were seen to have 'failed', women's narratives frequently emphasised how divorce was not their fault, or the fault

of their infertility (which, on its own, was not an accepted reason for divorce), but rather the fault of callous husbands or treacherous, poisoning co-wives.

Not all women blamed infertility for their divorces, even if reading between the lines of their life histories suggested that it may have played a role. For instance, F60 did not blame her childlessness for problems in her marriages, even though she had been divorced twice. However, when she was asked for a second time about how infertility had affected her marriages, her answers revealed that she had indeed suffered from some of the social effects of infertility, but had chosen not to mention this earlier:

Interviewer: 'So, this problem, has it affected any of your marriages?'

'What problem?'

'Perhaps not living well because you were not giving birth?'

'Oh, you mean going to traditional doctors?'

'No, in your marriage, maybe your husband was saying things to you because of your problem?'

'Like their wives, saying 'this one is not giving birth?''

'Yes'

'Can people stop saying that? Ah! They always say, 'You are barren' (chumba)...they said, 'Why are you not going to see the traditional doctors? If you want, marry another wife'. That's what they always said. But I haven't heard anything from this one [current husband] or even his parents'

F60's story raises an important consideration about using narrative data to attribute causality for events such as divorce. Some infertile women emphasized the suffering caused by infertility, and the negative impact it had had on their marriages. In contrast, F60 reluctantly admitted that infertility had had an impact on her life only at the end of her second interview, and after probing. She did not want to focus on herself and her fertility problems, and instead blamed her divorces on other people (in particular, the poor behaviour of her husbands and in-laws). Yet it is possible to infer that having children would probably have made F60 less likely to divorce and re-marry twice. Some women's narratives reflected their desire to detract attention from their infertility, whereas other women cast themselves as blameless victims of infertility. Narratives could not determine exactly how or why events in women's lives took place, but they built up a picture of the complex moral and social world in which decisions and motivations were formed, and through which life course events could be interpreted.

Several examples of marital instability directly or indirectly resulting from infertility have been presented. F22's divorce was slightly different. She had not considered herself infertile in her first marriage, as she had only been married for nine months, so she did not believe that infertility had contributed to her divorce. However, she went on to experience infertility in her second marriage. As in the case of F58 (who divorced her first husband after a few months because her senior co-wife refused to work), her story of divorce after a short and youthful marriage shows how marriages were less stable if pregnancy did not occur early on. It also demonstrates how divorce could destabilise women's wellbeing for a long time, even after re-marriage (as M42's first wife had experienced, when her family feared M42 to be bewitching her).

F22. Twenty-one years old. Primary infertility in first short marriage, and in two years of current marriage.

F22 first married at age 16. Nine months later, she wanted to return home to visit her sick mother, but her husband forbade her from going. She explained that he feared that she would be proposed to by other men. She then approached her mother-in-law, who gave her permission to go. However, on her return, her husband charged her a fine for disobeying him, and would not allow her into his house. She returned to her family who took the matter to the traditional court. They found her husband guilty of unreasonable behaviour and issued a fine to him, which he did not pay, so they divorced. F22 married again in 2003 and up until March 2005 had not become pregnant. Because she had left some clothes behind at her first husband's house, she thought she was not getting pregnant because someone at her ex-husband's household was 'holding her womb'.

The conflict leading to F22's divorce grew out of the tensions that married women commonly faced between demands from their husbands and their own families. However, the situation may well have played out differently if she had had a child. There may have been less jealousy or anxiety on her husband's behalf if she had gone to visit her mother with a child, as it could have reassured him that she would come back. 'Older' women with children generally had more freedom of movement, so he may not have forbidden her from visiting her mother or fined her in the first place if she had had a child. F22 and her family may have been less willing for her to leave her husband over this relatively minor conflict, and might have made more efforts to support the marriage. Thus it was not just conflict arising from infertility itself that could make childless partnerships vulnerable to divorce. The absence of children could hasten divorce in situations of conflict.

8.4 Summary and discussion

One response to suspected female infertility in polygynous societies is for husbands to marry additional wives. In the five cases in which infertile LH women's monogamous husbands married co-wives, four did so explicitly to have (more) children. In the fifth case (F46), an extra wife temporarily appeared after her husband made another woman pregnant in the early months of their marriage. There were two cases of polygynous men marrying additional wives in spite of having children with earlier wives. Their wives reported that they had done so in order to have more children, but in these cases it was difficult to estimate the contribution of infertility. They may have married extra wives anyway: both seemed to 'like marrying'. Yet survey data showed that infertile women were no more likely than other groups of women to be polygynously married. This might be explained by the fact that there were numerous circumstances in which men might acquire additional wives if they had the socioeconomic resources and personal motivation to do so. In addition, polygynous marriages involving infertile women were highly susceptible to marital instability, so even if there was a higher incidence of polygyny in infertile marriages, this would not necessarily be reflected in cross-sectional data, as these marriages were likely to be short lived.

From a life course perspective, the acquisition of a co-wife was not the end of the story for infertile women, but little consideration has previously been given to what happens to infertile women in this situation. Although women had not initially objected to their husbands marrying additional wives (and even endorsed their decision as they understood their need to have children), in all but one case gaining a co-wife led to marital conflict or divorce for either the infertile woman or her co-wife. It only worked well for one woman, F21, who described a traditional, rural, polygynous household, living with co-wives who were related to her. Polygyny was therefore not necessarily an alternative to divorce for those husbands who 'pitied' their infertile wives, as it could contribute to the first wife's departure. It might even be an indirect way of driving an infertile wife away, because polygyny commonly led to conflict between co-wives, after which the infertile wife was more likely to leave the marriage. Men might indirectly push their infertile wife away, rather than force her to leave directly, due to bride price repayment issues, which meant that men profited if their wives left of their own accord. Additionally, without sound justification (such as evidence of female infidelity) men who divorced their wives simply due to infertility were frowned upon, as this left women potentially destitute.

Yet fertile wives did not inevitably outlast infertile wives in marriage. F46 ignored criticism about her infertility, and prevailed over her co-wife through her superior behaviour and assertiveness, even though her co-wife was pregnant. F46's case showed that men did not necessarily need a fertile wife in order to get children, as children could be brought into the household from girlfriends or departed wives. F48 also remained as her husband's original wife after his co-wife, who he had married with the explicit purpose of having a child, failed to have a child before F48 did. The fertility of one wife had a direct effect on the other wife's marriage, showing the interconnectedness of co-wives' lives. Perhaps because F48's co-wife's marriage was largely based on having children, it was more fragile than marriages founded on a stronger couple relationship.

Other infertile women were not prepared to suffer second-class treatment from their husbands when a co-wife arrived, and manoeuvred and strategised in the face of problems connected to polygyny. F59 negotiated bride price payment from her husband, and F52 left her husband when he started to treat poorly in comparison with his new wife. These accounts of marital dynamics were described by women through material exchanges. F59 wanted bride price to pass to her father as a legitimisation of their marriage, and F52 saw her marital breakdown through the process of her husband removing her possessions. In both cases, their husbands responded with quests to win them back. They still wanted their wives in spite of infertility. M42 also wanted his first infertile wife back, supporting the finding that for the couple at least, there are alternative foundations for marriage apart from producing children.

Another commonly cited consequence of infertility was divorce, and the increased likelihood of infertile women being divorced suggests that infertile partnerships were indeed more vulnerable to divorce. Women rarely blamed infertility directly for marriages ending, because it was not a good enough reason for getting divorced (it would not have justified a man divorcing his wife in a traditional court, for example). Participants constructed more acceptable explanations for divorce, as men did not want to be seen to 'chase' a woman away, and women did not want to admit to 'failing' in their marriages. A variety of intervening processes led from infertility to divorce, including poisoning by co-wives, the bad behaviour of husbands, bride price disputes, and trying to get pregnant with a previous husband. Some women's husbands had

become abusive after several years of infertility, and they decided to leave themselves (though they could be said to have been ‘driven out’ by husbands who were trying to make their lives difficult and were encouraging them to leave). In all but the two cases of bewitchment, women said that they had made the decision to leave their marriages, even if their husband had said that they should leave. This reflects patrilocal marriage, where the ‘action’ of divorce (‘going home’) is taken by women. These women had all been married for seven to ten years before they eventually left, supporting the generalisation made in the previous chapter that several years usually passed before a couple broke up following infertility. This scenario fits with the worry that several childless women who were still married voiced: that love might support their marriages for some years, but there would be little to keep them in their marriage if love died.

Divorce could have long-term reverberations in women’s lives. Several women believed their infertility to be due to ex-husbands bewitching them, either to punish them, or force them to return to them. Women had three options following their divorce: re-marriage, moving back to their family, or trying to establish their own household. Each had important implications for their life courses, health and well-being, which are discussed further in the following chapter.

9 Infertility, Childbearing, and Reproductive Health

9.1 Introduction

This chapter addresses the wider health implications of infertility, and relates infertility to other reproductive health issues in the study area. The relationship between women's health and infertility can work in two directions. Certain health conditions (STIs, HIV, chronic health problems, physical damage incurred during childbirth) may lead to infertility, and infertility may affect women's lives such that they face heightened health risks (e.g. increased probability of divorce might increase risk of HIV infection). This study did not seek to establish which came first (infertility or the health problem), but this chapter explores the implications of connections between the two, analysing pathways by which infertile women might be at elevated risk, and how health problems shaped experiences and interpretations of infertility. Health issues relating to infertility are then compared with those of childbearing. Although infertility was linked with several health problems, infertile women also avoided many common and debilitating health problems associated with childbearing.

9.2 Infertility and HIV

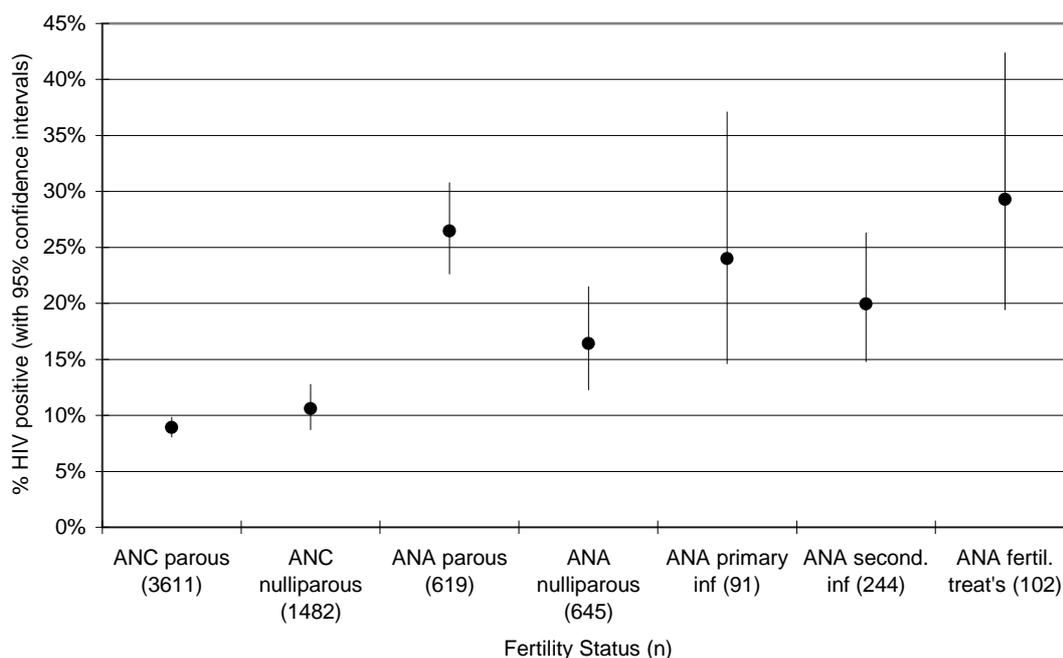
Infertile women have been identified as a group at potentially higher risk of HIV, either due to co-infection with STIs, and/or due to social pathways by which infertility might lead to a widening of sexual networks (through divorce, re-marriage, extra-marital relationships etc.). One objective of this study was to investigate qualitative evidence for these pathways, by asking questions about women's marital histories and extra-marital partners.

Although a number of LH women talked openly about extra-marital partners, it was unrealistic to assume that sexual behaviour questions, however sensitively posed, would be answered accurately by all women. The most important biases included social pressures to report 'correct' behaviour, women's perceptions of interviewers (whom they often thought to be educators or representatives from the medical profession), recall bias, and a reluctance to talk about current marriages (women were relatively open about past boyfriends, but rarely discussed sensitive issues relating to current marriages). Findings are therefore exploratory, suggesting possible pathways by which associations in survey data might be explained. The small number of life histories that

supported hypothesised pathways between infertility and heightened risk of HIV are presented below.

Women with primary infertility were more likely to be HIV positive than pregnant women (ratio of observed over expected cases of HIV (SMR=2.60, 95% CI's 1.59-4.02; see Figure 13 and Appendix G for detailed results table). All ANA women were more likely to be HIV positive than ANC attenders, due to the fertility-inhibiting effects of HIV, and social and behavioural factors associated with HIV (e.g. ANA women were more likely to use contraception and live in trading areas). However, the higher HIV prevalence in primary infertile ANA women compared with nulliparous ANA women suggests that infertility may increase HIV risk independently of these other factors, though overlapping confidence intervals mean this difference could be due to chance.

Figure 13 Percentage HIV positive, ANC and ANA, by fertility status (age cohort and marital status adjusted rates)



These results reflect other studies in finding infertile women more likely to be HIV positive. Some of the observed association between infertility and higher HIV prevalence is explained by HIV positive women having depressed fertility. HIV could thus cause some cases of infertility through its physiological effects. However, no infertile LH women volunteered HIV as a possible cause of their infertility. This might have been because they did not know their status (although 22 of the infertile LH women knew their HIV status through their participation in the ANA study), or did not

believe themselves to be HIV positive. Even if they knew themselves to be HIV positive, they might not have associated their infertility with HIV, or might not have wanted to discuss it. Women were not questioned about their HIV status, or whether they thought HIV had anything to do with their infertility. This was partly because the qualitative design of the study meant that the interview schedule responded to themes emerging from data, and women did not discuss their HIV/AIDS status. It would have been inappropriate and insensitive to ask a direct question about women's HIV status and how they thought it might relate to their infertility.

The following sections explore hypotheses that might explain the second reason for infertility being associated with higher HIV prevalence: that infertile women may be more likely to become HIV positive.

9.2.1 Hypothesis 1: Infertile women more likely to divorce

Survey data suggest that infertile women are more likely to be currently divorced, and/or to have been divorced in the past. Circumstances following divorce were important in determining whether infertile women were at increased sexual risk. There were several possible outcomes: remaining single and celibate, remaining single with one or more boyfriends, or re-marrying. Most ever-divorced infertile LH women re-married, but F55 and F23 were single at the time of interview and had no plans to re-marry (F52 had also separated from her husband, but is not considered here because she had only left her husband a week before interview). There were strong pressures on divorced women to either re-marry or have boyfriends, so remaining celibate seemed unlikely (only F57 claimed to be in this position, see section 5.2.1). These were economic pressures which rendered self-sufficiency an unviable option; social pressures; and personal reasons for wanting a relationship. Two women said that they wanted sexual relationships because they were still young, their 'blood was still running', and they wanted to make their bodies happy.

F55 was one of the few women who fitted the model of a single, divorced, infertile woman with multiple sexual partners:

F55. Twenty-seven years old. Divorced after three years of marriage without getting pregnant.

F55 grew up near Chilumba, but as a teenager lived with her older sister in a large city. She became pregnant whilst unmarried at age fifteen, and her uterus tore during childbirth. A medical doctor told her that it might take her a long time to become pregnant again. The child died some months later.

F55 returned to Chilumba, got married, and moved to Mzuzu with her husband where she shared a house with his first wife and three children. F55 did not become pregnant, and unusually, did not look for fertility treatment. Her husband would not help her as he already had children. After three years of marriage, she became ill. She went to hospital with stomach pains and the doctor told her that her co-wife was poisoning her. F55 agreed, as she had fallen out with her co-wife, who had accused her of poisoning her fish. F55 thought she had retaliated by poisoning her milk. The doctor instructed F55's husband to send her back to her parents to protect her. He followed this advice, and the marriage ended.

She moved back in with her father for two years. At the time of interview, F55 had just left her father's house and was renting a house nearby. She lived alone, relying on her brother and boyfriends to support her. She had left because of:

'Insults. That is why I have found this house to stay in. I realised that I was old enough to do so. My parents don't dress me any more, and they insult me about the way that I live, that is why I am living alone here'

F55 had not re-married, but had had many boyfriends. She said they were necessary for survival, since they brought her money, soap and other things she needed. Although when she first met new boyfriends they used condoms, after a while they did not:

'I use condoms because I fear diseases greatly...with those men from outside who I am going out with, that's when we use them... We don't allow any man [to sleep with us without using a condom] but perhaps if you have been going out with them for a long time, can you manage to use [condoms]?'

Many men had proposed marriage to her, but she turned them down because:

'Some men are difficult. At home here, they can tell you the truth, 'I have heard about your problem [of infertility]'. Some are men who already have children in their houses, they marry you just because of some problems at home [with their wife]. When you get there, he will start to insult you, saying, 'You are barren, you go home' which means you will pack and go. When you go home, you will start counting marriages, that this one is number four. Therefore, because of things like that, it is better to stay at home'

F55 had come to accept that she was infertile, because she had regular boyfriends yet did not conceive. Unless she became pregnant, she did not want to re-marry. She worried that if she did, everything would be fine at first, but after some time the love would go. Then she would marry again, divorce, re-marry, and end up 'walking here and there'. When asked about her future, she said 'men will just be leaving me, because who wants to live with an infertile woman? Because without children there is little understanding, there is no love in the house'.

Although infertility had not led directly to F55's divorce, she had had to leave following witchcraft accusations, because she was the childless wife. If both wives had had children, she might have competed more fiercely with her co-wife over who stayed in the marriage. Following her divorce, F55 blamed infertility for her single life and recognised her increased risk of diseases from having boyfriends. Her comments suggest that she viewed sex with 'outsiders' (men from outside the immediate geographical area) to be particularly risky. Yet she was in the difficult position of fearing diseases but wanting to become pregnant, so she evaluated when to stop using condoms according to the circumstances of the relationship. In addition, as an unmarried woman, fertility treatments were inaccessible. Although women's families could exercise protective and caring functions, in this case F55 portrayed them as judgmental and controlling about her lifestyle, such that she chose to live alone. Like many other women who were established as infertile, F55 was still attractive to men, many of whom wanted to marry her. She decided that unless she got pregnant it was not worth re-marrying due to the potential for being insulted and ending up repeatedly re-marrying. Like many other women, she equated lasting marital stability with having children. She wanted to avoid the excessive mobility associated with being repeatedly married and divorced.

The 'marrying here and there' that F55 feared was evident in F60's story. She was in her third marriage:

F60. Thirty-six years old. Primary infertility throughout three marriages.

F60 was older than most LH women, and had never had a child. In her first marriage, she looked after her husband's child from his previous marriage. She was unable to attend traditional healers during this marriage, because her husband was not interested in going with her, and would have been jealous about her meeting other men if she had gone alone. The only traditional medicine she received was supplied by her sister-in-law. She believed she was pregnant after taking this medicine as her stomach started to grow and 'dance' (move inside), and she missed some periods. Her sister-in-law advised her to visit a traditional healer to 'secure' the pregnancy, but her husband would not go with her, so the pregnancy was 'lost' (although she had no outward signs of miscarriage).

She left her first marriage after six years because her brother-in-law was abusive towards her, and she was free to leave as her husband had never paid bride price:

'We divorced because of his younger brother. He was insulting me every day. But I was not quarrelling with my husband... So, I told him 'I am going home'... I wrote a letter saying that I

have left for good, so if you wish, marry another wife. That was how our marriage was...[his younger brother] was smoking marijuana and he was affected with HIV/AIDS... his heart was always full of insults'

When prompted, she said that she would not have left this marriage if she had had children there. She returned home, and may have had a boyfriend during this time:

Interviewer: 'If a woman thinks that her husband has no power to make pregnant, can she have a boyfriend to make her pregnant, have you ever heard of this?'

'Yes'

Interviewer: 'You have heard about this, but as you have lived in all of your marriages, have you ever done that?'

'I have never done that. But if a person is divorced, and you are at home, which means you have nothing to do with your husband any more... you will have another boyfriend, and if that is also failing, then you will just know that the problem is with me'

After two years she re-married, because she was 'tired of staying alone'. She did not seek fertility treatments with her second husband either:

'He had children but he did not take them [claim them from their mothers]. He was a womaniser, he was marrying different women and had children with them, and then after a short time he left them, that was what he was doing... Because he was moving too much, I thought, 'If I go to a doctor [to get fertility treatments] I will be in trouble like my friends who are able to give birth. He has children here and there, and he doesn't have a proper place to live''

She left her second husband after a few months:

'We divorced because he was always moving and travelling, he was just moving around [sleeping around] anyhow. He was also getting in debt with people. So those people said that they would beat his wife. So... my brother said that if you stay there you will die. So my brother brought me to stay with him'

F60 returned home and later married a polygynous man who already had seven children (see section 5.3.5). When asked whether infertility had caused problems in any of her marriages she denied that it had.

Unlike many women, F60 did not present infertility as a defining factor in her life course; rather, she blamed badly behaved men for her divorces. Like F55, she was denied fertility treatment due to her first husband's lack of concern. Even when she believed herself to be pregnant, her husband failed in his duty to help 'secure' the pregnancy. Likewise, he failed to protect her from his violent brother. Her second husband was also characterised by numerous undesirable attributes (not wanting his

children, not having a proper home, and moving around too much). In spite of wanting children, F60 did not make an effort to seek fertility treatments with her second husband as she did not believe he would make a good father. She did not want children at any cost.

F60 was able to leave her unhappy marriages freely because neither husband had paid bride price, and she had family to return to. Though she did not directly admit to having boyfriends between marriages, her comment, made in the third person, about having boyfriends after marriages ended, suggested that she might have tried to get pregnant in this way. Unlike F55, F60 was keen to marry again, and had done so twice, because she was tired of being alone, and because 'you gain respect' when married. She did not voice fears that other women had about 'love dying' and having to leave.

F23 was another divorced infertile woman, who had been married twice and had since had boyfriends. She linked both her divorce and subsequent unmarried status to infertility:

F23. Thirty-four years old, single following divorce and secondary infertility.

After her second divorce following secondary infertility, F23 returned to her father's house, and had several boyfriends. She was reluctant to re-marry:

'I came back from my second marriage because they said I was barren, so can I go to another marriage in order to be insulted again? No'

She had wanted to get pregnant with one particular boyfriend, but his parents refused to let him marry her because they suspected she was infertile. She went to a private hospital, where they x-rayed her and told her to return with her husband in a few months. Because she did not have a husband, she failed to return. She still visited her first child at her first husband's home, such as when he was sick. Her first husband regularly proposed that they should re-marry (he had never re-married), but her father refused to allow her because they had fallen out in the past. She feared it would bring bad luck if she disobeyed her father, though she wanted to return there because of her child:

Interviewer: 'Do you still love your first husband up until now?' [PAUSE]

'Yes, I love him, he he!' [laughs]

'Yes. What about the second [husband]?'

'No, because there are no children there, hii hii!' [laughing]

'You love where there are children?'

'Eee, hmm, yes'

F23's reluctance to re-marry, and restrictions imposed upon her by her father, left her single and reliant on boyfriends, both to try to get pregnant, and for economic support. She felt unable to access fertility treatment at the hospital because she was not married. It was unusual that her first husband had not re-married, but F23 could not return to him while in her father's hands. Her father exerted considerable influence over her life and she was unwilling to go against his wishes, partly because there was no one else to look after him as he was unmarried, and partly because she feared incurring his angry thoughts if she disobeyed him. Even having a child together, and still loving each other, could not bring this couple back together. Other, stronger forces of influence, in the form of her father, intervened.

F23 and F55 were also the only two out of nine ever-divorced infertile women yet to re-marry. Their previous negative experiences with poisoning co-wives might have deterred them from marrying into polygynous marriages again (as all other established infertile women who had divorced had done). Yet marrying polygynous men was probably their most realistic option.

Women who had been married more than once in the study area had twice the odds of being HIV positive compared to women in their first marriage (Zaba, B. pers. comm, 2005). Thus even a slightly elevated risk of divorce amongst infertile women was likely to translate into a greater risk of HIV. These life histories suggest that divorced, infertile women were also likely to have one or more boyfriends and could be reluctant to re-marry unless they got pregnant first. The relative contributions to increased HIV risk of having had at least two husbands, or of having boyfriends during the period in between marriages, are unknown. However, these are plausible mechanisms by which divorced infertile women were exposed to greater HIV risk.

9.2.2 Hypothesis 2. Infertile women have boyfriends

F51 was the only LH woman to admit having an extra-marital affair in an attempt to become pregnant. The relationship had taken place during her previous marriage. It would have been very unlikely for a woman to admit having a boyfriend during a current marriage. After six or seven years of marriage without a pregnancy, she wanted to try with another man in case her blood differed from her husband's (see section 8.3). She was unhappy about what she had done, complaining that even though she had tried

to do the right thing, and had gone to many traditional healers, she had still ‘ended up [sleeping around] with men’, and without a child:

‘...You who can tell those people [who read your research] that this is what my problem is like... For a person to stay at their marriage, they need children... you can go through many marriages, but what is needed is a child. Even if you go to many traditional healers you will just end up with men, and they will call you prostitute. I have already decided that if this marriage ends, I will just live at home’ F51, age 29

It was impossible to say how common this behaviour was among infertile women when there was so little evidence for it. Local people believed that infertile women commonly took boyfriends, and did not talk about it with moral outrage. It appeared to be a pragmatic transgression of the usual boundaries of women’s sexual behaviour, as friends and relatives would recommend it to infertile women as a strategy. In spite of this, most LH women, when asked if they had heard of infertile women having additional boyfriends, said that it was too risky because of STIs:

‘It happens...but as of now there are diseases’ F24, age 22

‘Some people know that they are fertile, so they think that they might die with children in their stomach, so they do it... Some say ‘we should stay like this’ [without children]. But there are few who know for themselves that they are fertile... In particular, the problem is that people outside [neighbours etc.] say ‘no, you are just troubling yourself, your friend [spouse] is not fertile, you have to do this and that’ [sleep with someone else]’ F31, age 25

‘Because some say you have to go there and there [sleep around]. Sometimes it can help but sometimes it is also bad, like [because of] diseases of nowadays, so that is why I was waiting to see how it would end’ F48, age 24

While there was little evidence for women having boyfriends to get pregnant, they recognised the existence of an idea that some women did this. However, they rejected the practice in public, citing prevailing fear of diseases, rather than moral objections.

9.2.3 Hypothesis 3. Infertile women’s husbands more likely to marry polygynously or have girlfriends to try to have children

Infertile women were no more likely to be polygynously married than other women. However, infertile women might have been more likely to have been polygynously married in the past, and these marriages frequently ended in the infertile wife leaving.

Polygyny might thus increase the risk of divorce in infertile women, which is in itself associated with increased HIV risk. More detailed data on marital histories at a population level would be required to investigate further the impact of divorce and polygyny on HIV risk.

Several women reported that their husbands went ‘out of the house’ (had extra-marital affairs) to try to have children with other women (F25, F59, F48), which could expose their wives to risks from a larger sexual network. That these affairs had taken place was often undeniable, in the form of children resulting from these relationships, or additional wives who were originally girlfriends of married men. However, as few men were interviewed, and due to difficulties in obtaining comprehensive answers from them on this issue, there was no way of judging the scale of men’s infidelity, or of comparing it to husbands of fertile women (several of whom also had children from ‘outside’). Nevertheless, there is as much, if not more evidence pointing to men widening their sexual networks in response to infertility, as there is for women doing the same, suggesting that the focus of attention, in terms of infertile women’s increased HIV risk, should not just rest on women’s behaviour.

9.3 *Infertility and wider ill-health*

Four LH women’s fertility had been directly affected by ill health. One acutely ill woman was recorded as using fertility treatments in the ANA study. However, it emerged that she had not been using them at the time of the ANA study, but had used them after her first child and had misunderstood the survey question. In spite of exposure to pregnancy, she had not had a child since her last child was born seven years previously. Although she was in considerable pain, F43 insisted that she wanted to be interviewed. Her ill health meant that a shortened version of the interview schedule was used, and her weakness probably accounted for the fact that she did not embark on spontaneous narratives as other LH women had done. She was interviewed once at home, when she had been acutely ill with tuberculosis for around six months, and some months later when her condition had improved and she was staying at a traditional healer’s camp. She was receiving regular TB medication from the local hospital.

F43. Thirty years old, two daughters, secondary infertility.

F43 had two daughters aged ten and seven. When she first married, she was the second wife of her husband, and he subsequently married a third wife. Her co-wives had several children between them. She

became pregnant with her first child after three months, but the second 'took a long time', so she went to a traditional healer who gave her three pots of medicine to drink. Since her last birth seven years previously she had not used contraception but had not become pregnant. When asked if she wanted more children she replied, 'Can a person hate a child?' She especially wanted a son because she had two daughters, and sons were useful for 'helping with problems'. When asked why she had not looked for fertility medicine after her second child she replied,

'Because I personally, I am always sick. I haven't even thought about getting pregnant. That's all, God stopped [giving me children], and I have just been staying up to now, I have been found with this disease... So if a person is sick can she get pregnant?'

She had started suffering from episodes of ill health related to tuberculosis during the previous two years. When asked if she might use fertility medicine if she recovered, she said that she planned to.

Although F43 wanted more children, secondary infertility was clearly not her main concern in the face of ongoing illness. Infertility was experienced contextually and in relation to other problems. F43 did not see herself as an 'infertile' woman, but as a sick woman for whom infertility was an unavoidable and almost unremarkable consequence of this. Sexual activity as well as physiological ability to conceive was doubtlessly diminished by her illness.

F54 was another woman whose ill health had made having children difficult. She was childless following the death of her only child, though it was not possible to say whether she was infertile (i.e. whether she had been exposed to pregnancy for long enough to consider her infertile). Her marital history was unclear, and she did not understand questions that tried to uncover whether she considered herself infertile. However, it was clear that poor health had precluded her from having another child, because it was jeopardising her chances of re-marriage. She reported seizures and related mental health problems from childhood. Her mother and sisters in-law, and the ANA study fieldworker who had directed the interviewer to her house, said that F54 was 'not normal' and would 'not be able to answer questions properly'. Indeed, F54 had difficulty describing when, and in what order, events such as her marriage and pregnancy had happened. Her life history was unclear, and data from her life history narrative did not match ANA study data, which recorded that she had never married. This was probably because it was a short or informal union that either her family or fieldworkers had not considered a marriage. However, F54 did consider herself to have been married:

F54. Thirty-two years old, single, unclear marital history.

F54 lived with her parents until they divorced, then went to live with her aunt. She left school halfway through primary school due to her illness, and then ‘stayed for a very long time’ without a boyfriend or getting married. She eventually married, though could not remember when (her mother said it was when she was 26). She soon became pregnant and gave birth at the hospital. Her baby cried once and then died.

She told us that she had ‘failed’ in her marriage. Her husband told her to leave after she had not cooked dinner on time one night. She mentioned his other ‘bad behaviour’: he would beat and insult her, and tell her that she was mad. It was not clear how long after her baby’s death that she left.

She returned home to her family, and earned money selling fruit and stones from a local quarry by the roadside. Men still proposed marriage to her, but her brother intervened and would ask them if they wanted to marry his sister. They would deny it, and say they were just chatting. She ‘refused’ their offers to marry because she was ill and feared they would not take care of her properly. In spite of this, when she was asked if she wanted to marry, she replied, ‘Is there anyone who doesn’t want to get married?’

Several factors discouraged F54 from re-marrying and having children: her family’s protectiveness, her own perceived need for care for her illness, and her bad experiences during her first marriage.

Two other women’s infertility was related to past health problems: both had suffered reproductive morbidities, probably linked to early childbearing and/or poor obstetric care. F55 and F27 gave birth as unmarried teenagers, and suffered complications during childbirth, which led to them being ‘damaged inside’. Both were warned that they might have future problems conceiving, but both constructed additional, alternative explanations for their fertility problems (see section 9.2.1 for F55’s case, and section 7.4.1 for F27). Neither woman strongly connected their past reproductive morbidities to their subsequent fertility problems, even though the connection had been pointed out by medical doctors.

Likewise, few women mentioned symptoms or even diagnosis of STIs when explaining why they thought they were infertile. The exceptions were three women (one with primary and two with secondary infertility) who linked their infertility to infectious diseases they believed they had caught, though none knew specifically which diseases they were. One of these women, F55, did not make the link directly, but speculated that her infertility might have been caused by one of her sexual partners ‘moving badly and

damaging her inside'. As noted in Chapter 6, STIs were firmly linked to bad behaviour in participants' explanations. These findings are consistent with results from a study in southern Malawi, where study participants were aware of a link between STIs and infertility, but did not make the association in their own case (Barden-O'Fallon 2005).

Participants had heard about STIs from several sources: the radio, ANC, Under Fives clinics, and overhearing older people talking. No women mentioned learning about them at school⁵⁹. Knowledge was usually restricted to names of a few well-known diseases and a rough (and not necessarily accurate) idea of symptoms. Many women said that they could not tell us further details about STIs because they had never been affected directly. This suggested that women did not view STIs as phenomena that could be learnt about or avoided in advance. Treatment for STIs, and women's understanding of diagnosis and treatment was sub-optimal in many cases. Seven out of 49 life history women had been treated for STIs at hospital or by KPS nurses. Only those who had been treated for syphilis could identify what they had been treated for; others said that they had 'just been given tablets'. In one case, F27 went to hospital presenting with pain when urinating following childbirth. They said she had not 'caught it from men' but that it was a woman's disease. However, they injected both her and her husband. This appeared strange to F27 and compounded her lack of understanding about her condition. Clinics encouraged women to bring their partners for treatment, but nurses reported difficulties in ensuring this happened due to their fears of partners' responses. F59's husband only admitted he had been treated for itching and swelling when she confided in him that she was unwell:

'That was when I felt this [vaginal itching] but I didn't know what it was, or how it started. I was surprised to find that my husband had already had it, then I just went to the hospital.... I can say that he first went to hospital alone, and I didn't know that he was feeling itching or swelling, I didn't know. Then he went to the clinic at St Anne's, then he came back. So, I told him, 'My friend, I am not feeling well'. Then he said, 'Let's go to the clinic because I also want to drink some medicine...' So I said, 'What is this disease?' Then he said, 'I don't know' Then we went to St Anne's to have injections' F59, age 22

⁵⁹ Chilumba Secondary School now includes STIs in the curriculum, but this may be a recent development, or women may not have stayed at school long enough to study it, or they may have forgotten or not recounted what they learnt in school. Primary schools are now meant to cover reproductive health topics.

Several other women had not been diagnosed with an STI, but complained of vaginal discharge, itching, pain after sex or when urinating, or a combination of these symptoms. Bilharzia (*lukoch* or *ngereketa*) was also reported by numerous women. Bilharzia is endemic to the region and could be confused with an STI (or vice versa), as it can cause similar symptoms (lower abdominal pain and blood in the urine). In some cases symptoms had started when they married, or had lasted for a long time, but women had not sought treatment. Barriers to treatment included embarrassment, and the costs involved: F22 feared people would spread rumours about her if she sought help, and F71 cited private clinic fees as a barrier to getting the injection she had been told she needed. STIs are the most important cause of acquired infertility in sub-Saharan Africa, yet participants in the study often knew little about them, received sub-optimal treatment, and did not make the connection between preventable diseases and infertility in their own cases.

9.4 Pregnancy and childbirth

While infertile women typically underwent arduous treatment-seeking, and were more likely to suffer from HIV and STIs, many of their fertile counterparts also experienced difficulties trying to protect their pregnancies and their children's survival. Infertility was only one in a range of risks to successful childbearing and child rearing, which did not stop at conception.

'I had problems with my second child. I was feeling such great pain that I went to hospital... in spite of the pain I did not give birth. From starting labour, the whole night passed, and I delivered at noon... Some were saying I had twins; that I needed to go to the district hospital. The ambulance came, but the baby was already born. I was bleeding heavily, the baby was too big, that's why I had problems... With my next daughter I delivered at St Anne's hospital, and also bled too much. They told me that the baby was not in the right position... the bleeding was too much... Of course I drank traditional African medicines, we black people call it *malukori*, they make clay pots [of medicine] for us, we drink them on the way to the hospital. Sometimes you fail to deliver... sometimes you cannot see the path. That is why we drink medicines called *malupusu*, before we go to the hospital' F70, age 31

Aside from the trials described above, common biomedical problems during pregnancy were high blood pressure, blood flowing too fast, bleeding during pregnancy, malaria, abdominal pain, vaginal itching, problems sleeping, general bodily pain, fatigue and anaemia. In addition to this, medical services were difficult to access from rural locations, particularly if women were heavily pregnant:

‘I had malaria; I was even failing to sleep, cold and malaria were the problems during my pregnancy with this child... There were no problems during the delivery, but when I went to the hospital they told us to go to a bigger hospital, so we went to Livingstonia. When we arrived there, I had malaria and they started giving me medicine until I gave birth’ F73, age 23

Most women who had been pregnant had sought hospital or traditional treatment for one or more of these complaints. Supernatural harm and structural factors such as poor access to RSH services and risks of early childbearing that increased women’s vulnerability to reproductive morbidities were as evident in fertile women’s stories as they were in infertile women’s life histories. F69’s story illustrated how family conflict and fear of witchcraft threatened the safe delivery of her pregnancy:

‘I used traditional medicine during my last pregnancy... the Tumbuka say it is used if the baby is tied. I went to our traditional healer... because at home there were quarrels between my husband and other people. So they were saying that they might come to you because you are pregnant and you might die... Yes, the medicine helped me... because during my pregnancy, months passed. The month that I was expecting to give birth, the ninth month, my stomach was not even moving. But when I started drinking that medicine, I found that my stomach started working, and that same month God helped me [give birth]’ F69, age 29

The following life history illustrates further the variety of experiences related to childbearing. F63 described how, as a young woman barely out of school, she gave birth at home, alone, and with little idea of what to expect:

F63. Thirty-one years old

F63 left school when she got married. After three months of marriage, she took traditional fertility medicines for two weeks, and immediately became pregnant with her first child. She ended up delivering the baby at home:

‘I didn’t know what labour pains were like. I just felt pain in my backbone and I thought that maybe it was just pain, because I was feeling pain like that while I was pregnant... but it got worse, and I told one of the women here. She said, ‘Let me boil water so that I can warm you up, and I should go and get my friend [to help]’. While she was out getting her friend, I gave birth without her, alone... When they arrived here, they found that the baby had just been born on the floor. But I didn’t know that it was the baby. They arrived and saw what had happened and said ‘That’s a child which has been born’. That was when they started to wash me and the placenta’

F63's first child survived, but her second child, born at hospital, cried once and died. The doctors said that the child was big and had spent too long 'at her back, because her path was small'. For a long time after this, she had pain in her legs, because 'the baby had stayed between my legs for a long time'.

During her next pregnancy, she had back pain and the baby stopped moving, so she went to a traditional healer. He diagnosed that someone was holding (bewitching) the child, as there had been problems and arguments in her household. To escape this, she travelled to a traditional healer in a different area rather than give birth at the local hospital. The traditional medicines made the baby start moving again, but again, after the baby was born, he cried once and died. She begged her husband to allow her to use contraception in order to 'rest'. Firstly, she had a contraceptive injection, which made her periods 'not good', so she tried the pill. At this time, her husband married another wife:

'Maybe because he is alone [orphaned/without many relatives] he thought it better to marry another wife, so that he could depend on them... I wanted to return back home [divorce]. But there were some elders who said, 'Can you leave because your husband has another wife? No. You have to stay; she will come and cook on her own fire, and you will also have your own''

For two months after marrying a new wife F63's husband neglected her (by not sleeping at her house and not buying her things), so she called 'some people' [likely to be local elders], and they discussed it, and he started sleeping with her again. Her fourth and fifth pregnancies presented no problems. When she went into labour with her sixth pregnancy, she had numb legs but no labour pains. She told her husband she was sick, so he went to get the traditional birth attendant, but for the second time, her baby was born before help arrived. At the time of interview she was avoiding pregnancy by trying not to have sex every day, as she thought she had enough children.

F63's levels of knowledge and cognition around pregnancy and childbirth were very low when she first gave birth. For women in remote and inaccessible parts of the study area, and without access to transport, attending hospital in time to give birth was extremely difficult. Women in labour might walk for miles to give birth at hospital, or might have to leave home some weeks before their due date to stay with relatives nearer the hospital. F63's quest to avoid witchcraft, preserve her health, ensure her children's survival, and maintain her marital relationship incorporates many of the themes discussed in relation to infertile women's life histories. Her fear was a familiar one: that her fertility was under threat due to disturbed social relations, and that this had to be tackled by moving away and employing the expertise of a traditional healer. Her husband taking an additional wife at a time when she had had three pregnancies, but only one surviving child, and when she had declared that she wanted to 'rest' for a while, also put strain on their marriage. He, like the husbands of infertile women, wanted more children. His lack of relatives may have provided additional incentive to

increase the size of his family. She sought help and advice from (unspecified) ‘others’ in order to bring him back home, rather than tackling the situation independently. She also used modern contraceptives to ‘rest’ from reproductive trauma, although in a slightly different way from infertile women, who used the pill to ‘kick start’ their fertility. F63’s story illustrates how normative life courses were the exception rather than the rule amongst fertile as well as infertile women. Of 15 fertile LH women interviewed, only four life histories did not feature the deaths of children, divorce, or separation.

9.5 Discussion

This chapter has discussed the relationship between infertility and women’s health status, and situated infertility within the broader reproductive health concerns of women in the study area. Survey results confirmed that in this population, infertile women were more than twice as likely to be HIV positive than pregnant women. This held true for primary and secondary infertility (defined using demographic parameters), and self-perceived infertility cases (those using fertility treatments).

Evidence for elevated risk behaviour in married infertile women was weak, and combined with reports of husbands ‘going out of the house’, suggests that infertile women should not necessarily be thought of as bringing elevated sexual risk upon themselves. The most plausible mechanism appeared to be that if infertile women divorced (and they were more likely to have divorced than pregnant women), they might subsequently have boyfriends and/or re-marry (thus increasing the size of their sexual networks).

Women might also remain single, if they were reluctant to re-marry, fearing being seen as ‘too movious’, and wanting to avoid being insulted due to their infertility. Single women were then likely to have boyfriends, and even if they knew about the risk of STIs, they were faced with a choice between trying to get pregnant and using condoms. The importance of having children for infertile women should be recognised as an important potential barrier to the adoption of preventative behaviours such as condom use or reducing number of sexual partners. Infertile women are not likely candidates for using condoms in the post-divorce period, because they may want to keep trying to get pregnant. Ideally, a new couple would attend VCT for HIV and other STIs before

making decisions about having children together. The stories of F23 and F55 show how unrealistic this would be in their situations.

Although LH data were not sufficient to address the plausibility of the hypothesis that married infertile women have boyfriends to try and get pregnant, data on this subject added greater insight into kinship norms in the study area. In southern Malawi, the term '*fisi*' (a Chichewa word meaning hyena) describes the practice of men secretly asking a friend or relative to sleep with their wife, in cases of suspected male infertility (Kornfield and Namate 1997). *Fisi* was arranged secretly and never spoken about in public. In northern Malawi, the practice was described rather differently. Women were said to 'go out' secretly, without their husbands' knowledge. The difference between northern and southern Malawi in the public understanding of these practices may be because in northern Malawi, the male inheritance line and biological fatherhood was more closely protected, whereas the matriline was of greater importance in southern Malawi.

No infertile women drew a link between infertility and possible HIV infection. Yet a third of women using fertility treatments were HIV positive. Increasing awareness of this association among hospital personnel or traditional healers, leading to the tailoring of advice and counselling for infertile women if they present with fertility problems in either setting, is one possible way of targeting this otherwise hard to reach group of women. Infertile women are unlikely to access such services such as VCT and ART through common channels such as ANC. Whether they would continue to try to become pregnant if they found themselves to be HIV positive is another difficult and important question, and the fertility intentions of HIV positive people are now being investigated in several studies (see, for instance, Myer, Morroni et al. 2007). In addition, although STIs could lead to infertility, there was little evidence that women for whom this connection might have been plausible had considered this possibility. This could have been due to the incomplete biomedical knowledge that women had about STIs, or could have been because they did not want to voice these connections publicly. Two women also did not draw a strong connection between their past reproductive morbidity and subsequent infertility. This suggests that there is potential for improved understanding about risk factors for infertility, which could be a way of persuading men and women to adopt behaviours that would protect their fertility, and to seek timely treatment for STIs.

As might be expected in a poor rural setting, fertile LH women experienced a range of problems related to childbearing. Certain health problems were unique to childbearing women, which infertile women did not have to face. However, fertile and infertile women shared many similar experiences, including concerns about witchcraft, co-wives, inadequate medical services, family conflict, husbands' neglect, and perhaps above all, concern about poverty and livelihoods. Their experiences of health and fertility were ultimately shaped by a common set of structural factors, including poorly resourced health services, high levels of marital disruption, young women's relatively low socioeconomic status, pressures to demonstrate fertility at a young age and early on in marriage, a pluralistic health system, and limited understanding of some health risks and aspects of physiology. Whilst infertility is a problem in its own right, it falls within a spectrum of issues relating to childbearing and fertility, and as such should be systematically integrated within RSH. The following chapter looks at how this might be achieved.

10 Conclusions and Recommendations

10.1 Introduction

This chapter summarises main findings and discusses their contribution to current literature on infertility. Issues of reliability and validity, and limitations of the study, are examined. The implications of findings for policy and research in RSH are explored, concentrating on areas amenable to intervention. Suggestions are made as to how, and why, infertility might be incorporated into RSH policy and practice in resource poor settings. The chapter ends with thoughts on directions for future research.

10.2 Summary of main findings

This study has sought to understand the experience of infertility for women within the context of their life courses in a particular area of northern Malawi. In order to appreciate wider meanings, motivations and behaviours relating to infertility, the local social world, belief systems and socioeconomic situation in which women lived were analysed. The study described how infertility motivated behaviour, was an important determinant of wellbeing, shaped marriages and other relationships, and was one of the most significant reproductive health issues that women could face. Results echo those from other qualitative and anthropological studies in Africa, and elsewhere. Arduous treatment-seeking regimes, disrupted marriages and emotional anxiety characterised most infertile women's stories, and the language they used to express this mirrored that reported from women in Egypt (Inhorn and Buss 1994c), Cameroon (Feldman-Savelsberg 1994), Mozambique (Gerrits 1997), the Gambia (Sundby 1998), and South Africa (Dyer, Abrahams et al. 2002b). These aspects of infertility were similarly expressed and appear to be widely spread amongst women across sub-Saharan Africa. Yet the social ostracism faced by some women in other settings, such as being excluded from social events in Mozambique (Gerrits 1997), or being accused of witchcraft due to their infertility in Ghana (Ebin 1982), was not found.

The local demographic environment reflected and shaped norms and expectations around fertility. Almost universal marriage, high and youthful fertility, and little use of contraceptives before the first child meant that by not having a child early in marriage, women deviated from expected norms. This expected demonstration of fertility early in marriage has been reported elsewhere in Malawi (Barden-O'Fallon 2005), but unlike countries like South Africa (Harrison and Montgomery 2001) and Kenya (Rutstein and

Shah 2004), there was no evidence that failure to conceive before marriage threatened women's chances of marriage. As Roth Allen described in an ethnographic study in Tanzania, scenarios other than infertility were also categorised as fertility problems and could lead to childlessness, such as pregnancies disappearing, and children dying early in life (Roth Allen 2002). She argues that infertility is on a continuum of risks to successful child bearing, but is not usually recognised as such in safe motherhood programmes, where concern begins when pregnancy is already achieved. In Malawi, adoption was unfeasible, effective treatment options were scarce, and voluntary childlessness was almost unthinkable, a cultural characteristic shared with many other countries (e.g. India (Bharadwaj 2003), Chad (Leonard 2002)). In all such contexts, infertility has been found to be particularly challenging for affected women, and was considered an important health problem in the wider community. Demographic estimates of infertility only captured a small proportion of experience of fertility problems in the study area. In a policy climate focusing on fertility reduction and other aspects of RSH, infertility and other problems relating to childlessness have been overlooked.

10.2.1 Infertility as a morally loaded condition

A complex array of moral and biological phenomena was associated with infertility. These differed according to whether someone was individually affected by infertility, or whether they were talking about how infertility affected others. Unaffected people associated dubious moral qualities with infertility, characterising infertile women as 'movious' (due to divorce and re-marriage), and linking infertility to abortions, contraceptives, and diseases. Infertile women distanced themselves from these associations by blaming their condition on wider social unrest (in the form of witchcraft), or flawed congenital biology. Because causes of infertility were either linked to supernatural or congenital causes, or diseases thought to affect 'the other', an accurate understanding of the most likely causes of infertility and ways of protecting fertility was largely lacking in the study area. Kielmann, in her study of infertile Tanzanian women's accounts, interpreted similar patterns as women's attempts to control their situation. By creating their stories using selected information and characters, they sought to mitigate their reduced social status (Kielmann 1998; 138). As women in northern Malawi did, they blamed supernatural causes and other people for their misfortunes rather than diseases that could be linked to their behaviour and personal morality.

10.2.2 Demonstrating commitment to childbearing

The treatment-seeking profile of infertile women was similar to other African settings. Infertility was managed in a context of medical pluralism, in which different medical spheres interacted, and in which usage and belief in one sphere did not prohibit activities in the other, as studies of treatment-seeking for obstetric problems in Malawi have also found (Barber 2003). Attending hospital was of secondary importance, reflecting both the paucity of hospital-based treatment options, and the fact that causes of, and cures for, infertility were largely thought to fall under the remit of traditional medicine. Young couples, sometimes when women were still teenagers, sought help in the form of herbal medicines within the first few months of marriage. In northern Malawi, couples felt compelled to demonstrate their desire to have children, in order to show that their childlessness was involuntary. They did this by publicly seeking treatment, even if they were sceptical of traditional healers, or unconvinced that hospitals could offer any help. These reactions to infertility evidenced the continued importance of fertility right at the start of marriage. Couples wanted to demonstrate their fertility because it showed that their marriage was serious, and not just a flippant sexual relationship, and because it reassured them, and others around them, of harmony and continuity in the social world. As Feldman-Savelsberg found in Cameroon, infertility could be interpreted as much more than a sign of a couple's biological problems: it was a reflection of the broader social environment such as family disputes and communal misfortune (Feldman-Savelsberg 1999).

Infertility was socially managed and surveyed because people were morally and economically compelled to think of childbearing as a necessary part of attaining full adulthood. Young couples were thought of, and thought of themselves as, unknowing and compliant in their treatment-seeking, and in need of guidance from elders. Children were a resource for the whole extended family, not just the couple. The extended family's stake in couples' fertility meant that they encouraged treatment-seeking, or other responses to infertility such as divorce or the man marrying another wife.

Modern hormonal contraceptives have had unforeseen and unintended uses in the study area. The original purpose of these technologies had been radically transformed, so that they were used to stimulate fertility, by bringing on menstruation, or allowing a woman's body to 'rest' following reproductive trauma. The latter function has been discussed by Bledsoe with reference to women's reproductive lives in the Gambia,

where she describes how hormonal contraceptives are used to temporarily suppress fertility with the ultimate intention of maximising fertility and minimising risk (Bledsoe, 2002). Women, their relatives, and health practitioners, have incorporated contraceptive pills into the battery of tools available to support fertility ideals.

10.2.3 Infertile women no more likely to be currently polygynously married

Infertile women were no more likely to be currently polygynously married than other women, which was surprising, because a common response for infertility was said to be for the man to marry another wife. The particular social context of northern Malawi provides a possible explanation. Malawi has one of the highest divorce rates in Africa, and women's stories frequently linked polygyny with marital disruption, particularly when one wife occupied a less secure position in the marriage, which a wife who turned out to be infertile almost certainly did. In cases of polygyny, several routes could lead to divorce, including straightforward mistreatment of infertile women by their husbands and in-laws. There were also cases in which infertile women were forced out of their marriages by their co-wives through suspected poisoning. Thus even if the incidence of polygyny was higher for infertile women, this may not have been reflected in the cross-sectional data because such marriages were often short-lived. Furthermore, there were numerous other reasons why men married additional wives, apart from infertility, so it could be that there was no real difference in the incidence or prevalence of polygyny between fertile and infertile women.

10.2.4 Why infertile women were more likely to have divorced

Infertile women were both more likely to be currently divorced, and more likely to have been married more than once. The particular character of marital instability in the study area, in which women largely decided when to leave and what they did next differed from many Asian and North African contexts, where women are not as free to decide to leave marriages, and are unlikely to re-marry following divorce. The link between infertility and divorce was rarely as straightforward as infertility condemning women to abuse from husbands and directly leading to the break-up of marriages. The effects of infertility worked more subtly, denying women the opportunity to build up moral and social capital and conjugal security through the accumulation of children, which Bledsoe (2002) argues is the one of the central motivations for having children in the Gambia. Her interpretation fits with the Malawian data on marriage and infertility.

Mechanisms by which infertility contributed to marital instability can be summarised as follows. Firstly, having children stabilised marriage. It was easier for the couple to ‘stay well together’, a function of children widely reported in studies of infertility (Gijssels, 2001; Dyer, 2004). Family roles could be enacted, and children contributed to the atmosphere and image of a good family. In-laws and elders were happy to have grandchildren, for the perpetuation of the lineage and because they hoped to receive assistance from those children in future, and were thus more likely to support the marriage. As well as these positive contributions of children to marital stability, women with children were more reluctant to leave their marriage if problems arose, as this would entail leaving their children behind. Even if love died, and particularly if her husband married another wife, if a woman had children, she could remain at her husband’s household without being romantically involved with him. Even if a woman did leave her marriage, she was more likely to return in future if she had children at that household. Children stabilising marriage was thus partly a result of patrilineal and patrilocal norms, which were not always conducive to women’s overall well-being, as they could restrict a woman’s departure from an unhappy marriage.

Conversely, lack of children de-stabilised marriage in several ways. Problems could arise as a direct result of infertility. Some women reported mistreatment by their husbands or in-laws; others described social stress caused by familial pressure and neighbours gossiping. Yet infertility in itself was not considered a legitimate cause for divorce, and most people pitied rather than vilified childless women. Infertility more often led to divorce indirectly. If love died, as most infertile women expected would happen at some point, there was little to keep an infertile woman in her husband’s household if she did not have children. Her husband might marry another wife to try to have children, which frequently led to polygyny-related marital instability. In this event, the likelihood of having to leave was higher for infertile wives. Another threat to infertile marriages was if either the woman or man wanted to try to have children with another partner (reflecting the ‘incompatibility’ hypothesis of infertility, or the belief that the other partner was to blame), which could threaten the marriage. Lastly, if pregnancy did not occur early in marriage, this could contribute to marital instability, not because of problems related to infertility, but because if the marriage was unhappy or there were bride price disputes, there was little incentive for childless women to remain married.

10.2.5 Love in infertile relationships

All divorced infertile women had swiftly re-married, or received regular offers of marriage. Women described these marriages as based on 'love', and they were a chance for women to escape the diminished social status of being single. Some of these infertile 'love wives' were favoured by their husbands over fertile wives (all such husbands were men who already had several children). Polygynous men actively courted women who they knew to be infertile. The particular local context enabled these marriages. Polygyny was common, and women felt able to 'risk' another marriage, even if it also turned out to be infertile, because they could always return home or marry again.

Many infertile women had strong marital relationships and were supported by their husbands, often in spite of considerable pressure from family members, over many years. A woman could thus be highly valued by her husband, whilst still occupying a compromised position in the wider family and community. Sentiments similar to those in a Senegalese Wolof saying, that 'a married couple without children is very fragile and the partners are more like lovers' (LeGrand, Koppenhaver et al. 2003; 387), resounded in the study area, where childless couples were thought of as just 'playing' together. This belief could affect how women perceived their position in the household, whether or not they actually experienced negative reactions.

Men could pick and choose how to people their households, and did not need their wives and children to be biologically related to each other. Infertile women often cared for children their husbands had had with other women. Men could choose a wife with desirable qualities (whether she be loving, obedient, industrious, or in good health), and children from 'outside', or from previous relationships. Shared parenthood was not particularly important to men, reflecting the central importance of the patriline as opposed to the nuclear family. Further functional reasons as to why men who already had children were happy to marry infertile wives included having a wife who was more sexually available, who had a quieter house, and who was unlikely to have children, which might have been attractive to men who felt they already had large enough families. Childless women were also economically productive in the agrarian household economy; Inhorn argues that in Egypt, urban infertile women have a worse experience of infertility because they have been robbed of their agricultural as well as reproductive productivity (Inhorn, 1996).

However, marriages have more complex foundations than the practical functions of a spouse. People are driven by personal desires, ideas (such as the notion of romantic love within a couple, which is increasingly referred to in this, as well as other, parts of Africa (see, for instance, a study on legal aspects of infertility in Zimbabwe (Hellum 1999)). The strength and quality of many couples' relationships overrode structural factors that rendered infertile marriages vulnerable to disruption. Attitudes to polygyny, relationships with in-laws, the presence of other children in the household, alternative roles for infertile women, and interpretations of the causes of infertility were all individual-level factors that accounted for some of the variation in responses to infertility.

Infertile women could find a niche in certain types of marriage, but could still feel as though they had a compromised social status, as love marriages did not have the same recognition and public value as childbearing marriages. In spite of popular discourse that characterised infertility as inevitably disruptive to marriages, this study found women who mothered other women's children, and had lasting marriages, a situation also found in Nigeria (Cornwall 2001). Cornwall reported a similarly negative public account of women's experience of infertility, but found in practice that infertile women lived seemingly stable domestic lives, loved by those around them. They experienced empathy from those around them more frequently than negative reactions. This study's findings confirm that experiences of infertility cannot be evaluated by what is said alone, particularly by those not directly affected by infertility. The immensely negative descriptions of infertility may reflect normative pressures to appear adversely affected by infertility (in order to demonstrate one's good intentions to bear children), in addition to actual anxiety about childlessness.

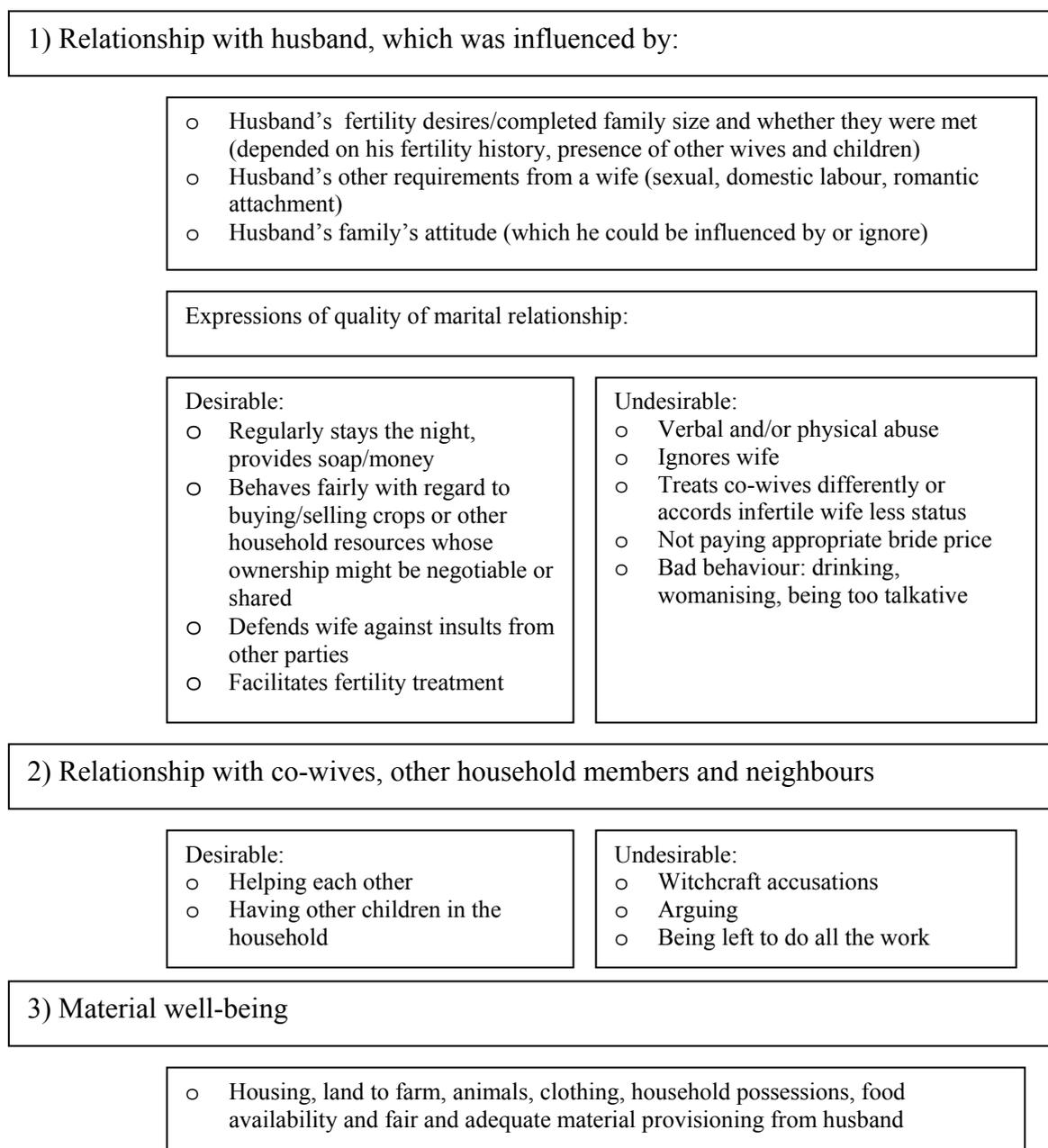
10.2.6 How infertile women contrived to 'stay well'

Both fertile and infertile women's behaviour and motivations were best understood within a framework of them actively manipulating marriage, fertility and livelihood options in order to 'stay well' within northern Malawi's patriarchal and patrilocal social system. Women were always meant to be in the hands of men, and were transferable between patrilineal lines of husbands or male kin. From childhood, women were mobile, and when they grew up, married away from home. They then relied on their husbands and in-laws to access land and housing. Men and their families dominated decision making over women and children's residence. Both fertile and secondary infertile women could

easily lose their children through childhood mortality and custody norms following divorce. As in many patrilineal societies, women's livelihoods were relatively insecure, whether they had children or not, until they were firmly accepted in their husband's household, which might not be until they had grown-up sons. Even then, if their sons left or their husbands died, they might be vulnerable to transfer again. This was one of the reasons women maintained links with their natal home: to maintain a potential refuge if they left their marriage.

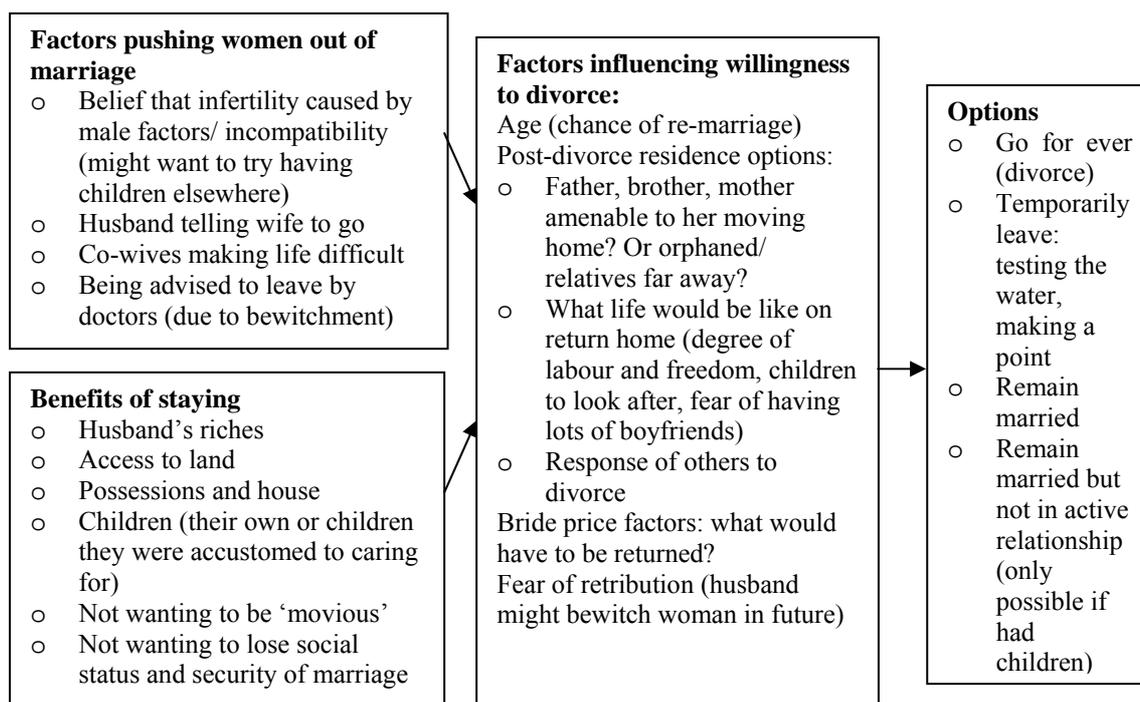
Infertile women's strategies for 'staying well' included marrying polygynous men who already had children, divorcing men who mistreated them or who had co-wives who poisoned them, bringing in other women's children to the household, withdrawing from marriages to try to force their husband's hand over issues like paying bride price, and, if single, participating in small-scale businesses, and having boyfriends. Infertile women in Malawi were relatively free to leave unhappy marriages or try to have children with different men after divorcing (or, perhaps, whilst still married, if they did so secretly). Yet actually having somewhere to go on leaving a marriage, and wanting to avoid being seen as 'too movious' (which was associated with a host of negative behavioural and moral attributes) effectively limited many women's willingness and ability to change patriline. Infertile women's options were practically limited by the prevailing moral and economic climate, which dissuaded excessive mobility among women, and provided no alternative legitimate life course aside from marriage and motherhood. In summary, although this social system worked systematically in the interests of the patriline, infertile women negotiated and manipulated their options and resources to try to secure the best outcomes for themselves. The following scheme summarises factors that influenced whether women stayed well in marriage (see Figure 14):

Figure 14 Factors affecting women’s wellbeing in marriage



Women’s self-perceived well-being was an important factor in whether or not they remained in a marriage. They were rarely passively ‘divorced’ by men. The patrilocal system meant that it was women who had to physically leave the conjugal home, and they usually made the ultimate decision if and when to leave. Women were also more seriously affected by marital disruption than men, because they had to re-establish themselves in a new life. Figure 15 summarises the complicated factors that women had to weigh up if they were not ‘staying well’ when deciding whether to leave the marriage or not.

Figure 15 Factors affecting women's decisions to stay in, or leave, marriage



Women's choices depended on factors such as quality of life at home (relationship with family, boyfriends etc), and previous bad experiences related to infertility within marriage, which might delay or deter them from re-marriage. Several women stepped out of normative roles at this stage and attempted a more autonomous life, running small businesses, with the support of boyfriends and family members. In health terms, this was a potentially riskier way of life, as women wanted and required boyfriends. Yet without alternative and more widely acceptable life courses available, there were few other options for women who found that a normative life course was not an attractive and/or achievable option for them.

In sum, infertile women might have felt compromised in some respects by not having children, such as when they felt that they could not rely upon their husband indefinitely for marital support. In spite of this, they had numerous other resources to exploit: their labour, their sexuality, their good behaviour, the money that had or had not been paid for them (which enabled them to withdraw from their marriages until their husbands behaved in an acceptable manner), and their social networks. Infertile women might have had their choices compromised in some instances, but they also less to lose in others. Childless women did not have to consider the down-side of leaving children behind if they wanted to leave an unhappy marriage. They still struggled and strategized to stay well, and could act assertively to achieve what they wanted. One succeeded in

encouraging her husband to get rid of her lazy, but pregnant, co-wife. Another showed her anger at her husband treating her differently due to her infertility by leaving the marital home until her demands were met. Her husband soon relented and she returned to him. Infertile women did not tolerate an inferior position to a co-wife, which was one reason why infertile women whose husbands married other wives often soon divorced.

10.2.7 Infertility and reproductive health

Women with primary and secondary infertility, measured using demographic definitions and by their use of fertility treatments, were more likely to be HIV positive than pregnant women (though were not significantly more at risk than other women who had not recently given birth for various other reasons). This result was expected, partly due to the fertility depressing effects of HIV. What was not clear was whether infertile women were more likely to engage in high risk sexual behaviours that might make them more vulnerable to HIV. Qualitative data on all risk factors apart from divorce did not indicate that infertile women were likely to have sex outside marriage to get pregnant, or necessarily be involved in transactional sex. Few life histories fitted previously suggested models of why infertile women might represent a risk group for HIV and other STIs due to their sexual behaviour. This may have been because the sample was predominantly a rural population, and infertile women may have been more likely to move to urban areas (see section 2.2.1). It might have been because study methods were inadequate for picking up reports of risky sexual behaviour. In the absence of evidence suggesting otherwise, increased likelihood of divorce remains the most plausible pathway by which infertile women are exposed to HIV risk in this area. Survey data showed that infertile women were more likely to be both currently and ever-divorced, and in this population, being ever divorced raised likelihood of HIV.

The qualitative data illustrated an intractable problem faced by several infertile women, who had divorced, and wanted to get pregnant before marrying again, having been disenchanted with married life without children. For personal and economic reasons, and because they wanted to keep trying to get pregnant, they had multiple sexual partners: an obvious risk factor for STIs. Regular condom use was an unviable strategy, partly because it prevented pregnancy.

Affected women rarely spoke of their infertility being caused by HIV or other STIs. Although this was probably partly because they wanted to dissociate themselves from

blame linked to STIs, the fact that a link between HIV or AIDS and infertility did not emerge from unaffected women's data either suggests that women are not aware that HIV depresses fertility, though it is recognised as contributing to maternal and infant mortality. It would probably be seen as a side-effect of the more obviously compromised health status of a woman with chronic AIDS illnesses, as severe conditions obviously limited childbearing. However, in reality, HIV depresses fertility before the appearance of clinical symptoms (Gray, 1998).

Infertility was not clearly demarcated as a separate issue within local conceptions of reproductive health. It was one of many issues that women faced in successfully building and safeguarding a family. This does not mean that infertility was not a valid subject of enquiry, but rather supports the argument that infertility should be integrated into the overall RSH agenda. RSH concerns experienced by other women had many characteristics in common with infertility in terms of the perceived aetiology of conditions, and the ways that women sought treatment or attempted to avoid further risks. Fertile women's RSH also suffered from inadequate access to information and services, fear of witchcraft and STIs, unreliable husbands, and above all, concern about poverty and livelihoods.

10.3 Reliability and validity

The following section describes steps taken to increase reliability and validity, and how valid and reliable the findings are. Reliability describes the 'degree to which the finding is independent of accidental circumstances of the research' (Kirk and Miller 1986; 20). Although each life history interview was the unique product of an interaction between particular individuals in a specific time and place, reliability concerns the degree to which similar findings would be drawn if the study were repeated using the same methods (Perakyla 1997). Validity of qualitative research can be thought of as how far observations made 'accurately represent the social phenomena to which they refer' (Hammersley 1990; 57). Validity of interpretations can be judged by internal consistency and plausibility of findings, which is achieved through rigorous and systematic analysis of data (Mason 1996; 147). The case by case analysis of women's life histories in which each story was given equal weight and considered against emerging hypotheses was one important way of ensuring validity. Another was to triangulate data sources. This study used different qualitative methods (interviews, group discussions, field observations, and informal interviews), and contextualised

qualitative findings using survey data. The different qualitative methods produced different types of data, but the fact that findings could be synthesised into a coherent whole suggested that findings did reflect widely shared local understandings and an identifiable moral framework.

10.3.1 Interviewer and participant effects

The interactions that occurred between the principal researcher, local interviewers, and participants, are what created the life history data (Harrison and Montgomery 2001), so what they thought of each other, and the way they wished to portray themselves to each other, were key factors in shaping the data. Participants met the principal researcher and interviewers with hospitality and enthusiasm on all but a couple of occasions. Certain aspects of the principal investigator being an obvious outsider (as a white British woman) were helpful when introducing the study. Access to households was readily granted, and participants were generally interested in receiving a foreign visitor. However, it also gave the data a particular character. Participants often informed the principal researcher about unusual or ‘traditional’ phenomena that they felt would be of special interest to her as an outsider. It was important to have enough background understanding of the social environment to be able to differentiate between these traditional/unusual pieces of information, and what constituted the daily reality for most people, and to understand the relationship between these two types of knowledge.

The principal researcher aimed to standardise interviewer effects in LH interviews through careful training (asking open-ended, non-leading questions, appearing non-judgemental, and actively listening). This entailed considering the principal researcher’s and interviewers’ biases and preconceptions. However, interviews were not conducted in a standard fashion across the study period. Multiple influences determined the depth and tone of questioning: the amount of time available, rapport with the participant, the relative age of interviewer to the participant, whether they felt confident or intimidated, and at what point the interview was carried out in the course of the research. At the start of the research, interviewers were rather timid. This was quickly replaced with a brusque professionalism, which seemed to increase participants’ unease. This was discussed with interviewers, who returned to a more natural, relaxed style of interviewing which produced the most fruitful life histories. If interviewer or participant variation meant that some details were missing or unclear following interview, a follow-up interview was arranged where further individualised questions were asked.

Problems were encountered when initially framing the life history questions which affected the interview schedule's reliability in the early days of research, as women did not always understand what the interviewer was trying to ask, and often attempted to second-guess the meaning of questions. For example, women were asked how they 'felt' about experiences ('how did you feel when you got married?', 'how did you feel when you weren't getting pregnant?'). Some women expressed emotional responses (happiness, sadness, or 'admiring' other people's children). However, in general, this question confused women. The first difficulty was that the verb 'to feel' in Chitumbuka (*kupulika*) also means 'to hear' and 'to understand'. One can specify 'how did you feel in your heart?' but the meaning of this question was often not clear to participants. People variously understood it to mean 'how did you feel [touch] your husband in the bedroom?' (F45) and 'how did you feel in your body when you married?' In light of these difficulties, questions were made more open ended so that women could focus on more tangible aspects of their life, such as 'what things changed after your husband married another wife?' This usually prompted women to talk about changes in material provisions or changes in living arrangements, which were equally useful responses in terms of understanding marital dynamics.

Participant effects applied to both qualitative and quantitative data collection. What participants chose to focus on or omit was influenced by numerous motivations and background factors (e.g. education, desired projected identity), and anticipated shared meanings (what they thought would be meaningful to their audience). Thus participants might not have responded 'truthfully' to survey or in-depth interview questions according to one or more of the following 'biases'.

Interviews were created according to how participants wanted to project their identity. This 'identity work' proved fundamental to understanding women's life stories. However, there were times when projected identities obfuscated the more concrete details about life courses that interviewers were attempting to collect, such as whether they had actually ever visited hospital for treatment. As one would expect when carrying out research in a poor community, some women focused on their poverty, and these were often the women who also asked for material assistance, so it made sense for them to stress their need, in the hope that they would receive some treatment or money. Other women presented themselves as stoical survivors, and were reluctant to complain

about any aspect of their health or marriages, even if they had revealed unhappy experiences when probed.

How participants perceived researchers also affected data collection, and one important variable was whether women wanted to align themselves with the perceived sympathies of the researchers, or resist what they felt the researchers represented. Some women associated the researchers with family planning and biomedical spheres, and paid extra attention to these topics accordingly. Others said they had never used traditional fertility medicine, and concentrated on their hospital experiences. Only when probed about traditional medicine did they describe long courses of traditional treatment. They may have thought the researchers would be uninterested in traditional medicine, or might have thought that use of traditional medicines was so obvious that it was not worth mentioning. Several women appeared to try to identify themselves with the researchers, with assertions that hospitals had superior knowledge, and that only ‘those people at the hospital’ could know what ‘really’ caused infertility. Likewise, many women who had not been to hospital said they were thinking of going, and it was difficult to know whether they were really planning to do so, or whether they felt they should say this as they did not want to conflict with researchers’ values, or did not want to appear ignorant for not having been. Others wanted to make it clear that their values differed from those they considered the researchers to represent. For instance, when F22 was asked why she had not been to hospital for a reported medical condition, she described how she had self-medicated, and told us of her expertise in traditional herbs, actively contesting the interviewer’s implicit suggestion that hospital treatment had a higher value than her own treatment system.

On sensitive topics concerning sexuality and reproductive health, people may provide normative, socially acceptable responses, and may conceal behaviour they believe to be deviant or abnormal (social desirability bias) (Huygens et al 1996). Social norms meant that certain subjects could not be accessed easily during interviews, and it was even difficult to judge the degree to which women under-reported or omitted discussion of certain subjects. Topics identified as taboo or restricted included talking about aspects of current marriages, induced abortion, and female infidelity. This limited the extent to which some of the research hypotheses (e.g. sexual risks that infertile women might be exposed to) could be addressed. It had not been clear before the study began how open women might be about these topics. In a previous study in Mozambique, for instance,

almost all infertile women admitted to extra-marital relationships in an attempt to get pregnant (Gerrits, 1997). It was impossible to tell whether differential findings from Malawi represent differing behaviour, or differing propensity to report such behaviour, or both. No perfect means exists for finding out about highly sensitive behaviour or beliefs. Methods such as diary writing or secret ballots were not appropriate to the study, and would have conflicted with the in-depth, rapport building nature of the interviews.

Recall bias might have affected the reliability of facts. Recollection of dates was often problematic, especially with regard to marriages. Women with children often used birth dates to chronologically structure their lives, a strategy unavailable to women with primary infertility. However, it did not necessarily damage the reliability of qualitative findings if dates were inaccurate: the important aspects of life stories were how events related to each other, and interpretations of cause and effect. Recall bias could even indicate which events and processes women considered significant, which helped in understanding motivations and women's own interpretations of their lives.

Not all women complied with the researchers' encouragement to tell stories or respond to open-ended questions. Only two women explicitly declined to participate. However, several women consented, probably out of courtesy, but subsequently tacitly resisted participation, or avoided discussion of certain topics, through only providing monosyllabic answers and not making eye contact with, or turning away from, the interviewer. This could limit the completeness of factual aspects of their life histories. However, it was informative to note which issues women of certain ages and statuses were not willing to discuss. The process of getting married was one such topic, especially in younger women still married to the husband in question. Women were frequently reluctant to talk about their current husbands, even when they were comfortable talking about themselves. They were unwilling to speculate on certain questions relating to their current husbands (such as how many children he had outside of their marriage, whether he 'goes out of the house', why he married another wife, or what he felt about their fertility problems). These were often met with answers such as 'I can't know what is in his heart', or 'I can't know his business', reflecting the privacy with which a husband's own affairs were regarded. It was not considered appropriate to talk about one's husband's private life to a third party.

All these factors were perhaps unavoidable and did not render data unreliable, though the principal researcher had to take them into account. There were other factors that affected data reliability and completeness, which were addressed with practical steps, including explaining carefully the confidentiality of findings, making sure that the interview took place where nobody could overhear, ensuring that interviewers did not appear judgemental, and using same-sex, local interviewers.

In summary, biases usually considered problematic in survey data may be informative in qualitative analyses. Exploring the shape and direction of social desirability bias and what women were not willing to talk about, and how they wanted to project their identity according to their circumstances, provided greater detail about the ‘frames of explanation’ that women used to structure their narratives. However, biases concerning topics that women were unwilling to discuss means that the scope and generalisability of findings is limited.

10.3.2 Interpretation of data and validity of findings

Issues of validity and reliability were considered throughout the process of data analysis, from transcribing interviews to presenting findings. The potential loss of richness of data resulting from transcription was addressed by making detailed field notes during each interview. They described the surroundings, the tone of people’s voices, their body language, and misunderstandings, pauses or laughter. Reference to these notes during analysis aided interpretation and recollection of each interview (see Appendix I for an example). This process also encouraged the principal researcher to maintain a reflexive awareness of the ‘constructed’ nature of the interviews (Riessman 1993). Local interviewers added explanatory comments to transcripts if the dialogue was unclear.

The principal investigator was able to read Chitumbuka competently and compiled lengthy records of important phrases and technical terms. The Chitumbuka/English transcripts were referred to repeatedly during analysis and writing up. Over time, an understanding developed of the cultural constructs expressed in language, and the meaning of common sayings (e.g. ‘staying well’, which entailed a range of qualities that needed to be explored). There was a danger in reading widely used expressions, which people used to make sense of their lives, too literally. Phrases such as ‘it’s up to God’, ‘I just stayed’, ‘children are good because they fetch water’ represented deeper meanings

that they expected to share with their audience. For instance, when talking about the value of children or husbands, women typically used an economic paradigm ('he brings soap'). These phrases needed to be unpacked, as they alluded to emotional and moral dimensions. In order to understand Chitumbuka well, its phrases and their context, usage, and relationship to observable phenomena had to be considered.

Several other strategies were taken to minimise misunderstandings and improve insight. These included the principal researcher living in Chilumba for ten months (three months of which lodging with a Malawian household), learning Chitumbuka, and teaching interviewers about study objectives and principles of social research. By collaborating closely with local staff (especially interviewers and KPS fieldworkers) during the study's development and analysis, both insider and outsider perspectives were employed. Findings were continuously related back to local staff, and were fed back to participants, whose comments were carefully considered.

10.3.3 Validity and reliability of quantitative data

Although survey data are often considered more reliable than qualitative data, several errors in survey data emerged when following up LH women. Cases were found in which women's marital status and number of children did not concur with KPS records, even taking into account changes that had occurred since they were last interviewed. For example, a local bar girl was reported as divorced with one child, and was selected for interview for these reasons. She later insisted that she had three children. This was not a data entry error: she had told KPS fieldworkers in an earlier interview that she had one child. Perhaps her other two children were from a previous relationship or did not live with her; perhaps she had no interest in being a 'reliable' informant. However, provided such errors are relatively rare and do not fall systematically in one direction (e.g. women routinely underestimating the number of pregnancies they have had), they should not affect overall findings in a sufficiently large dataset.

10.3.4 Limitations of study

The limitations discussed below affect the generalisability and scope of findings. Firstly, the sampling strategy for LH women was limited by age, geographical distribution, and gender. There could have been greater efforts to corroborate infertile women's accounts by gathering more information from other key actors, such as husbands, in-laws, and service providers. Secondly, the time frame of the study limited

conclusions about the longer term effects of infertility. The demographic definitions of infertility used in survey analyses were also limited in terms of what they added to understanding the lived experience of infertility.

The time span of the study meant that concrete connections between events in women's lives could not be made with certainty, due to the constructed nature of the qualitative data. Following women over a longer time period, with repeated interviews, might have been a more effective way of establishing life histories and the effects of infertility within them. A longitudinal quantitative study would also have been valuable, for addressing the question of whether infertile women really were at greater risk of HIV or polygyny than other women. Such a study would have to take place over several years or in a larger population, reflecting the time required to observe enough events such as incident HIV cases or divorces to draw firm statistical conclusions.

The LH women were all from a rural area, and may have excluded infertile women with riskier, more mobile lifestyles, such as those who divorced and sought alternative livelihoods or a more socially accepting environment in towns or cities. This pattern of migration was found in a study of infertile women in Tanzania, where a high proportion of commercial sex workers in trading centres were infertile (Boerma and Mgalla, 2001). Although there were no towns in the study area, two trading areas were included. In many ways trading centre life was similar to urban life, as there was a more tolerant social environment for unconventional life courses. In addition, several infertile LH women had lived in towns and had returned to their rural homes, so the urban perspective was not entirely lacking from qualitative data.

One disadvantage of selecting from a limited age range (c. 20-30 years) was that some of the younger women had not spent long enough in adult life to have accumulated the long, complex histories that older infertile women recounted. Many effects of infertility might not become apparent until older ages, as years could pass before couples divorced, or women re-married. However, younger women's stories were still valuable, representing journeys up to a certain point in the experience of infertility, even if particular 'outcomes' had yet to arise. Recollections of these early stages of infertility were often vague among older women, particularly if no dramatic events had occurred during this period. To compensate for this narrow age focus, some data were gathered on infertility in older women by interviewing five infertile women aged over 30. These

interviews were of a different character from those with younger women, which in itself was telling about age and gender norms. As well as having fewer substantive events to recount, young women were not accustomed to recounting their life histories, and often considerable encouragement was required before they relaxed into the interview. The life history format seemed more suited to older women, who responded with ease to the model.

The focus on women was deliberate but necessarily limiting. A gendered perspective on infertility, which has been implicit throughout this thesis, requires active engagement with men as well as women, and in retrospect, this study could have benefited from more insights from men. For instance, women might have omitted details that their husbands could have provided, such as their motivations for marrying additional wives. When husbands were talked to, either in interviews or informal conversations, they generally recalled more specific details about seeking treatment and dates of marriages than their wives, because they often had a higher standard of education, and because the responsibility to remember this sort of information largely lay in the male domain. In practical terms, it would have been difficult to interview husbands of infertile women separately, because issues of trust and confidentiality would have arisen (both parties would have had to trust interviewers not to inadvertently or otherwise reveal information about them), and it would have been undesirable to interview them together, due to social unease about talking about personal matters in public with one's spouse.

Demographic measurements of infertility have never claimed to represent perceived infertility. They are used to indicate whether populations are suffering from pathologically high levels of infertility, which indicates underlying health problems such as STIs, and are useful for comparing populations over time and space. They can not take into account contextual factors that render infertility meaningful as a health or social problem. Thus measuring infertility using demographic parameters and analysing these results by relating them to qualitative data was not a perfect comparison, though one would expect demographic measures of infertility to relate in some way to self-perceived infertility, as it did in this study (50% of women using fertility treatments were also infertile according to demographic definitions).

Depth of insight into experience of infertility could have been improved by employing more ethnographic methods (living longer in the study area, learning Chitumbuka to a higher degree of fluency, and carrying out longer term participant observation, perhaps within infertile households), but these methods would not have allowed as many varied life histories to have been collected. A balance had to be struck between depth and breadth of data collection methods within the time available.

10.4 Implications and recommendations

10.4.1 Applicability of findings

Before implications are discussed, it is worth considering the generalisability and applicability of findings to other geographical areas. The sampling strategy aimed to select enough women to enable a good understanding of the situation of infertile women across the study area. However, it is unlikely that findings would be exactly replicated in other areas of northern Malawi, let alone other areas of sub-Saharan Africa. In the area immediately north of the study area, towards Karonga, one begins to find different language groups (mainly Nkhonde), and more Tanzanians. They would probably differ in their responses to infertility, as they are said to differ in other aspects of social life, such as marital norms. The aim of this study was not to generalise about Malawi as a whole, but to study infertility within a specific area, and to provoke wider thought and analysis on the subject of infertility as a result.

These findings might also prove insightful where fertility remains high and youthful; where a high economic, moral and symbolic value is placed on children; where people want to prove their fertility early in life and/or marriage; and where infertility is associated with negative social or health outcomes. These are countries in which infertile women stand out most because voluntary childlessness is rare, and where there is little biomedical support for infertility. In such contexts, infertility is a problem that many people experience, and that even more people fear. Yet it is precisely these contexts in which RSH services are ill equipped to deal with infertility, and in which policy and research pays little attention to it. So although the following implications are drawn for the specific study area, many of them pertain to countries with similar demographic profiles and RSH challenges, including much of sub-Saharan Africa, and parts of southern Asia. In Malawi as well as many other countries, the implications of this study would be best addressed by improving overall health systems, women's status

and education, and reducing poverty. Infertility is an area of RSH in which inequalities between rich and poor are starkly illustrated. Ever more expensive technological solutions are available in richer countries (and to richer people within them), while poor countries struggle to provide basic RSH resources (Raymond 1993). Bearing this wider observation in mind, the following discussion is limited to specific areas within RSH.

10.4.2 Infertility and sexual behaviour

Infertile women were more likely to be HIV positive and currently or ever divorced. These results require careful interpretation, because they are not evidence in themselves that infertile women are more likely to have 'risky' sexual behaviour. There was little evidence that infertile women in the study area had particularly risky life courses, apart from their increased likelihood of divorce, which was a risk factor for HIV. There may be further stigma attached to infertility if it is labelled as a condition associated with 'risky sex'.

Yet divorce and re-marriage are not appropriate subjects for standard behaviour change communication programmes in the way that postponing sexual debut or reducing numbers of sexual partners might be. Although consistent condom use, faithfulness, or abstinence before marriage would effectively protect young people from acquired infertility, it is difficult to suggest how infertile women can realistically protect themselves against HIV, as they are unlikely to abstain or use condoms if they are trying to get pregnant. The ABC strategies are unrealistic options for many rural married women in sub-Saharan Africa even without the added complication of infertility. Schatz found married women in Malawi to have developed an alternative hierarchy of risk reduction strategies, none of which included the ABC approach, because this was simply unviable for them (Schatz 2005). Behaviour change programmes have yet to confront the challenge of promoting safer sex when a couple is trying to conceive. Likewise, it is difficult to advocate recommending that women remain in one marriage to reduce HIV risk, as this marriage might be unhappy, unfaithful, and more damaging than re-marrying elsewhere. Thus this thesis does not make recommendations for behaviour change campaigns targeted at infertile women. Rather, areas for improving infertility prevention and management are suggested.

10.4.3 Improving women's RSH knowledge and skills

The prevention and treatment of infertility could be jeopardised by incomplete knowledge about its causes. The perceived importance of supernatural influences on women's fertility meant that women rarely linked their own infertility with STIs. Although women were aware of STIs, and in particular HIV and AIDS, most did not clearly understand the causal link between STIs and infertility, and did not make the link in their own cases. In almost all interviews, women lacked detailed knowledge about biological and traditional causes of infertility (both were specialised, restricted domains of knowledge, especially for young women), which led to them feeling powerless about their condition, and unable to negotiate or comprehend treatment in either sphere. People saw STIs as diseases of promiscuity that affected 'other people', and evaluated the risk that someone was infected by examining that person's sexual history, rather than assuming that anyone could be affected. Men and women 'from outside' were considered more sexually risky, and STIs were not considered dangerous to fertility until symptoms started to appear. As Dyer (Dyer, Abrahams et al. 2002a) notes in a South African context, local health providers should be aware of the disjuncture between medical causes of infertility and what their patients believe to be causing it.

In resource poor settings, the main focus with regard to infertility has to be prevention, because even expensive treatments for infertility have limited success. Accurate biological knowledge forms an important part of being able to avoid STIs, seek the appropriate treatment for STIs and infertility, and maximise chances of conception. To be able to act upon this knowledge, women need practical communication and empowerment strategies. Re-focusing health education to include messages about fertility protection could increase the relevance and strength of public health messages. As Leonard argued following her work amongst infertile women in Chad: 'The threat of infertility may, in some settings, be one of the most compelling reasons to practice protective behaviours' (Leonard 2002; 106). This approach has been advocated by the Population Council under the title 'triple protection' (against STIs, unwanted pregnancy and infertility) but has only been implemented in a few areas in urban India and Nigeria (Brady 2003), and as part of the 'Stepping Stones' training package in South Africa⁶⁰ (Welbourn 2007). They argue that rather than focusing on death and disease, protecting fertility strikes a more immediate chord, and is more amenable to open discussion.

⁶⁰ A participatory training package in gender, communication, relationship and HIV skills.

Fertility protection messages could be incorporated into education on STIs and the risks of youthful pregnancy and inadequate ANC and obstetric care. These messages could also be introduced into school RSH lessons, and community outreach sessions, which are a common way of disseminating public health messages in rural sub-Saharan Africa. At present, these subjects are not discussed in detail at school in Malawi until Standard 5, or when children are considered ‘old enough’ (entering adolescence). Many women leave school before this, so one recommendation would be to increase primary school education in RSH education and accompanying life skills at younger ages. This has already been advocated for Malawi by some researchers (UNFPA and University of Southampton 2000). In particular, the lack of awareness that STIs without symptoms can damage fertility needs addressing.

An example of combining these ideas into a practical means of preventing infertility and addressing other RSH priorities would be to adapt current advice for young couples to attend VCT for HIV before marriage. Due to stigma around HIV testing, and the couple not wanting to appear to distrust each other, few couples actually comply with this recommendation. This advice could be repackaged using the concept of a ‘fertility MOT’, whereby a couple’s health and readiness to have children was checked. This could include a range of health checks and questions, and couples attending would not necessarily be associated with having had extra-marital sexual relationships. This might be a more accessible and attractive option to young couples, and would also meet with the support of their families more readily.

10.4.4 Qualitative data needed to appreciate nature of infertility

This study raised questions about the way that infertility is measured, which in turn has implications for how public health priorities are addressed. Childlessness by age 45 among women in the study area was five percent, relatively low compared with neighbouring countries, but the experiences of LH women suggested that this represents the tip of the iceberg in terms of lifetime experience of fertility problems. Women with children feared losing them to death or divorce, and could easily end up childless if their fears materialised. Other women spent many anguished years seeking treatment before eventually having a child. The infertility measured by most surveys captures only a small proportion of fertility problems, because they only count woman with five or even seven years’ exposure to pregnancy without a live birth. Perceived infertility is much more widespread, as concern begins if women are not pregnant only a few months after

marriage. Complementing qualitative studies with survey data allowed a fuller appreciation of the relationship of perceived to measured infertility, and the implications and importance of infertility as an RSH concern. Without in-depth work such as this, issues like infertility, which might appear of limited importance at a statistical level, but which provoke great concern on the ground, might be neglected, with implications for the comprehensiveness and acceptability of local services and health messages.

10.4.5 Incorporating infertility into RSH

This leads to the recommendation that issues around infertility should be considered more carefully when planning, setting priorities, and interpreting behaviour in RSH. An opportunity exists to reduce acquired infertility in a tangible and resource efficient way, complementary to current HIV/AIDS reduction and RSH programmes. Leaving infertility out misses an opportunity both to help infertile couples, and to improve the overall effectiveness of RSH programmes, even for those not directly affected by infertility. This is because infertility represented a paradoxical situation to many people. They cared about it deeply, and it threatened important social values, but institutions that purported to promote reproductive health and help ‘plan their family’ provided ‘no help’. In this respect ‘family planning’ was more than a misnomer, but provoked distrust within a country with a history of concern that supra-national forces wanted to limit their numbers and sterilize people. Infertility could be incorporated into basic sex education, strategies for improving the status of women and gender relations (e.g. encouraging people not to blame women for infertility), and improving provision of RSH services such as management of STIs. By shifting the focus slightly and providing additional services tailored for infertility, real improvements could be made to infertility prevention and treatment, with knock-on effects for other areas of health.

Women often believed that hospitals did not take infertility seriously, and offered few and inappropriate services, which was perhaps unsurprising given the demands on providers’ time and resources, and the fact that infertility management is not a designated priority. If infertility is not taken seriously, and women fear that contraceptives can cause infertility, this may deter or delay women (and those who influence women’s ability to access contraceptives), from trusting and using modern contraceptives (UNFPA and University of Southampton 2001). Many women in this study voiced fears that contraceptives, both traditional and modern, caused infertility. This connection has also been reported in other sub-Saharan African settings (Richards

2002; Castle 2003). Although contraceptive use has increased in recent years in Malawi, such suspicions are likely to hinder the pace of uptake. Women were concerned about the effects that hormonal contraceptives had on their bodies, and rumours about contraceptives could not have helped engender more positive attitudes to contraception amongst older people and men, whose attitudes influenced women's access to and choice of contraceptives. Issuing flat denials or dismissing women's fears is an ineffective way of resolving these issues, as they are rooted within a wider climate of distrust. Introducing a truly holistic RSH service with clear objectives to not just limit, but also to protect fertility, would help to dispel rumours that the government or international community was primarily concerned with suppressing fertility using malevolent means such as sterilising contraceptives.

Fears also stemmed from lack of biological knowledge and understanding of how methods worked. Significantly improving levels of knowledge would require a concentration of efforts from primary school onwards. But within the RSH sphere, the best way to assuage fears would be to implement truly comprehensive RSH services, including infertility services, and providing detailed explanations of different contraceptive methods, including realistic descriptions of potential side effects, so that women are not as alarmed if they experience them. At present, taking into consideration observations made at Chilumba family planning clinic, and stories told about the unconventional means by which women obtained and used modern contraceptives, it seems that services are far from satisfactory, and the understanding of women receiving contraceptives is currently inadequate.

Some have forcefully argued that the suffering caused by infertility is comparable with that of other diseases, and that it should be possible to provide assisted reproductive technologies in developing countries, perhaps through building public-private partnerships (Richards 2002). At present it is unrealistic to recommend introducing expensive infertility therapies to countries like Malawi, but there are some simple steps that can help couples to understand and manage their condition, and optimise their chances of conceiving. In addition, underlying infections or physical damage related to the cause of infertility could continue to affect women's health (Daar and Merali 2001), and these problems could also be addressed if specific infertility management clinics were offered as part of wider RSH services.

Findings about treatment-seeking in this study confirm that an important part of the process is concerned with women or couples feeling as though they are taking some action by visiting a traditional healer. By doing ‘something’, they make a public statement that they want to get pregnant. When they arrive at the consultation, they are taken seriously, receive a lengthy consultation, and are given herbal medicines and advice about future action. This motivation to take public action could be capitalised upon by RSH programmes, by offering basic counselling, health advice, and treatments at rural hospitals, even if this cannot guarantee results (after all, traditional medicine can not do this either). Infertile women or couples could be offered the best infertility management available, and also be provided with other advice and services (Dyer, Abrahams et al. 2002a; see 10.4.6). Although infertile women may continue to visit traditional healers, they should be encouraged to visit the hospital at least once to see if there is anything that can be done for them. If they do visit the hospital, there should be guidelines in place for addressing both infertility and other health issues. Awareness should be raised among health providers that infertile women are more likely to be HIV positive, and thus deserve particular attention when seeking services in this respect.

Many of these recommendations (detailed in Table 19) have been made before, and findings from this study strongly support the recommendations of an expert group on the ‘Application of Human Rights to Reproductive Sexual Health’ (United Nations High Commissioner for Human Rights 2001). At present, there is a dire need for a basic care package for managing infertility in resource-poor settings, which would help to incorporate infertility into wider RSH services (Sundby and Larsen 2005).

Table 19 Suggestions for improving infertility prevention and care in resource-poor settings

<p>Prevention:</p> <ul style="list-style-type: none">○ Safe abortion (would require policy change in Malawi) and post-abortion care○ Improving obstetric practices○ Community education dispelling myths, disseminating information, describing treatment options○ Invest in effective STI prevention strategies <p>Infertility care:</p> <ul style="list-style-type: none">○ Counselling: learning about ‘fertile period’, lifestyle factors to increase conception chances, psychosocial counselling, group therapy○ Involve men in infertility management so that women are not automatically blamed○ Referral centres for management of infertility○ Provision of clinical guidelines and simple diagnostic tools (e.g. home testing kits for sperm quality and ovulation) <p>Prevention and care:</p> <ul style="list-style-type: none">○ Involve both partners in testing and treatment of STIs

SOURCES: Population Info Programme 1983; Okonofua and Datta 2002; Sundby and Larsen 2005

The secondary benefits of these programmes have also been emphasised by practitioners in the field. Okonofua argues that programmes geared towards reducing infertility also reduce STIs, increase contraceptive prevalence rates, and reduce RTIs, indirectly reducing maternal mortality and morbidity, as well as building community trust by providing a service that is responsive to local needs (Okonofua and Datta 2002). This final point about considering the wider community is important. Experience of infertility, and treatment-seeking, were found to be public processes, and an extended circle of relations was involved in infertility management. They often had more power in determining the course of treatment than the affected woman, and would also need to be involved in efforts to improve infertility education and services.

Only two accounts of incorporating basic infertility services into primary health care in developing countries have been published in recent years: one in India and one in Nigeria (Shears 2003). Both give positive accounts of their reception within their respective communities, although no more than 10% of their clients succeeded in having a child. However, these settings, although still poor, were not as limited in resources as Malawi, and both were in urban areas with basic laboratory facilities. Both recommend that counselling should be taken more seriously and recognised as part of treatment, even if success rates of infertility management are not particularly high, in order to mitigate some of the negative psychosocial consequences of infertility.

10.4.6 Increasing access to health services for infertile women

At present, preventive health and screening activities are centred in local hospitals in clinics for childbearing women. Infertile women, especially those with primary infertility, rarely have cause to attend antenatal clinics, family planning clinics, or Under Fives clinics, which are the main doorway to routine public health information and education. Clinics typically include a group education session on topics from domestic hygiene, to healthy eating, STIs, family planning, and how to live positively with HIV. These routine visits for childbearing women are also a chance to collect subsidised mosquito nets. Until recently, it would have been highly unlikely that infertile women would have had easy access to VCT for HIV, as this was mainly provided through ANC clinics (alternative testing opportunities have now become more accessible). The fact that women who do not routinely attend these services are also more likely to be HIV positive (and probably have higher levels of other STIs) doubly disadvantages them, as they are less likely than other women to come across testing and treatment opportunities, such as ART and group therapy. Incorporating basic infertility management and counselling into existing RSH services would provide an opening for infertile men and women to access these wider health services.

10.5 Future work

Directions for future work are grouped into two categories: interventions to test the effects of incorporating infertility into RSH services and outreach activities, and further analyses that could be performed on future survey data (such as those to be collected by KPS during their 2007-2011 programme), which illustrate how some of the hypotheses raised about infertility and its effects on the life course could be quantifiably tested using longitudinal data. The usefulness of additional qualitative work on the general importance and experience of infertility to women in sub-Saharan Africa is probably questionable at present, as similar findings and messages have emerged from across the continent. Qualitative approaches could, however, assess the acceptability, quality, or perceptions of interventions or services for infertility in resource poor settings if these are introduced in future. The arguments for incorporating infertility into RSH in developing countries have been made eloquently and passionately by many, with little to show for it in terms of action to address infertility more effectively. The priority for future RSH research on infertility should be to back up these arguments with evidence of the cost and effectiveness of pragmatic ways to tackle infertility.

Several recommendations have been made as to how RSH services could better incorporate infertility management. As yet, there have been no studies to evaluate the effectiveness of such programmes. It could be argued that access to such services is a basic reproductive right. However, a stronger argument would result from evidence that such services provide wider secondary benefits. The relationship between providing infertility services and increased trust in modern contraceptives, for example, is neither simple nor direct, so this outcome would have to be measured. A pilot intervention, monitoring the effects of introducing infertility prevention and management into RSH services in a resource-poor setting such as rural northern Malawi, would help to answer this question, and would also indicate whether women were willing to visit hospital for fertility problems if more time and appropriate efforts were spent on them. Outcome indicators to evaluate such services could include changes in the client base, STI treatment rates, contraceptive prevalence rate, and indicators of patient trust and satisfaction. Changes in perceptions of RSH services could be investigated with qualitative methods.

The effects of including infertility in RSH education at school or community outreach level could also be evaluated: whether triple-protection messages engaged more, or a wider variety, of people; and whether messages were better remembered. Ultimately one would hope to find evidence for behaviour change in the targeted groups. Qualitative aspects of change could include whether talking about infertility in public helped reduce stigma around infertility, or reduced blame on women, or encouraged more effective treatment-seeking by affected couples.

A longitudinal analysis that could identify (probably) infertile women and track them over the course of four years will soon be possible with a new KPS data collection programme called the Household Serosurvey⁶¹. This will be a continuation of the existing Continuous Registration of Demographic events, with the addition of a behaviour survey and voluntary counselling and rapid testing for HIV in people's households. Surveys and tests will be administered to all consenting adults (aged 15 and over) in the first and fourth years of the study, with yearly testing in younger adults. The behavioural survey will be able to identify cases of infertility according to demographic definitions using data on birth history, marital history and use of contraceptives. More

⁶¹ As of March 2007 this was awaiting final ethical approval from the Malawian National Health Sciences Research Committee and was due to begin data collection in September 2007.

detailed spouse data will also be collected. It will thus be possible to compare infertile and fertile women on numerous outcomes, such as incidence as well as prevalence of polygyny and divorce, incident cases of HIV, use of ART, and fertility intentions. The new programme will also collect detailed socioeconomic data, which will enable analysis of whether infertile women, or otherwise childless women, are materially disadvantaged. However, the study will still be limited by its relatively short time span, though demographic follow-up may continue beyond 2011.

Longer term future work might monitor how social and economic changes affect the experience and treatment of infertility. One such change could be that voluntary childlessness becomes more of a possibility for women. Voluntary childlessness has only become more widely acceptable in western societies through huge ideological and economic shifts, and there was some evidence in the study area that attitudes were indeed changing among some young women who were contemplating alternative, child-free life courses. This was an unusual group of young women, in that they were academic high achievers at school (Focus Groups 3 and 4). They stressed ambitions and values in contrast to those of typical rural women. They were aiming for 'modern' lives, discussing future identities for themselves that often involved having no children, and emphasising instead a professional career.

Other researchers have responded to the problem of infertility in developing countries by calling for research on 'innovative, low-cost assisted reproductive technology procedures that provide safe, effective, acceptable, and affordable treatment for infertility' (United Nations High Commissioner for Human Rights 2001; 2). Although at present there are no such technologies available in Malawi, and only a small proportion of the richest Malawians could possibly access the nearest centres in South Africa, one day this might change. If cheaper technologies became available, or Malawi became richer, legal, cultural and moral issues concerning their use would require investigation. Anthropologists and demographers will continue to debate these complex issues, which are faced by all societies confronted with technologies that alter the fundamental nature of human reproduction.

Bibliography

AbouZahr, C. and T. Wardlaw (2003). Maternal mortality in 2000: estimates developed by WHO, UNICEF and UNFPA. Geneva, WHO.

Adadevoh, B. K. (1974). Sub-fertility and Infertility in Africa. International Workshop on Correlates of Sub-Fertility and Infertility in Africa (1973), University of Ibadan, The Caxton Press (West Africa) Limited.

Araoye, M. O. (2003). "Epidemiology of infertility: social problems of the infertile couple." West African Journal of Medicine **22**(2): 190-196.

Barber, G. (2003). 'To tell or not to tell?': ethics and secrecy in anthropology and childbearing in rural Malawi. The ethics of anthropology: debates and dilemmas. P. Caplan. London and New York, Routledge: 133-154.

Barden-O'Fallon, J. (2005). "Unmet Fertility Expectations and the Perception of Fertility Problems in a Malawian Village." African Journal of Reproductive Health **9**(2): 14-25.

BBC. (2004, 22 March, 2004). "Nigerian state thwarts polio push." Retrieved 03/09/04, 2004, from <http://news.bbc.co.uk/1/hi/world/africa/3556777.stm>.

Bharadwaj, A. (2003). "Why adoption is not an option in India: the visibility of infertility, the secrecy of donor insemination, and other cultural complexities." Social Science & Medicine **56**(9): 1867-1880.

Bledsoe, C. (1990). The politics of children: Fosterage and the social management of fertility among the Mende of Sierra Leone. Births and power. W. Handwerker. Boulder, Colorado, Westview Press: 81-100.

Bledsoe, C. H. (1995). Marginal members: Children of previous unions in Mende households in Sierra Leone. Situating Fertility: Anthropology and demographic inquiry. S. Greenhalgh. Cambridge, Cambridge University Press: 130-153.

Bledsoe, C. H. (2002). Contingent Lives: Fertility, Time and Aging in West Africa. Chicago, The University of Chicago Press.

Bledsoe, C. H., F. Banja, et al. (1998). "Reproductive mishaps and Western contraception: An African challenge to fertility theory." Population and Development Review **24**: 15-57.

Bledsoe, C. H. and U. Isugo-Abanihe (1989). Strategies of child fostering among Mende Grannies in Sierra Leone. Reproduction and Social Organisation in sub-Saharan Africa. R. Lesthaeghe, University of California Press.

Boerma, J. T. and M. Urassa (2001). Associations between female infertility, HIV and sexual behaviour in a rural area in Tanzania. Women and Infertility in Sub-Saharan Africa: A Multidisciplinary Perspective. J. T. Boerma and Z. Mgalla. Amsterdam, Royal Tropical Institute: 176-187.

- Bolton, R. (1995). Rethinking Anthropology: the Study of AIDS. Culture and Sexual Risk: Anthropological Perspectives on AIDS. H. Brummelhuis. New York, Gordon and Breach: 285-313.
- Bongaarts, J. and R. Potter (1983). Fertility, Biology and Behaviour: An Analysis of the Proximate Determinants. New York, Academic Press.
- Bourdieu, P. (1996). "Understanding." Theory, Culture and Society **13**(2): 17-37.
- Brady, M. (2003). "Preventing Sexually Transmitted Infections and Unintended Pregnancy, and Safeguarding Fertility: Triple Protection Needs of Young Women." Reproductive Health Matters **11**(22): 134-141.
- Bruce, J. (1989). "Homes Divided." World Development **17**(7): 979-991.
- Caldwell, J. C. and P. Caldwell (1987). "The Cultural Context of High Fertility in sub-Saharan Africa." Population and Development Review **13**(3): 409-437.
- Caldwell, J. C. and P. Caldwell (2000). From STD epidemics to AIDS: a sociodemographic perspective on sub-Saharan Africa. Infertility in the Modern World. Present and Future Prospects. G. R. Bentley and C. G. N. Mascie-Taylor. Cambridge, Cambridge University Press.
- Castle, S. (1992). Intra-household variation in illness management and child care in rural Mali. Faculty of Medicine. London, University of London.
- Castle, S. (2003). "Factors Influencing Young Malians' Reluctance to Use Hormonal Contraceptives." Studies in Family Planning **34**(3): 186-199.
- Cates, W., T. M. M. Farley, et al. (1985). "Worldwide patterns of infertility: Is Africa different?" Lancet **ii**(8455): 596-98.
- Cates, W. J., R. T. J. Rolfs, et al. (1993). The Pathophysiology and Epidemiology of Sexually Transmitted Diseases in Relation to Pelvic Inflammatory Disease and Infertility. Biomedical and demographic determinants of reproduction. R. Gray, H. Leridon and A. Spira. Oxford, Clarendon Press: 101 - 125.
- Chigumadzi, P. T., J. Moodley, et al. (1998). "Infertility profile at King Edward VIII Hospital, Durban, South Africa." Tropical Doctor **28**: 168 - 72.
- Chiweza, A. L. (2005). "Women's inheritance rights in Malawi: the role of District Assemblies." Development in Practice **15**(1): 83-89.
- CIA Factbook. (2006). "www.cia.gov/cia/publications/factbook/geos/mi.html." Retrieved 02/11/06.
- Coast, E. (2003). "An evaluation of demographer's use of ethnographies." Population Studies **57**(3): 337-346.
- Collet, M., J. Reniers, et al. (1988). "Infertility in Central Africa: infection is the cause." International Journal of Gynecology & Obstetrics **26**: 423-8.

- Constitution of Malawi. (2004). "CONSTITUTION OF THE REPUBLIC OF MALAWI." Retrieved August 10, 2004, from www.maform.com/constitution/sectindex.html.
- Cornwall, A. (2001). Looking for a child: coping with infertility in Ado-Odo, South-western Nigeria. Managing reproductive life: Cross-cultural themes in sexuality and fertility. S. Tremayne. Oxford, Berghahn. **1**.
- Cullen Young, T. (1934). "A Good Village." Africa: Journal of the International African Institute **7**(1): 89-96.
- Daar, A. S. and Z. Merali (2001). Infertility and social suffering: the case of ART in developing countries. Report of a meeting on "Medical, Ethical and Social Aspects of Assisted Reproduction" Geneva, Switzerland, WHO.
- Das Gupta, M. (1995). "Life course perspectives on women's autonomy and health outcomes." American Anthropologist **97**(3): 481-491.
- Doyal, L. (1995). What makes women sick : gender and the political economy of health, Macmillan.
- Doyal, L. (1998). Gender and health: Technical paper WHO.
- Duncan, M. E. and e. al (1990). "First coitus before menarche and risk of sexually transmitted diseases." The Lancet **335**: 338.
- Dyer, S. J., N. Abrahams, et al. (2002b). "Infertility in South Africa: women's reproductive health knowledge and treatment-seeking behaviour for involuntary childlessness." Human Reproduction **17**(6): 1657-1662.
- Dyer, S. J., N. Abrahams, et al. (2004). "'You are a man because you have children': experiences, reproductive health knowledge and treatment-seeking behaviour among men suffering from couple infertility in South Africa." Human Reproduction **19**(4): 960-967.
- Dyer, S. J., N. A. Abrahams, et al. (2002a). "'Men leave me as I cannot have children': Women's experiences with involuntary childlessness." Human Reproduction **17**: 1663-1668.
- Ebin, V. (1982). Interpretations of Infertility: the Aowin People of South-west Ghana. Ethnography of Fertility and Birth. C. P. MacCormack. London, Academic Press: 141-159.
- Eisenhardt, K. M. (1989). "Building theories from case study research." Academy of Management Review **14**(4): 532-550.
- Ericksen, K. and T. Brunette (1996). "Patterns and Predictors of Infertility Among African Women: A Cross-national Survey of Twenty-seven Nations." Social Science & Medicine **42**(2): 209-220.
- Fairclough, N. (2003). Analysing discourse: textual analysis for social research. London, Routledge.

- Favot, I., J. Ngalula, et al. (1997). "HIV Infection and Sexual Behaviour among Women with Infertility in Tanzania: A Hospital-Based Study." International Journal of Epidemiology **26**: 414-419.
- Feldman-Savelsberg, P. (1994). "Plundered kitchens and empty wombs: Fear of infertility in the Cameroonian Grasslands." Social Science & Medicine **39**(4): 463-474.
- Feldman-Savelsberg, P. (1999). Plundered Kitchens, Empty Wombs: Threatened Reproduction and Identity in the Cameroon Grassfields, The University of Michigan Press.
- Gerrits, T. (1997). "Social and cultural aspects of infertility in Mozambique." Patient Education and Counselling **31**(1): 39-48.
- Giddens, A. (1979). Central Problems in Social Theory. Action, Structure and Contradiction in Social Analysis. Berkley, University of California Press.
- Gijssels, M., Z. Mgalla, et al. (2001). 'No Child to Send': Context and Consequences of Female Infertility in Northwest Tanzania. Women and infertility in sub-Saharan Africa: A multi-disciplinary perspective. J. Ties Boerma and Z. Mgalla. Amsterdam, KIT Publishers: 203-222.
- Gilchrist, V. J. and R. L. Williams (1999). Key informant interviews. Doing qualitative research. B. F. Crabtree and W. L. Miller. Thousand Oaks, Sage Publications: 71-88.
- Glaser, B. and A. Strauss (1968). The Discovery of Grounded Theory. Chicago, Aldine.
- Goody, E. (1982). Parenthood and social reproduction: Fostering and occupational roles in West Africa. Cambridge, Cambridge University Press.
- Gray, R. H., M. J. Wawer, et al. (2002). Sexually transmitted infections and health through the life course. A life course approach to women's health. D. Kuh and R. Hardy. Oxford; New York, Oxford University Press.
- Gray, R. H., M. J. Wawer, et al. (1998). "Population-based study of fertility in women with HIV-1 infection in Uganda." Lancet **351**(9096): 98-103.
- Greenhalgh, S., Ed. (1995). Situating Fertility: Anthropology and demographic inquiry. Cambridge, Cambridge University Press.
- Greenhalgh, S. (1995). Anthropology theorized reproduction: Integrating practice, political economic, and feminist perspectives. Situating Fertility: Anthropological and demographic inquiry. S. Greenhalgh. Cambridge, University Press: 3-28.
- Gregson, S. (1994). "Will HIV become a major determinant of fertility in sub-Saharan Africa?" Journal of Development Studies **30**(3): 650.
- Grodstein, F. and K. J. Rothman (1994). "Epidemiology of pelvic inflammatory disease." Epidemiology **5**: 234-42.
- Guyer, J. I. (1994). Lineal Identities and Lateral Networks: The Logic of Polyandrous Motherhood. Nuptiality in Sub-Saharan Africa: Contemporary Anthropological and Demographic Perspectives. C. H. Bledsoe and G. Pison. Oxford, Oxford University Press: 231-252.

- Hammersley, M. (1990). *Reading Ethnographic Research: A Critical Guide*. London, Longmans.
- Handwerker, L. (1998). The consequences of modernity for childless women in China: medicalization and resistance. *Pragmatic Women and Body Politics*. M. Lock and P. A. Kaufert. Cambridge, University Press: 178-205.
- Hardy, E. and M. Y. Makuch (2001). *Gender, infertility and ART*. Current Practices and Controversies in Assisted Reproduction: Report of a meeting on "Medical, Ethical and Social Aspects of Assisted Reproduction", WHO Headquarters, Geneva, Switzerland, World Health Organisation.
- Hareven, T. K. (1978). "Cycles, Courses and Cohorts: Reflections on Theoretical and Methodological Approaches to the Historical Study of Family Development." *Journal of Social History* **12**(1): 97-109.
- Harrison, A. and E. Montgomery (2001). "Life histories, reproductive histories: rural South African women's narratives of fertility, reproductive health and illness." *Journal of Southern African studies* **27**(2): 311-328.
- Helitzer-Allen, D. (1994). *An Investigation of Community-Based Communication Networks of Adolescent Girls in Rural Malawi for HIV/STD Prevention Messages. Women and AIDS Program Research Report Series*. Washington DC, International Center for Research on Women.
- Hellum, A. (1999). *Women's Human Rights and Legal Pluralism in Africa: Mixed Norms and Identities in Infertility Management in Zimbabwe*, Mond Books.
- Huygens and e. al (1996). "Rethinking Methods for the Study of Sexual Behaviour." *Social Science & Medicine* **42**(2): 221-231.
- ICPD. (1995). "Summary of the Programme of Action." Retrieved 02/09/04, from <http://www.un.org/ecosocdev/geninfo/populatin/icpd.htm>.
- Inhorn, M. C. (1994a). *Quest for Conception: Gender, Infertility and Egyptian Medical Traditions*. Philadelphia, University of Pennsylvania Press.
- Inhorn, M. C. (1994b). "Interpreting Infertility: Medical Anthropological Perspectives. Introduction." *Social Science & Medicine* **39**(4): 459-461.
- Inhorn, M. C. (1996). *Infertility and Patriarchy*. Philadelphia, University of Pennsylvania Press.
- Inhorn, M. C. and K. A. Buss (1994c). "Ethnography, Epidemiology and Infertility in Egypt." *Social Science & Medicine* **39**(5): 671-686.
- Jahn, A., L. Ngwira, et al. (2004). *ANC Non Attenders Study: Exploring the blind spots in HIV sentinel surveillance*. National AIDS Committee Annual Research Conference, Lilongwe, Malawi.
- Kaler, A. (2004). "The Moral Lens of Population Control: Condoms and Controversies in Southern Malawi." *Studies in Family Planning* **35**(2): 105-115.

- Kalipeni, E. (2000). "Health and Disease in Southern Africa: a comparative and vulnerability perspective." Social Science & Medicine **50**: 965-983.
- Kamwendo, G. H. (2002). Ethnic revival and language associations in the New Malawi. A Democracy of Chameleons: Politics and Culture in the New Malawi. H. Englund. Blantyre, Malawi, CLAIM/MABUKU: 140-150.
- Kielmann, K. (1998). Barren Ground: Contesting identities of infertile women in Pemba, Tanzania. Pragmatic Women and Body Politics. M. Lock and P. A. Kaufert. Cambridge, University Press: 127-163.
- King, M. and E. King (1992). The story of medicine and disease in Malawi : the 130 years since Livingstone. Blantyre.
- Kirk, D. and B. Pillet (1998). "Fertility levels, trends, and differentials in sub-Saharan Africa in the 1980s and 1990s." Studies in Family Planning **29**(1): 1-22.
- Kirk, J. and M. L. Miller (1986). Reliability and Validity in Qualitative Research. London, SAGE Publications.
- Kleinman, A. (1992). "Local Worlds of Suffering: An Interpersonal Focus for Ethnographies of Illness Experience." Qualitative Health Research **2**: 127-134.
- Kornfield, R. and D. Namate (1997). Cultural Practices Related to HIV/AIDS risk behaviour; Focus Group Discussion of village leaders in Phalombe, STAPH Project: Support to AIDS and family health.
- Kuh, D. and R. Hardy (2002). A life course approach to women's health: does the past predict the present? A life course approach to women's health. D. Kuh and R. Hardy. Oxford; New York, Oxford University Press.
- Larsen, U. (1989). A Comparative Study of the Levels and Differentials of Sterility in Cameroon, Kenya and Sudan. Reproduction and Social Organisation in Sub-Saharan Africa. R. Lesthaeghe. Berkeley, University of California Press: 238-337.
- Larsen, U. (1995). "Comparing Nigeria and Cameroon." Population Studies **49**: 329-346.
- Larsen, U. (1996). "Childlessness, Subfertility and Infertility in Tanzania." Studies in Family Planning **27**(1): 18-28.
- Larsen, U. (2001). Primary and Secondary Infertility in Central Africa Republic. Women and infertility in sub-Saharan Africa: A multi-disciplinary perspective. J. Ties Boerma and Z. Mgalla. Amsterdam, KIT Publishers: 25-70.
- Larsen, U. and Menken (1989). "Measuring sterility from incomplete birth histories." Demography **26**(2): 185-202.
- Larsen, U. and H. Raggars (2001a). Levels and trends in infertility in sub-Saharan Africa. Women and infertility in sub-Saharan Africa: A multi-disciplinary perspective. J. Ties Boerma and Z. Mgalla. Amsterdam, KIT Publishers: 25-69.

- LeGrand, T., T. Koppenhaver, et al. (2003). "Reassessing the Insurance Effect: A Qualitative Analysis of Fertility Behaviour in Senegal and Zimbabwe." Population and Development Review **29**(3): 375-403.
- Leonard, L. (2002). "'Looking for Children': The Search for Fertility among the Sara of Southern Chad." Medical Anthropology **21**: 79-122.
- Longfield, K., A. Glick, et al. (2004). "Relationships Between Older Men and Younger Women: Implications for STIs/HIV in Kenya." Studies in Family Planning **35**(2): 125-134.
- Machinjili, C. (1998, 1998). "1998 Population and Housing Census." Retrieved 02/09/04, from www.nso.malawi.net/data_on_line/demography/census_98/census_results.html.
- Maclean, U. (1982). Folk Medicine and Fertility. Ethnography of Fertility and Birth. C. P. MacCormack. London, Academic Press: 161-179.
- Malinowski, B. (1948). Magic, Science and Religion and Other Essays, Greenwood Press Reprint.
- Mason, J. (1996). Qualitative Researching. London, SAGE Publications.
- Mayaud, P. (2001). The role of reproductive tract infections. Women and Infertility in Sub-Saharan Africa: A Multidisciplinary Perspective. J. T. Boerma and Z. Mgalla. Amsterdam, Royal Tropical Institute: 71 - 107.
- Meekers, D. and A. E. Calves (1997). "'Main' girlfriends, girlfriends, marriage, and money: the social context of HIV risk behaviour in sub-Saharan Africa." Health Transition Review **7**(Supplement): 361-375.
- Mogobe, D. (2005). "Denying and Preserving Self: Botswana Women's Experiences of Infertility." African Journal of Reproductive Health **9**(2): 26-37.
- Mohanty, C. T., A. Russo, et al., Eds. (1991). Third World Women and the Politics of Feminism. T. Bloomington, Indiana University Press.
- Morris, B. (2000). Animals and Ancestors. Oxford, Berg.
- Myer, L., C. Morroni, et al. (2007). "Prevalence and Determinants of Fertility Intentions of HIV-Infected Women and Men Receiving Antiretroviral Therapy in South Africa." AIDS Patient Care and STDs **21**(4): 278 -285
- National Statistical Office and ORC Macro (2001). Malawi Demographic and Health Survey 2000, National Statistical Office, Zomba, Malawi and ORC Macro, Calverton, Maryland, USA.
- National Statistical Office and ORC Macro Calverton. (2005). "DHS Final Report: Malawi 2004 " DHS Final Report Retrieved 2 November, 2006, from http://www.measuredhs.com/pubs/pub_details.cfm?ID=%20575&ctry_id=24&SrchTp=ctry&flag=sur.

- Ncozana, S. S. (2002). The spirit dimension in African Christianity: a pastoral study among the Tumbuka People of Northern Malawi. Blantyre, Malawi, Christian Literature Association in Malawi (CLAIM).
- Nuwaha, F., E. Faxelid, et al. (1999). "Lay people's perceptions of sexually transmitted infections in Uganda." International Journal of STD & AIDS **10**: 709-717.
- Okonofua, F. E. (2003). "New Reproductive Technologies and Infertility Treatment in Africa." African Journal of Reproductive Health **7**(1): 7-8.
- Okonofua, F. E. (2004). "Is infertility a need to meet in Africa?" Memisa Medisch **70**(1): 29-36.
- Okonofua, F. E. and B. Datta (2002). What about us? Bringing infertility into reproductive care. Quality/Calidad/Qualite. New York, Population Council.
- Opong, C. (1992). Traditional Family Systems in Rural Settings in Africa. Family Systems and Cultural Change. E. Berquo' and P. Xenos. Oxford, Clarendon Press: 69-86.
- Owen, C., R. Martin, et al. (2005). "Effect of infant feeding on the risk of obesity across the lifecourse; a quantitative review of published evidence. ." Pediatrics **115**: 1367-1377.
- Peltzer, K. (1987). Some Contributions of Traditional Healing Practices Towards Psychosocial Health Care in Malawi, Eschborn : Fachbuchhandlung für Psychologie Verlagsabteilung.
- Perakyla, A. (1997). Reliability and Validity in Research Based on Tapes and Transcripts. Qualitative Research: Theory, Method and Practice. D. Silverman. London, SAGE Publications.
- Pool, R. and N. R. Washija (2001). Traditional healers, STDs and infertility in northwest Tanzania. Women and infertility in sub-Saharan Africa: A multi-disciplinary perspective. J. Ties Boerma and Z. Mgalla. Amsterdam, KIT Publishers: 241-256.
- Population Information Programme (1983). "Infertility and Sexually Transmitted Disease: A Public Health Challenge." Population Reports: Issues in World Health **L**(4): L114-L144.
- Pressat, R. and C. Wilson (1985). The dictionary of demography. New York, Blackwell.
- Raymond, J. (1993). The Production of Fertility and Infertility: East and West, South and North. Women as Wombs. San Francisco, HarperSanFrancisco, a division of HarperCollins Publishers: 1-28.
- Reidman (1993). Science that colonises: A critique of fertility studies in Africa. Philadelphia, Temple University Press.
- Reissman, C. K. (1993). Narrative Analysis. Newbury Park: CA, Sage.
- Reniers, G. (2003). "Divorce and remarriage in rural Malawi." www.demographic-research.org Special Collection 1: Article 6.

- Renya (1975). Age differential, marital instability and venereal disease, factors affecting fertility among the north west Barma. Population and social organisation. M. Nag. The Hague: 55 - 73.
- Ribohn, U. (2002). The politics of poverty alleviation in Malawi. A Democracy of Chameleons: Politics and Culture in the New Malawi. H. Englund. Blantyre, Malawi, CLAIM/MABUKU: 25-42.
- Rice, P. L. and D. Ezzy (1999). Qualitative Research Methods: A Health Focus. Oxford, Oxford University Press.
- Richards, S. C. (2002). "'Spoiling the Womb: Definitions, Aetiologies and Responses to Infertility in North West Province, Cameroon'." African Journal of Reproductive Health 6(1): 84-95.
- Riessman, C. (1993). Narrative Analysis. Newbury Park, Sage.
- Ross, A., D. Morgan, et al. (1999). "Reduced fertility associated with HIV: the contribution of pre-existing subfertility." AIDS 13(15): 2133-2141.
- Ross, K. R. and K. M. Phiri (1998). Democratization in Malawi. Blantyre, Bonn.
- Roth Allen, D. (2002). Managing Motherhood, managing risk: fertility and danger in West Central Tanzania, University of Michigan Press.
- Roth Allen, D. M. (2001). Mchango, menses and the quality of eggs: women's perceptions of fertility risks. Women and infertility in sub-Saharan Africa: A multi-disciplinary perspective. J. Ties Boerma and Z. Mgalla. Amsterdam, KIT Publishers.
- Runganga, A. O., J. Sundby, et al. (2001). "Culture, Identity and Reproductive Failure in Zimbabwe." Sexualities 4(3): 315-332.
- Rutstein, S. O. and I. H. Shah (2004). Infecundity, Infertility and Childlessness in Developing Countries. DHS Comparative Reports 9.
- Samuelson, H. and V. Steffen (2004). "The Relevance of Foucault and Bourdieu for Medical Anthropology: Exploring New Sites." Anthropology and Medicine 11(1): 3-10.
- Schatz, E. (2003, 19 September 2003). "Comparing, Contextualising, and Conceptualizing: Enhancing Quantitative Data on Women's Situation in Rural Africa." Demographic Research. Special Collection 1, Article 5 Retrieved January 15th, 2004, from www.demographic-research.org.
- Schatz, E. (2005). "'Take your mat and go!': Rural Malawian women's strategies in the HIV/AIDS era." Culture, Health and Sexuality 7(5): 479-492.
- Shears, K. H. (2003). "Programs Begin to Emphasize STI, Infertility Link." Family Health International 23(2): 16.
- Silverman, D. (2000). Doing Qualitative Research. London Sage Publications: p.157
- Spring, A. (1995). Agricultural development and gender issues in Malawi. Lanham, Md., University Press of America.

- Sundby, J. (1998). "Infertility in Gambia and Health Care Seeking." Social Science & Medicine **46**: 891-899.
- Sundby, J. and U. Larsen (2005). Health care services and care seeking for infertility in sub-Saharan Africa: the case of Moshi in northern Tanzania. Reproductive Disruptions. J. Ties Boerma and Z. Mgalla. University of Michigan.
- Temmerman, M., F. A. Plummer, et al. (1990). "Infection with HIV as a risk factor for adverse obstetrical outcome." AIDS **4**: 1087-93.
- Thomson, H. I. (1999). "A Statement by Honourable Harry I. Thomson, M P, Minister of Health and Population, Government of Malawi, to The Hague Forum. 8-12 February 1999." Retrieved 05/05/07, from <http://www.un.org/popin/icpd/icpd5/hague/malawi.pdf>.
- Ties Boerma, J. and Z. Mgalla (2001). Introduction. Women and infertility in sub-Saharan Africa: A multi-disciplinary perspective. J. Ties Boerma and Z. Mgalla. Amsterdam, KIT Publishers: 13-24.
- Tonkin, E. (1992). Narrating our Pasts: The social construction of oral history, Cambridge University Press.
- Udvardy, M. (1990). Kifudu: A Female Fertility Cult Among the Giriama. The Creative Communion: African Folk Models of Fertility and the Regeneration of Life. A. T. Jacobson-Widding and W. van Beek. Uppsala, Uppsala Studies in Cultural Anthropology: 137-152.
- UN Millennium Project (2006). Public Choices, Private Decisions: Sexual and Reproductive Health and the Millennium Development Goals. .
- UNAIDS, WHO, et al. (2004). Epidemiological Fact Sheet on HIV/AIDS and sexually transmitted infections. Malawi, UNAIDS, WHO, UNICEF.
- UNDP. (2003, 2003). "Human Development Indicators 2003: Malawi." Retrieved 27/01/04, from www.undp.org/hdr2003/indicator/cty_f_MWI.html.
- UNDP. (2005). "Human Development Reports 2005: Country Fact Sheets, Malawi." Retrieved 02/11/06, from http://hdr.undp.org/statistics/data/country_fact_sheets/cty_fs_MWI.html.
- UNFPA and University of Southampton (2000). Policy and practice gap in young people's reproductive health interventions in Malawi. Reproductive Health Research: Opportunities and Choices. U. o. Southampton and UNFPA, Funded by DFID.
- UNFPA and University of Southampton (2001). Barriers to Use of Family Planning Services in Malawi: Findings from Focus Group Discussions. Reproductive Health Research: Opportunities and Choices. U. o. Southampton and UNFPA, Funded by DFID.
- United Nations High Commissioner for Human Rights. (2001). "Recommendations of the Expert Group Meeting, "Application of Human Rights to Reproductive Sexual Health", 25-27 October 2006 :<http://www.ohchr.org/english/about/publications/docs/reproductiveENG.pdf>." Retrieved October 9, 2004.

VonDoepp, P. (2002). Are Malawi's Local Clergy Civil Society Activists? A Democracy of Chameleons: Politics and Culture in the New Malawi. H. Englund. Blantyre, Malawi, CLAIM/MABUKU: 123-139.

Watkins, S. C. and L. Tawfik (2007). "Sex in Geneva, sex in Lilongwe, and sex in Balaka." Social Science & Medicine **64**: 1090-1101.

Watkins, S. C., E. M. Zulu, et al. (2003, 19.09.03). "Introduction to: Social Interactions and HIV/AIDS in Rural Africa." Special Collection 1 - Article 1. Retrieved 5.11.03, 2003, from www.demographic-research.org/.

Welbourn, A. (2007). "Stepping Stones: Issues." Retrieved 12/04/07, from www.steppingstonesfeedback.org/issues.htm.

WHO. (1999). "ICPD and ICPD+5 Reproductive Health Goals and the 17 Indicators (www.who.int/reproductivehealth/publications/rhr_01_19/RHR_01_19_annex1.en.html)."

WHO (2001). Reproductive health indicators for global monitoring: Report of the second interagency meeting. Geneva, World Health Organisation.

Young, T. C. (1932). Notes on the history of the Tumbuka-Kamanga peoples in the Northern Province of Nyasaland. London, Frank Cass & Co. Ltd.

Zaba, B. and S. Gregson (1998). "Measuring the impact of HIV on fertility in Africa." AIDS **12**(Suppl. 1): S41-S50.

Zulu, E. M. (1996). PhD thesis: Sociocultural Factors Affecting Reproductive Behaviour in Malawi, University of Pennsylvania.

Appendices

- a) Summary table of studies of HIV and fertility
- b) Educational attainment of LH women
- c) Description of steps to marriage
- d) Quantitative data collection tools
 - i) ANA form
 - ii) ANC form
 - iii) Individual census form (CEN)
- e) Qualitative data collection tools
 - i) Life history interview prompts
 - ii) Life history household details form
 - iii) Focus group discussion questions
- f) Information and consent sheets
- g) Results tables from quantitative analyses
 - i) Age cohort and marital status adjusted % 'married more than once', ANC and ANA women.
 - ii) Age cohort and marital status adjusted % 'currently polygynously married', ANC and ANA women
 - iii) Age cohort and marital status adjusted 'HIV prevalence', ANC and ANA women
- h) Summary of participants in qualitative data collection
 - i) Parity-for-age table used to select low and medium/high parity samples
 - ii) Life history women
 - iii) Focus group discussants
- i) Examples of qualitative data and analysis methods
 - i) Sample LH interview transcript with parallel translation
 - ii) Sample field notes
 - iii) Sample LH case summary

Appendix A

Summary of studies comparing fertility between HIV-infected and HIV-uninfected women, 15-44 years (Shown in Figure 2). Compiled by Lewis, Ronsmans et al. 2004.

Location	Time period	Female HIV prevalence (%)	Total fertility rate			Basis*	Setting	Reference (see below)
			HIV+	HIV-	All			
Masaka, Uganda	1989-1996	11.8	5.11	6.77	6.51	FRR	rural	1
Rakai, Uganda	1994-1996	19.8	3.25	4.93	4.47	FRR	rural	2
Fort Portal, Uganda	1994-1995	26.0	3.96	8.17	6.76	ROI	urban	3
Fort Portal, Uganda	2000	22.7	6.06	7.28	6.69	ROI	urban	4
Lusaka, Zambia	1995-1996	29.6	3.78	5.87	5.04	ROI	urban	5
Lusaka, Zambia	1998-1999	27.0	4.64	5.50	5.04	ROI	urban	5
Mposhi, Zambia	1995-1996	17.4	4.79	7.30	6.70	ROI	rural	5
Mposhi, Zambia	1998-1999	16.2	3.20	7.61	6.70	ROI	rural	5
Mwanza, Tanzania	1988-1991	15.1	3.12	4.16	3.97	ROI	urban	6
Mwanza, Tanzania	1991-1993	4.7	4.24	6.49	6.37	ROI	rural	7
Manicaland, Zimbabwe	1998-2000	25.4	4.09	4.22	3.97	FRR	rural	8
Yaoundé, Cameroon	1997-1998	7.8	2.33	3.88	3.72	ROI	urban	9
Kisumu, Kenya	1997-1998	30.1	2.90	3.15	3.07	ROI	urban	9
Ndola, Zambia	1997-1998	31.9	3.97	5.71	5.04	ROI	urban	9
Kagera, Tanzania	1987-1990	29.2	4.00	5.55	5.04	ROI	urban	10
Kagera, Tanzania	1993	18.7	4.84	5.37	5.04	ROI	urban	10
Kagera, Tanzania	1996	14.4	3.93	3.89	3.84	ROI	urban	10
Karonga, Malawi	1998-2001	17.0	4.77	6.61	6.18	ROI	rural/urban	11
Kisesa, Tanzania	1994-1997	6.7	3.59	6.19	5.93	FRR	rural	12

*FRR = Fertility Rate Ratio; ROI = Relative Odds of Infection

REFERENCES

1. Carpenter, L. M., J. S. Nakiyingi, et al. (1997). "Estimates of the impact of HIV infection on fertility in a rural Ugandan population cohort." Health Transition Review **7**(Suppl. 2): 113-126.
2. Gray, R. H., M. J. Wawer, et al. (1998). "Population-based study of fertility in women with HIV-1 infection in Uganda." Lancet **351**(9096): 98-103.
3. Kilian, A. H., S. Gregson, et al. (1999). "Reductions in risk behaviour provide the most consistent explanation for declining HIV-1 prevalence in Uganda." Aids **13**(3): 391-8.
4. Kilian, 2003, pers. communication
5. Fylkesnes, K., R. M. Musonda, et al. (2001). "Declining HIV prevalence and risk behaviours in Zambia: evidence from surveillance and population-based surveys." Aids **15**(7): 907-16.
6. Kigadye, R. M., A. Klokke, et al. (1993). "Sentinel surveillance for HIV-1 among pregnant women in a developing country: 3 years' experience and comparison with a population serosurvey." Aids **7**(6): 849-55.
7. Changalucha, J., H. Grosskurth, et al. (2002). "Comparison of HIV prevalences in community-based and antenatal clinic surveys in rural Mwanza, Tanzania." Aids **16**(4): 661-5.
8. Zaba, B., N. Terceira, et al. (2003). "The contribution of HIV to fertility decline in rural Zimbabwe, 1985-2000." Popul Stud (Camb) **57**(2): 149-64.
9. Glynn, J. R., A. Buve, et al. (2001). "Factors influencing the difference in HIV prevalence between antenatal clinic and general population in sub-Saharan Africa." Aids **15**(13): 1717-1725.
10. Kwesigabo, G., J. Z. Killewo, et al. (2000). "Monitoring of HIV-1 infection prevalence and trends in the general population using pregnant women as a sentinel population: 9 years experience from the Kagera region of Tanzania." J Acquir Immune Defic Syndr **23**(5): 410-7.
11. Crampin, A. C., S. Floyd, et al. (2003). "The long-term impact of HIV and orphanhood on the mortality and physical well-being of children in rural Malawi." AIDS **17**: 389-397.
12. R. Hunter, S. C., R. Isingo, et al. (2003). "The association between HIV and fertility in a cohort study in rural Tanzania." J Biosoc Sci **35**: 189-199.

Appendix B

Highest level of education attained by LH women

Highest level of school attended	N	%
None	2	4
Primary	Standards 1-5	8
	Standards 6-8	27
Secondary	10	21
TOTAL	47	100

NOTE: Those who did not finish Standard Five were usually functionally illiterate. Standard Eight is an indicator of a basic primary education.

Appendix C

Ideal steps to marriage

- Couple start a relationship (going out together) *or* man sees woman he wants to marry *or* man identifies a family he would like to find a wife from.
- Man sends message (*thenga*) to her parents (via a paid intermediary such as a friend) declaring interest.
- Parents ask daughter if she knows him and consents.
- Man pays cash (*vikhole*) to woman's maternal aunt to demonstrate serious intent.
- Man visits the woman's parents at home (*kufikira*), and pays cash to initiate marriage talks.
- The amount of *chuma* (bride price⁶²) for the woman's parents before or during marriage is negotiated. Typical bride price reported by LH women was one to two cows and/or cash (around \$20-\$40), sometimes supplemented with other goods such as hoes and blankets.
- If the woman is pregnant before marriage man might pay additional money as damages (*chibadala*). This is less than bride price.
- Bride price paid, and woman is 'in her husband's hands'. If the woman's parents were dead, a male kin equivalent (such as a brother) would be paid.
- Usually, man and woman elope in secret at night (acceptable as long as some/all payments have been made and a message is sent to woman's parents informing them of her whereabouts) to man's household.
- After spending one night together they are considered married.
- Woman's paternal aunt visits some days later and advises her on 'staying well' in marriage.
- A church blessing may take place some weeks/months later⁶³.

⁶² Often known as 'lobola' in southern Africa, this is capital transferred from the husband's to the wife's side of the family

⁶³ Church weddings were rare: two older women had them (before 1951), and one LH woman. F16 and F26 had church blessings after they had been married for some time. The traditional wedding ceremony (*ukwati*) seems to have all but vanished. The bride's aunt would escort her to her husband's home, where wedding gifts (cloth, buckets, and flour) would be brought, and people would throw money at the couple.

Appendix D

Quantitative data collection tools:

- i) ANA1: ANC Non-Attender Form (from KPS) (6 pages)
- ii) ANC: Antenatal Clinic Survey Form (from KPS) (2 pages)
- iii) CEN2: Baseline Survey New Subject (from KPS) (2 pages)

ANA1 – ANC-NON-ATTENDER FORM KPS
(NON-VIRGINS AGED 15-44 YEARS, PREVIOUSLY SEEN IN CENSUS)

page 1

Registered

ANA Study Number anaid version

Screening questions

1. Have you ever had a monthly period?	peraver	Y	N	→ Q 5.		
2. At what age did you start your monthly periods?				menarchage		
3. How long ago was your last monthly period?	Days, Weeks, Months, Years ago	D	W	M	Y	Impcat Impnum
4. Have you ever been pregnant or given birth to a child?	birever	Y	N			
5. If never pregnant or given birth, have you ever had sexual intercourse?	sexever	Y	N	→ ANA2		
6. How old were you when you first had sexual intercourse?				ageofsex		

Pregnancy Status

7. Are you currently pregnant? if unsure or possible, offer pregnancy test and continue according to result.		Y	N	→ Q 13.
		DK (offer test)		pregres
8. Result of pregnancy test	X = Not done	Pos	Neg	→ X → Q 13.
9. How many months pregnant are you? (record completed months)				gestmths
10. Did you received ante-natal care this pregnancy?	curanc	Y	N	→ Q 13.
11. Which ANC did you go to this pregnancy?	<input type="text"/>			clinic
12. Health passport seen with ANC entry for this pregnancy?		Y	N	ancbook

Marital Status

3. Are you now:	Married (or living with a man) ?	Single (= never married) ?	marital	M	S	→ Q 19.
	Divorced / separated ?	Widowed ?		D	W	→ Q 17.
4. When did you get married to your current partner?	(MM / YYYY)					marcurest marcurmm marcuryear
5. How many other wives does your current partner have? (record 00 if none)						othwives
6. Taken together, how many children has your current partner ever fathered with other women?					DK	husbnchil
7. How many marriages in your life have ended in separation or widowhood? (= sum of all previous marriages)					none	prevcohab
8. When did you get married to your first husband?	(MM / YYYY)					marfirrest marfirmm marfiryear

9. Reminder to interviewer: which pages to fill next:

		What is her marital status?	
		never married or in first marriage	re-married, widowed or divorced
Is she pregnant now?	No	2, 5	2, 4, 5
	Yes	3, 5	3, 4, 5

10.	Are you currently using any means to help you to become pregnant? If yes, specify methods:	Y	N	fertilreat
11.				fertilmeth

Reproductive history

2.	Have you ever been pregnant? <i>(whether or not resulting in a birth)</i>	pregever	Y	N	→ Q 27.
3.	Have you ever had any miscarriages? <i>(pregnancy loss before end of 7th month)</i>	How many?			emistot
4.	Have you ever had any stillbirths? <i>(birth in, or after the 8th month of pregnancy, baby did not cry)</i>	How many?			stillbirth
5.	Have you ever had any live births?	livebirth	Y		→ Q 28.
16.	If NO livebirths, did she say she had any stillbirths?		Y	N	

Before first birth

7.	Have you ever used contraception ?	contraever	Y	N	→ Q 47.
----	------------------------------------	------------	---	---	---------

Child residence and survival

8.	How many of your own children live at home with you?	sons	daughters	childhome
9.	How many of your own children live elsewhere?			childothhh
10.	How many of your own children have died?			childdied

list sons and daughters separately

Last birth to now

1.	When did you first give birth? <i>(live or still)</i>	(MM / YYYY)		birfirst birfirmm birfiyear		
2.	When did you last give birth? <i>(live or still)</i>	(MM / YYYY)		birasest birasmm birasyear		
3.	Did you receive antenatal care for that last pregnancy?		Y	N	birasanc	
4.	If yes, which ANC?				lastanc	
5.	The father of your last born child, was he: Current husband, Previous husband, Non-marital partner?		C	P	N	lastfath
16.	What happened to that last child?	lastchild	Alive	Died	Still	→ Q 39.
17.	If child died, how old was it when it died ?		weeks	months	years	dieddwks diedmths diedyrs
8.	How long did you breastfeed your last child?		weeks	months	years	brfedwks brfedmths brfedyrs
9.	How long was it before your monthly periods came back?		No period	DK		periodwks periodmths periodyrs period
10.	How long was it before sexual intercourse restarted?		Not Yet	DK		sexwks sexmths sexyrs sex
1.	After the last birth, did you have any miscarriages?		Y	N	mislabir	
2.	Did you use condoms and / or other contraception since the last birth?	contrabir	Y	N	→ Q 47.	

Use of Condoms and / or other Contraception

3.	What methods did you use? <i>(tick any method mentioned)</i>		<input type="checkbox"/> pill	<input type="checkbox"/> cond	pill condom
			<input type="checkbox"/> withdrwl	<input type="checkbox"/> inject	withdrwl injection
	specify other methods:		<input type="checkbox"/> steril	<input type="checkbox"/> other	sterilized conother
4.	Are you still using condoms or other contraception now?		Y	N	contsltop
5.	If not using now: When did you stop? <i>(MM / YYYY)</i>				contsltopmm contsltopyear
6.	Why did you stop?		<input type="checkbox"/> want preg	<input type="checkbox"/> don't need	contsltopr
	specify other reasons:		<input type="checkbox"/> other		

7. If she is widowed, divorced or re-married, fill page 4; otherwise go straight to page 5

8.	Does the man who fathered the pregnancy live in the same household as you?		Y	N	falthsamehh	
9.	What is the age of this man? <i>(record in one of the following ways, according to what the woman says)</i>	year of birth	19		falthbiyaea	
		age in years			falthagee	
		age difference	Same	Older	Younger	agediff
		older or younger by:	years		agediffyrs	
10.	Did you use any means to help you to become pregnant with this baby?		Y	N	fertilcreat	
11.	If yes, specify methods:				fertilmeth	
Reproductive history						
12.	Have you ever been pregnant before? <i>(whether or not resulting in a birth)</i>	pregever	Y	N	Q 57.	
13.	Have you ever had any miscarriages? <i>(pregnancy loss before end of 7th month)</i>	How many?			emistot	
14.	Have you ever had any stillbirths? <i>(birth in, or after the 8th month of pregnancy, baby did not cry)</i>	How many?			stillbirth	
15.	Have you ever had any live births?	pregever	Y		Q 58.	
16.	If NO livebirths, did she say she had any stillbirths?		Y	N		
					Q 61. Q 57.	
17.	Have you ever used contraception?	contraever	Y	N	Q 75.	
Child residence and survival						
18.	How many of your own children live at home with you?	sons	daughters		childhome	
19.	How many of your own children live elsewhere?				childohhh	
20.	How many of your own children have died?				childdied	
Last birth to now						
1.	When did you first give birth? <i>(live or still)</i>	(MM / YYYY)			birfstest birfstmm birfstyear	
2.	When did you last give birth? <i>(live or still)</i>	(MM / YYYY)			birfaset birfasm birfasyear	
3.	Was the last born child from the same father like this pregnancy?		Y	N	samefath	
4.	Did you receive antenatal care for that last pregnancy?		Y	N	birfasanc	
5.	If yes, specify which clinic did you attend?				lastanc	
6.	What happened to that last child?	lastchild	Alive	Died	Still	
7.	If child died, how old was it when it died?		weeks	months	years	
8.	How long did you breastfeed your last child?		weeks	months	years	
9.	How long was it before your monthly periods came back?	until this Pregnancy	P	D		
		until child Died				
10.	How long was it before sexual intercourse restarted?		weeks	months	years	
11.	After the last birth, did you have any miscarriages?		Y	N	mislabir	
12.	Did you use condoms and / or other contraception since the last birth?	contralbi	Y	N	Q 75.	
Use of Condoms and / or other Contraception						
13.	What methods did you use? <i>(tick any method mentioned)</i>		<input type="checkbox"/> pill	<input type="checkbox"/> cond	pill condom	
14.	If other, specify:		<input type="checkbox"/> withdrwl	<input type="checkbox"/> inject	withdrwl injection	
			<input type="checkbox"/> steril.	<input type="checkbox"/> other	steriln controther	
			Stop	Fail	contralfail	
15.	If contraception used just before this pregnancy, did you stop using it or did it fail?					
5. If she is widowed, divorced or re-married, fill page 4; otherwise go straight to page 5						

MARITAL HISTORY QUESTIONS FOR WIDOWS, DIVORCED AND RE-MARRIED WOMEN

page 4

Interviewer, please check marital status of woman (Q 13. and Q 17.) and let her confirm that you have got this right

Say "let me just check, you are now widowed, divorced or re-married?"

→ Now you know which section to use

WIDOWS

6.	How many marriages in your life have ended in separation or widowhood? (= sum of all previous marriages)		prevcohab
7.	When did your last husband die? (MM / YYYY)		lndiemm lndieyr
8.	When did you get married to your last husband? (MM / YYYY)		marfasm marfasyr
9.	How many other wives did that husband have whilst you were married? (record 00 if none)		lhothwies
10.	How many children did that husband ever father with other women?	DK	lhusbnchil
11.	(If this woman has any children) How many children did you have with your last husband?		lhyrchid

Now fill in page 5

DIVORCED WOMEN

2.	How many marriages in your life have ended in separation or widowhood? (= sum of all previous marriages)		prevcohab
3.	When did you separate from your last husband? (MM / YYYY)		divmm divyr
4.	Is your last husband still alive?	Y N DK	lhalive
5.	If last husband dead, when did he die? (MM / YYYY)		lndiemm lndieyr
6.	When did you get married to that husband? (MM / YYYY)		marfasm marfasyr
7.	How many other wives did that husband have whilst you were married? (record 00 if none)		lhothwies
8.	How many children has that husband ever fathered with other women?	DK	lhothchild
9.	(If this woman has any children) How many children did you have with that husband?		lhyrchid

Now fill in page 5

RE-MARRIED WOMEN

10.	How many marriages in your life have ended in separation or widowhood? (= sum of all previous marriages)		prevcohab
11.	Now I want you to tell me about your previous marriage, the one before this one: why did it end? <small>widordiv</small>	Divorce Widowed	→ Q 94.
12.	When did you separate from that husband? (MM / YYYY)		divmm divyr
13.	Is that husband still alive?	Y N DK	lhalive
14.	If last husband dead, when did he die? (MM / YYYY)		lndiemm lndieyr
15.	When did you get married to that husband? (MM / YYYY)		marfasm marfasyr
16.	How many other wives did that husband have whilst you were married? (record 00 if none)		lhothwies
17.	How many children has that husband ever fathered with other women?	DK	lhothchild
18.	(If this woman has any children) How many children did you have with that husband?		lhyrchid

Now fill in page 5

99. When did you last have sex?

Record in one of the following ways, according to how she first answers:	Hours Days Weeks Months Years ago	H	D	W	M	Y	lastsexcat lastsexnum
	Date (MM / YYYY)						lastsexmm lastsexyr

00. When was the first time you had sex with that same man?

Record in one of the following ways, according to how she first answers:	Days Weeks Months Years ago	D	W	M	Y	firstsexcat firstsexnum	
	Days Weeks Months Years before the last time	D	W	M	Y		
	Only had sex with him one time						firstsex
	Date (MM / YYYY)						firstsexmm firstsexyr
	Long ago, can't remember						firstsex
	When we first got married						
Before we first got married							

Proceed to STI screening questions

STI syndromic screening: I would like to ask you about possible problems that you might have with your female organs. If we identify such a problem that can be treated, we would be able to advise you and refer you and your partner for the appropriate treatment. Would you be happy to answer questions on this subject?

01 Agreed to answer the STI screening questions? sticonsent Y N → END

Do you currently suffer or did you ever notice any of the following signs?

Record symptoms and time of occurrence. Was the last episode of the condition treated?

Current or recent (within last 6 months)

Past record the year of the last episode

Never

Tx Circle if the last episode of the condition has already been treated at a HC or hospital

02	Abnormal vaginal discharge, vulval itching / rash / papules	C	P	N	Tx	vdisch vdischbx
03	Record the YEAR when the symptom last occurred	abnormally large amount				vdischamyr
04		abnormal colour (not clear or whitish)				vdischoolyr
05		abnormal odour				vdischodyr
06		vulval itching				vdischitchyr
07	Sores / ulcers on your female organs	C	P	N	Tx	gud gudbx
08	Record the YEAR when the symptom last occurred	with little blisters				gudblisyr
09		without blisters				gudnoblisyr

10	Pain and / or swelling of the groin	C	P	N	Tx	bubo
11	Record the YEAR when the symptom last occurred					buboyr
12	Pain in the lower part of the belly / pelvis	C	P	N	Tx	pelvic
13	Record the YEAR when the symptom last occurred					pelvintoyr
14						pelvfevyr

Offer examination if any current or recent STD symptoms are reported

15	Examination of outer genitals? (Summarise findings)	Refused	Y	N	R	examined
16	Abnormal vaginal discharge	Pos	Neg	Indet.		clinvolscr
17	Genital ulcers	Pos	Neg	Indet.		clingud
18	Inguinal bubo	Pos	Neg	Indet.		clinbubo
19	Lower abdominal tenderness	Pos	Neg	Indet.		clinpelv
20	Other pathological finding (specify diagnosis):	Pos	None			clinoth

21. Anthropometry

22	Mid upper arm circumference	cm			muac
----	-----------------------------	----	--	--	------

Laboratory investigations

23	Urine pregnancy test	Offer test if she had sex (Q99.) after her last menstrual period (Q3.)	Positive	Negative	Indeterminate	Refused	P	N	I	R	pregtest
24	Consent form signed for blood tests?						Y	N			consentblood
25	Bled?	Bled	Saliva collected	Unable to bleed	Refused		B	S	U	R	bled
26	Haemoglobin filter paper test	Hb (g/dl)									hb
27	Feedback of HIV-test result and counselling requested?						Y	N			hivfeedb

Lab-specimens (fill in)

28		Specimen Set Number			specset
29	Blood				blood
30	ICT				ict
31	Orasure				orasure
32	Urine				urine
33	Stool no preserv.				stoolnop
34	Stool with preservative				stoolwp
35	Interview date				intdate
36	Field staff code				rcdr rcdr2
37	Coder / Checker				codr chkr

1.]	Name						
2.]	Current home village						
3.]	Previous home village				Labno:		
4.]	Since what year do you live in the current village?						
5.	ANC	01 = CRH	08 = Kaporo	11 = Nyungwe	12 = KDH	75 = Fulirwa	
6.	Bled	B = bled	R = refused				
7.	Haemoglobin (g/dl)						
oding office use							
3.	Village zone code	Previous village zc	RPR	TPPA	EOSB	ANC surv.number	
emale interviewer from here (DO NOT ADD ANY DETAILS THAT WILL REVEAL THE WOMAN'S IDENTITY)							
3.	Woman's year of birth	<1910	1910-19	1920-29	1930-39	1940-49	
	Birth decade estimate	B	C	D	E	F	
0.	What is the age of the man who fathered this pregnancy? (record in one of the following ways, according to what the woman says)	year of birth					19
		age in years					
		age difference					Same Older Younger
		older or younger by:					years
1.	Does this man live in the same household like you?	Y					N
Woman's education							
2.	Have you been to school?	Never			Ever		Curr.
3.	What is the highest level of schooling you reached?	Prim.			Sec.		Tert.
4.		form/ standard					
5.	Were you still at school when you got pregnant with this baby?	Y					N
What is the main occupation of the head of the HH where you are currently living?							
6.	Occupation head:						
7.	Employment code	Industry Code (which industry does this job contribute to?)					
8.	Did s/he formally train in this occupation?	Y					N
Marital Status							
9.	Are you now:	Married (or living with a man)?		Single (= never married)?		marital	
		Divorced / separated?		Widowed?			
0.	When did you get married to your current husband?	(MM / YYYY)					
1.	How many other wives does your husband have?	(record 00 if none)					
2.	Taken together, how many children has your current partner ever fathered with other women?	DK					
3.	How many times have you been married before? (do not include the current marriage)	prevcohab					
4.	When did you first get married?	(MM / YYYY)					
This pregnancy							
5.]	How many months pregnant are you?	(record completed months)					
6.	Did you use any means to help you to become pregnant with this baby?	Y					N
7.	If yes, specify methods:						

Reproductive history

8.	Have you ever been pregnant before? <i>(whether or not resulting in a birth)</i>	pregever	Y	N	Q 32.
9.	Have you ever had any miscarriages? <i>(=pregnancy loss before end of 7th month)</i>	How many?			emistot
0.	Have you ever had any stillbirths? <i>(=birth in, or after the 8th month of pregnancy, baby did not cry)</i>	How many?			stillbirth
1.	Have you ever had any live births?		Y	N	Q 35.

N but had still birth → Q 38. N and no still births → Q 32.

Before first birth

2.	How old were you when you started your monthly periods?			menarage	
3.	How old were you when you had first penetrative sexual intercourse?			agefssex	
4.	Have you ever used contraception?	contraever	Y	N	Q 51.

↓ Q 49.

Child residence and survival

		sons	daughters	
5.	How many of your own children live at home with you?			childhome
6.	How many of your own children live elsewhere?			childohhh
7.	How many of your own children have died?			childdied
8.	When did you first give birth? <i>(live or still)</i>	(MM / YYYY)		birfirst birfmm birfyear

} list sons and daughters separately

Last birth to now

9.	When did you last give birth? <i>(live or still)</i>	(MM / YYYY)		birfsest birfsemm birfseyear			
0.	Was the last born child from the same father like this pregnancy?	Y	N	samefath			
1.	Did you receive antenatal care for that last pregnancy? If yes, which ANC did you attend?	Same	Other	None	birfseanc		
2.	What happened to that last child?	lastchild		Active	Died	Still	Q 45.
3.	If child died, how old was it when it died?	weeks	months	years	diedwks diedmths diedyrs		
4.	How long did you breastfeed your last child? <i>(record in the way that the woman reports)</i>	weeks	months	years	brfedwks brfedmths brfedyrs		
5.	How long was it before your monthly periods came back? <i>(record in the way that the woman reports)</i>	weeks	months	years	periodwks periodmths periodyrs		
6.	How long was it before sexual intercourse restarted?	weeks	months	years	sexwks sexmths sexyrs		
7.	After the last birth, did you have any miscarriages?	Y	N	mislabir			
8.	Did you use contraception since the last birth?	contabir	Y	N	Q 51.		

} until this Pregnancy until child Died

Contraception

9.	What contraceptive methods did you use? <i>(tick any method mentioned)</i>	<input type="checkbox"/> pill	<input type="checkbox"/> cond	<input type="checkbox"/> withdrwl	<input type="checkbox"/> inject	<input type="checkbox"/> other	pill condom1 withdrwl injection1 controther1
0.	If contraception used just before this pregnancy, did you stop using it or did it fail?	Stop	Fail	contrfal			
1.	Interview-month	year	Field-Staffcode	Coder / Checker	intmm intyr rcdr rcdr1 cdr chr		

CEN2 – BASELINE SURVEY NEW SUBJECT – KPS

Version 11

1 Identity			REGISTERED
2. Name			GHHID
3. Sex		M F	name ident
4. Date of birth Birth decade estimate	<1910 1910-19 1920-29 1930-39 1940-49 1950-59 1960-69 1970-79 1980-89 1990-99 B C D E F G H I J K		sex
5. Name of mother if alive elsewhere, name head of HH and village	HH: vge.: Alive Died in year:		birthst birthmin birthyear
6. Name of father if alive elsewhere, name head of HH and village	HH: vge.: Alive Died in year:		idmoth nameparent molwita mothdyr
7. Village of birth			idfath nameparent fathvita fathdyr
8. Marital status (current)	N never married M married D divorced/septd W widowed		idvill bvill
9. Name all <u>current</u> spouses and order			marital
			spouse- database

Additional identifiers

10. Have you been known by any other names in the past?	
11. Specify previous contact:	LEP1 LEP2 HC Control HH year:
12. Name HH & village or HC where last seen:	
13. If <i>not</i> seen before, why? born after LEP unknown came from: in year:	
14. If no siblings appear on an accompanying GHH-form: List siblings alive in Karonga If no siblings are known alive in Kga.: List other members of the HH where last seen	tick if same: mother father
(1)	<input type="checkbox"/> <input type="checkbox"/>
(2)	<input type="checkbox"/> <input type="checkbox"/>
(3)	<input type="checkbox"/> <input type="checkbox"/>

15. Name of informant		informid
16. Current household		
17. Position in household	Z Head Y Member W Visitor V Itinerant U employed in HH I renting from res. landlord (name) S institutional member R Non member relative	posn
18. When did you join / become head of this family / social group?	1 from birth (estimates from Q4) (MM / YYYY)	joinst joinmm joinyear
19. Previous village		previll
20. Has the subject been here today?	Y N	beenhere
21. When was s/he last here?	1 yesterday 2 during the last 7 days 3 during the last 4 wks 4 more than 4 wks ago	wentwhen
22. ADL status of this subject	Alive Died Left	adl
23. (specify HH if within Karonga) Year of death / departure		dtliffy
24. Left to HH: Vge.:		newres hse namehdhse
25. Reason for joining this family / social group? (if joined or left this HH within last 12 months)		rsnmove rsndind

Education and occupation

26.	Have you been to school?	Never	Ever	Curr.	schlever
27.	Highest level reached	school type			schltype
28.	School / work address	form/ standard			schlstid
29.	Main occupation				
30.	Employment code	describe industry (if not in agriculture/ forestry):			emp occ ind
31.	Did you formally train in this occupation?	-Y N			trained
32.	How many people do you employ in your main occupation?				empnum
33.	Was subject seen?	Y N			seen

TB case finding

34.	Do you have a cough?	Y	N	cough labno	
35.	Duration of cough	fill in lab number here number of weeks			coughks
36.		(if more than 2 months, give MM/YYYY when cough started)			coughmm coughyy
37.	Haemoptysis	Y	N	haemopt	
38.	If cough >3 weeks / haemoptysis / TB suspect on other grounds:	On the spot sputum collected			spulcoll specno
39.	(GP-form must be filled for TB suspects)	Sputum containers given			spcontgiv

BCG scar survey

40.		classify				size (mm x mm)	
41.	BCG scar 1	1	2	3	4	X	bcgscar1 bcgsize1
42.	1=yes 2=none	1	2	3	4	X	bcgscar2 bcgsize2
43.	3=doubtful 4=not examined	1	2	3	4	X	bcgscar3 bcgsize3

Vaccination calendar for children under 5 only

44.	Place of birth	1 Home	2 Health centre	3 TBA camp	born	
45.	Child health card seen	Y N			cardseen	
46.	HC issuing the card				vcentre	
47.	Tick all vaccines received	Vacc. date	Vaccinating HC**	Vacc. date	Vaccinating HC**	
48.	<input type="checkbox"/> BCG			<input type="checkbox"/> Polio0		bcgdate p0date
49.	<input type="checkbox"/> DPT1 <input type="checkbox"/> +HBV/ HIB			<input type="checkbox"/> Polio1		dp11date p1date
50.	<input type="checkbox"/> DPT2 <input type="checkbox"/> +HBV/ HIB			<input type="checkbox"/> Polio2		dp22date p2date
51.	<input type="checkbox"/> DPT3 <input type="checkbox"/> +HBV/ HIB			<input type="checkbox"/> Polio3		dp33date p3date
52.	<input type="checkbox"/> Measles					measdate

** name HC where vaccinated if different from Q46.

For women 15-49 years only:

53.	How many of your own children live at home with you?		chihome
54.	How many of your own children live away?	How many of your own children have died?	chisway chidied
55.	When did you last give birth (live birth)?	(MM/YYYY)	cib
56.	Did you attend an antenatal clinic during the last 4 years (48 months)?	Y N	ancuse
57.	Have you ever been pregnant at all (resulting in a birth or not)?	Y N	prevpreg
58.	Interview-date	Field-Staffcode	Coder / Checker

Appendix E

i) Life history interview prompts

INTRODUCTION

We would like to know about the story of your life.

We will start with where you were born, and when you were growing up and going to school.

Then we will ask about when you first got married, and about having children. How it was to be married, and how you were staying.

We would like to discuss and talk about these things with you, not just to say ‘yes’ or ‘no’.

Then we will talk about what you are doing now.

So, from being young, up until now, that is what we would like to talk about.

START INTERVIEW

CHILDHOOD - SUKULU

So, where were you born? Who was taking care of you?

Tell me about the different places you lived when you were a child.

Muli kulutako ku sukulu? Muli kulekela mu standard uli?	Did you go to school? What standard did you finish in?
Muli kulekelashi sukulu?	Why did you stop going to school? <i>Before or after getting married?</i>

REPEAT WHAT SHE HAS TOLD YOU TO MAKE SURE IT IS CORRECT: “So, you left school at age And you were living with What happened next?”

YOUNG WOMAN: NTHENGWA? NCHITO?

How old were you when you first got married?

How many other wives did he have?

Did he take any other wives after you got married?

Did he pay lobola?

How did it happen that you got married the first time?

How did you feel when you got married?

Did you want to have children? Did you and your husband discuss having children?

What did you hope for in terms of children?

HAVING CHILDREN: “And so you got married when you were.... Did you get pregnant or what happened?”

How long after you got married did you get pregnant?

Can you tell me about the children that you had with this marriage?

- IS CHILD STILL ALIVE?

- YEAR OF BIRTH

And can you tell me about any problems you had with pregnancy?

Or problems during childbirth?

And can you tell me about any miscarriages you had?

Or any babies who were not alive when they were born [still birth]?

And during this time, who else was living with you? Were there any children who were not your own living with you? Why?

“And are you still married to this same man? Or what happened to that marriage – did you divorce, or did he take another wife?”

“So you were divorced to that man.”

Why did that marriage end? Did you decide to leave or did he tell you to leave?

Where did you go after the marriage ended? What were you doing there?

Did he return the lobola?

Where did the children live when the marriage finished? Why?

“So, your husband took another wife.”

Chifukwa uli wafumu winu walikutola
mwanakazi munyake?

Mukapulika wuli apo akatola
mwanakazi munyake?

Wali kutola wanakazi walinga?

Wanakazi wanyake wokhala kochi?

Pafupi naimwe?

Kasi akawa na wana na wafumu winu?

Walinga?

Why did your husband take another
wife?

How did you feel when he married
another wife?

How many other wives did he
marry?

Where does the other wife / other
wives live? Near to you?

Has she had children with him? How
many?

Vinthu vikawa makora nangu
vikalutilira apo akatolera kwa yimwe?

Did anything change when he
married again?

CHUMBA / INFERTILITY

“So you had ... children. Was there ever a time in your life when you waited a long time to get pregnant?”

(Pakawa nyengo iyo mukakhumbanga kuwa nanthumbo kweni mukatola nyengo yitali?)

OR “When you first got married, did you use anything to help you get pregnant, even if you only used it for a short time?”

Mukugwirisa ntchito vinthu vinyake
vakukuvwilani kuti muwe nanthumbo?

Are you using /did you use
anything to help you become
pregnant? Are you using anything
at the moment?

Mukuzomelezga kuti muli wa chumba?

Did you worry that you were
infertile?

Mukugwirisa ntchito vinthu uli?
Kumwa, oro kunjiza mukati, oro
kughezga?

What did you use? Do you drink
something, or put something inside,
or bathe with something?

Mukayamba pa uli kugwirisa ntchito?
Mukayamba pa uli kufipa mtima pa
kuwa nanthumbo cha?

When did you start using it?
When did you start worrying
because you were not getting
pregnant?

Pakajumphya nyengo yitali uli apo
mukatoleka kuti muyambe
kughanaghana?

How long after getting married did
you start worrying?

Chifukwa uli mukayamba kufipa
mtima? (Wanthu wanyake
wakakufumbanipo ‘chifukwa uli
mukuyavya nthumbo? Wafumu winu
wakakufumbanipo?)

Why did you become worried? [Did
some people ask you why you
weren’t pregnant?] Did your
husband ask you?

Mukadumbilana zakupenja mankhwala
na wanthu wanyake?

Did you discuss looking for
medicine with other people?

Mukughanaghana kuti ndi vinthu va

Did you think it was due to your

kwa imwe oro va kwa wafumu winu kuti muleke kuwa nanthumbo? Chifukwa uli?	husband or you, that you are not getting pregnant? Why?
---	--

Ask all women about this:

Pala mwanakazi akughanaghana kuti wafumu wake waliye nkhangono za kupanga nthumbo, angawa na mwanalume munyake kuti wamupase nthumbo. Muli kupulikapo ivi?	If a woman thinks that her husband can't make her pregnant can she get another man to make her pregnant? Have you heard this? What happens?
--	---

“Sono, nkukumba kufumba malo yakupambanapambana ayo mukalutako kupenja mankhwala, kale oro sono, kuti muwe na nthumbo.”

“Now I want to ask you the different places where you went, to look for medicine to help you to get pregnant”

Mukaluta kochi kwa kwamba?	Where did you go at first?
Chifukwa uli mukaganiza kuluta kula pa nyengo iyo?	Why did you decide to go there at that time?
Yula dokotala/ng'anga wa ka kupimani? Mukati?	Did the doctor/traditional doctor examine you? Inside?
Wafumu winu wakaluta namwe?	Did your husband go with you?
Chifukwa / chifukwa cha?	Why/ why not?
Wa dokotala wakapima wfaumu winu oro nakuyowoya nawo?	Did the doctor examine your husband or talk to him?
Wa dokotala wakakupasani mankhwala?	Did the doctor give you medicine?
Ndi mankhwala uli? (Yakumwa, yakunjiza kusi) Mulikwatolopo mankhwala yanyake?	What type of medicine? (to drink or to put inside) Have you had any other types of medicine?
Mankhwala ayo yakagwira ntchito?	Did any of these medicines help you?
Khalinga ako mukaluta ku wadokotala/ng'anga, nangu chipatala?	How many times did you go to the doctor or traditional doctor or to the

Wa dokotala wakakupasani malangizo ngaza kutola nthumbo?	hospital? Did the doctor give you advice on how to get pregnant? What did he say?
Wadokotala/ng'anga wakakuphalilani zina la icho chikanangika? Ntchi vichi? <i>Usange Mbuhawi...</i>	Did the doctor tell you what was wrong? What was it? <i>If this doctor said it was witchcraft:</i>
Wadokotala/ng'anga wakakuphalilani uyo akwamba uhawi?	Did the doctor /traditional doctor tell you the one who was bewitching you?
Chifukwa uli mundaluteko ku chipatala? Mukuyanayana kuluta?	Why didn't you go to the hospital? Do you think you will go?

Kasi wafumu winu wakufuma ku walo?	Has your husband been out of the house? [Unfaithful]
Mungandiphalilako pa ivi?	Can you tell me about this?
Mukamanya kasi uko wakalutanga, nauyo wakawa nayo?	Did you know where he was going or who he was with?
Mulikutimbana pa ivi or mukazomelezga waka?	Did you fight about it or accept it?
Kasi wafumu winu wakawa na wana ku wanakazi wanyake awo mbawoli wawo cha, apo imwe mukatolekanga?	Has your husband had children with another woman who was not his wife, whilst you have been married?

“So, you were married... and had children....[REPEAT WHAT SHE HAS SAID], and during any of this time did you ever have any of these problems:”

	Her history
Muli kupulikapo ivi vili apa muchibabilo chinu ?	Have you ever had any of these symptoms in your reproductive parts?
○ Kuwawa pala mukutunda	○ Pain when urinating.
○ Kunyenyele kusika oro kumatako	○ Itching down here or in the vagina.
○ Kawanakazi ukufuma unandi (mawele yala yakufuma kusika)	○ Excessive vaginal discharge [white fluid]

<ul style="list-style-type: none"> ○ Kusika kukufuma vinthu ngati mwapya na moto ○ Pala mwokomana na mwanalume kasi munthumbo pachinena namachero yake kuwinya ? Panji thupi kosha? ○ Kasi muli nasuzgo lililose pa mavwilalo yino panji kugeza / panji kunjilamo (kugeza more than 7 days, kugeza kawiri pa mwezi, panji kudukira dukira kuthika ndopa chomene?) ○ Vilonda kusika / vakutupa muphechepeche. <p>Pa uli vikachitika? Pakajumphya nyengo uli kuti vizindikilo vimale? Mukapeja wowwiri wuliwose?</p>	<ul style="list-style-type: none"> ○ Burning sensation whilst urinating ○ If you have sex with a man, do you feel pain in the abdomen or at the top of the vagina? ○ Do you have any problems with your period? [bleeding for more than 7 days, two periods per month, scarce periods or maybe heavy bleeding?] ○ Swelling sores around the vagina? <p>When was that? How long was it before the symptoms stopped? Did you look for help?</p>
--	---

“So, up until now have you ever used anything for child spacing or to stop diseases, including condoms?”

	Use of Contraception
Muli kugwirisapo ntchito pa vya kulela?	Have you used anything for child spacing? What did you use? [like condoms]
Mukagwirisira ntchito vichi? Ma condom?	
Chifukwa uli? [Chisanzo, pa wana patali patali, mukukhumba yayi wana, kutola nthumbo yayi, kuleka kutola matenda yo STD/AIDS]	Why did you use it? [E.g. for child spacing, you don't want children, not to get pregnant, not to get transmitted disease, STD/AIDS]
Mukagwirisa ntchito pa uli?	When did you use it?
Nafumu winu nangu chibwezi chinu?	With your husband or your boyfriend?
Mwazamukwamba kugwirisa ntchito kulela? Chifukwa nanga chifukwa cha?	Will you use child spacing again? Why/why not?

And when you were at school, did you ever have any boyfriends?

Did you ever sleep with a man before you got married?

And in the future, how many children would you like to have?

Why do you want this number?

What is good about having children? For example, do they help you with work? What do they do?

Umoyo wa za kubaba	Reproductive Health:
<i>Ndati ndifumbeko za mathenda ayo ise ta wanakazi tikukumana nayo yakunthowa yithu uku. Kumbukani kuti ichi chisis cha imwe na ine.</i>	<i>I want to ask you some of the disease which us women can come across in the vagina. Remember this is secret between you and I.</i>
Muli kuphulikapo nthenda yiliyose iyo yingakhwafya chibabilo? (for example, chizonono. Then, maboma).	Have you heard of any diseases which attack the uterus? [for example: syphilis, then bubo]
Yakuchemeka uli, vizindikilo ndi vivichi?	What are they called? What are the symptoms?
Mukasambila kochi za matenda? Uyo akakuphalilani ninjani?	Where did you learn about these diseases? Who told you?
Mukuchizga uli?	How do you cure them?

“And during this time how have you made money to stay well?”

Ntchito / ndalama / chakulya	Work / money / food: Socioeconomic status
Muli kukhalapo pa ntchito iyo mukasanganga ndalama? <i>What sort of business is it? When did you do this job? For how many years? What do you sell?</i>	Have you ever worked to earn money? <i>What sort of business is it? When did you do this job? For how many years? What do you sell?</i>
Mukungwira nasono ntchito iyo? Chifukwa uli muli kuleka?	Are you working at the moment? Why did you stop?
Mukuchitachi pa nyengo ya sono kuti mukhare makora? Kuti musange ndalama, kuti musange chakulya?	What do you do at the moment in order to stay well? To get money, to get food?

<i>Who pays for school fees? How do you buy soap? Or relish?</i>	<i>Who pays for school fees? How do you buy soap? Or relish?</i>
Kasi wanyake wakukhala kwabula chakulya nyengo zinyake, nyengo zose, oro yayi? Nanga imwe?	Does anyone in this house go without food often, sometimes, or never? What about you?
Mukulima mbewu uli?	What crops do you grow?
Ndi mbwenu uli mukugulishya kuti musange ndalama?	And then do you sell them in order to get money?
Pala imwe mwalwala, mukusanga yayi ndalama ndipo mukulima cha, uyo angakupwelelelani ninjani?	If you are sick, and you can't get money or do cultivating, who cares for you?
Uyo akwiza na ndalama / chakulya / somba / sopo pano munyake ninjani?	Who brings money/food/fish/soap here?
Wakuchitachi kuti wasange ndalama?	What do they do to earn money?

DO YOU HAVE ANY QUESTIONS?

THANKS VERY MUCH FOR YOUR TIME.

ii) Life history household details form

Check list for interviewer	Tick
Information sheet read?	
Given copy of Information sheet?	
Read consent form?	
Has she signed or printed it?	
Any questions?	

ANAID	Int. No.	Subject Number		
Time of interview		until		
Interviewer		Date of Birth		
Area				
Head of Household				
Current Marital status: <i>married</i> <i>divorced from last husband</i> (circle one) <i>single</i> <i>widowed from last husband</i>				
Members of household: list all people who eat together at this house every day				
	Relation to subject	sex	age	Lives there all or some of the time?
1	<i>Subject</i>	---	---	---
2				
3				
4				
5				
6				
7				
8				
9				
10				
Comments on household: (<i>roof, furniture, where you sat, who else is around, write down somewhere else if you need more space</i>)				

iii) Example of focus group discussion questions

Question Guide – Group Discussion – Women aged 18-20

1. Warm up exercises

2. Respect: who do we give respect and why?

Joanna is interested to find out about community life here in Malawi. She has seen that some people get more respect than others for different reasons. But she is finding it hard to understand why. Can we help her?

Who do we give respect to in our community?

Do we respect everyone who is old/rich?

Why do we give respect to those people?

Who do we not give much respect to? Why?

So what are the things that help a person to get respect? Why?

- Children?
- Money?
- Land?
- Marriage?
- Religion?

3. Having children at a young age

Many women have children at a young age here in Malawi, some when they are still at school.

Do some of these young women WANT to get pregnant?

- Why a young woman would WANT to get pregnant, perhaps while she is still at school?

Do some of these young women get pregnant when they DO NOT want to?

- Why do they get pregnant even when they don't want to?
- Why don't they use contraceptives?
- Are they fearing them? Why?
- Are they not able to find them? Why?
- Do you think that their boyfriends don't want to use them? Why?

What are the advantages to start having children when still young?

- Maybe they are not women like you, maybe they are women who are not so successful in education, they live in rural areas, what are the advantages for women like that?

What are the disadvantages of having a child when still schooling?

What should happen to an unmarried girl if she gets pregnant?

- What should her boyfriend do?
- What should her parents do?

Is it easier to get married if you are already pregnant with that man?

In Malawi, there have been surveys which say that 55% of teenage girls were made to have sex when they didn't want to.

- Have you heard that this may happen around here?
- When is it likely to happen?
- What sort of men do this?

What do you think is the average age that girls in Karonga district first

- Have sex?
- Have a baby?
- Get married?

What do you think is the average number of children that women have here?

Why do you think that women marry men who are older than them?

What are the reasons that a girl might want to have a boyfriend?

Why would they want a boyfriend who is older than them?

What age would you like to have your first child? Why is that a good age?

How many children would you like to have? What are the things that you think about when you make that decision?

Do people treat a young woman differently after she has had a child when she is married?

Do people treat a young woman differently after she has had a child when she is not married?

- What will be the differences in her life?
- How will elders treat her?
- How will younger children treat her?
- How will her friends treat her?

Many young women when they first get married don't get pregnant straight away. We find that many of them are using traditional methods to try and get pregnant.

- Why is it so important to get pregnant quickly after marriage?

If young women like yourselves would go to the family planning clinic, what would happen?

- What do you think the nurse would say?
- If you decided that you needed family planning, where would you get it?

4. Things that worry you and things you are planning

You are at an age now when you will soon leave school and you might be thinking about your future. Maybe you have certain plans, about what job you want, or having your own family. Maybe you also have certain worries about what might be difficult for you.

Joanna is interested in the things that are of concern to you here in Karonga. Can you tell us all the things that you worry about:

Firstly, for the whole country of Malawi, and all it's people, what are the things which worry you about its future?

Secondly, for young women of your age here, what are the things that you worry about your future?

If they don't mention these, ask: Do you worry about these things?

- Not having children
- HIV/AIDS

- Unemployment
- Not having a husband
- STDs

So these are the things you might worry about, what about the good things that you plan?

What do you hope to do after school? Why?

Is it important to you to have your own family?

Why is it so important to have children?

5. Infertility

Part of Joanna's work is looking at infertility. She is interested to know how much you know about infertility and what you think about it.

Can any of the following cause infertility? Why?

- Prostitution
- Pills (contraceptive)
- HIV/AIDS
- Sex before marriage
- Nguli
- Witchcraft
- Traditional medicines
- Rope (traditional contraceptive)
- Using a condom
- God
- Jalawe
- Anything else?

6. Sexually Transmitted Diseases

Can you list all the diseases that you know which are sexually transmitted? – Get them to do a free list (explain to Doris and Sellina)

Do you know any other diseases which can affect the reproductive area?

Where did you learn about these diseases?

Do you ever discuss these things in school?

What lessons do you get about family planning/HIV at school? What did they teach you?

Who gave you the lessons?

Where else could you get information on STDs?

7. Marriage

In the UK, there are two ways to get married. You can go to a church, or you can go and get your marriage registered with the government. Also, lots of people just move in to live with each other. Here in Malawi, there also seem to be different ways of getting married. Joanna is finding it hard to understand the different ways and why people choose them

Can you explain what people mean when they say, 'tikasomphola waka'?

Can you describe what happens at a traditional wedding? Does this happen very often any more? Have you ever been to one?

What other ways are there of getting married?

Appendix F

i) Life History Information Sheet: English and Chitumbuka

Information Sheet: Women's health in Karonga

PRINCIPAL INVESTIGATOR: Joanne Hemmings, Karonga Prevention Study, Chilumba, Karonga District, Malawi.

We would like you to take part in this study because we think that you can tell us a lot about women's health and family life in Malawi. Before you decide it is important for you to understand why the research is being done and what it will involve.

The purpose of this study is to try and find out more about women's health, childbearing and fertility in the Karonga district. In particular, the study is interested in finding out more about infertility and childlessness, as this is of great concern to many women. The study will involve asking questions to lots of different women. When the study is finished, recommendations will be made to the Malawian Department of Health and to International Health Organisations. However, at the moment there are no plans to bring extra doctors or services to this region on the basis of this research.

The study will take place over six months and will involve interviewing around forty women. It is up to you to decide whether or not to take part. If you would prefer not to take part in the study, for whatever reason, please tell us. We will ask you to sign a consent form. You will still be free to withdraw at any time and without giving a reason.

You will be asked questions and your opinions on

- The family
- Where you have lived
- Your marriages and children
- Infertility
- Traditional medicine

The discussion will last for about one hour. If you want to leave at any time, please tell the interviewer. Or you can just leave. The discussion will be tape recorded so that we can write it down at a later stage, though if you would prefer it not to be recorded then we can turn off the tape recorder.

Joanne Hemmings, the researcher from the UK, will keep all records of the discussion in a locked cupboard. Your name will not be kept on any records. The only people to see the discussion when it is written down will be the interviewer, Joanne Hemmings, and a translator. All personal details such as your name, where you live, and your age will not be kept with your interview so no one will be able to trace it back to you. If you agree to it, the records from your interview will be kept in a safe place, without your name attached to it, in a University in the UK, in case future researchers or students want to use it.

There will be no financial payment to you for taking part in this study.

This study does not involve taking any blood.

This study has been approved by the London School of Hygiene and Tropical Medicine Ethics Committee and by the Malawian National Ethics Committee (under the remit of the Wellcome Trust Project into finding out more about Antenatal Non attenders).

This study is funded by the Economic and Social Research Council of the UK.

Mutu: Umoyo wa wanakazi mu boma la Karonga

Mwenecho wa kafukufuku: Joanne Hemmings, Karonga Prevention Study, PO Box 46, Chilumba, Boma la Karonga.

Tili na khumbo lakuti muwe mukafukufuku uyu chifukwa tilinachigomezgo kuti mungatiphalilapo vya kukhuzana vya umoyo wa banakazi na mabanja ghabo mu Mumalawi. Pambele mundaghaneghane vyakuchita ntchakwenelera kuti mumanye chifukwa icho kafukufuku uyu akuchitikira nakutiso ivyo vitikhumbikenge mu kafukufuku uyu.

Kafukufuku uyu wakuchitika kuti timanye za umoyo wabanakazi, kubaba na mphapo za banakazi mu Boma la Karonga. Chomene chomene, tikukhumba kumanya za uchumba, chifukwa chikukhwafya chomene wanakazi. Kafukufuku uyu wowwilenge kufumba mafumbo kubanakazi wakupambanapambana. Pala kafukufuku wamala, ivyo vyangika viti vimanyishikenge ku wakuwonelela vya umoyo muchalo cha Malawi na mabungwe ya kuwonelela vya umoyo muchalo chonse cha pasi. Panyengo yasono tilije dankha ndondomeko yakwiza na ba dokotala banyakhe kumalo agha na ndondomeko yakovwila pakafukufuku uyu.

Kafukufuku uyu watitolelenga miyezi 6 ndipo pafupifupi banakazi 40 watiwafumbikenge mafumbo. Chili kwa imwe kusankha, kuwa mukafukufuku panji chala. Usange ukukhumba kunjila mukafukufuku uyu chala, pavifukwa vinyakhe chonde timanyishani. Usange unjilenge mukafukufuku uyu, titikupasaninge form nakusayina kuti mwazomela. Muwenge na wanangwa wakusintho maganizo ghinu nyengo yiliyose kwambula kupeleka chifukwa.

Muti mufumbikenge mafumbo ndipo muti mu fumbikenge kupeleka maganizo yinu pavyakukhuzana na:

- Mabanja,
- Ndi kochi uko mulikukhalapo,
- Nthengwa zina na wana winu,
- Uchumba,
- Mankhwala ya chifipa.

Vyakundumbishana vitolenge ola limodza (1HR). Usange wukukhumba kuwukapo nyengo yiliyose, phalilani awomukundumbiskana nabo, panyakhe wukanipo waka. Vindumbilano viti vijambulikenge mu tape mwakuti tizakawe na nyengo yakulembela makola, nangaule usange mukukhumba cha, tilekenge kujambula.

Joanne Hemmings, watiwasungenge ivyo mwadumbilana mu kabati iyo yiti yikiyikenge nyengo zose. Dzina linu litililembekenge panji kusungika palipose chala. Banthu awo watiwaghonenge vidumbilano ni aba: uyo wati wafumbenge mafumbo, Joanne Hemmings, uyo wati wang'anamulilenge chitumbuka na chizungu. Vyakukhuzana na imwe: dzina linu, uko mukukhala, na vilimika vinu vitisungikenge na uyo wakufumba mafumbo chala, kuopa kuti mungamanyikwa.

Pala mwazomelezgana na ivi, vyakulembeka vyose vyakhukhuzana na mafumbo ayo mwafumbika viti viwikikenge mu malo ghawemi ku University yaku UK mwakuti wanji abowazamupanga kafukufuku wabo waza ka gwiriseko nchito. Dzina linu kuti liza muku lembekela ku umoza chala.

Pazamuwavya malipilo yaliyose kwa aliyose uyo wa njira mukafukufuku uyu.

Kafukufuku uyu ngwambula kutola ndopa.

Kafukufuku uyu wazomelezgeka na wa LSHTM na wa National Health Sciences Research Committee (NHSRC) of Malawi (under the programme application "Epidemiology of Mycobacterial and HIV Infections in Northern Malawi").

Awo wakuvwila kafukufuku mba Economic and Social Research Council iyo yili ku UK.

ii) **Consent for Life History interviews, English and Chitumbuka**

WOMEN'S HEALTH IN KARONGA – SURVEY - CONSENT FORM

Name: _____ ANAID/Subject No.: | _____ |

Village: _____

- 1 I fully understand this research. I understand that this research aims to find out about the health of women in Karonga.
- 2 I understand what will happen if I agree to join this research. There will be questions about women's health. I have understood that my name will not be included because some of the questions will concern private matters. There will be no other person apart from Joanne Hemmings who will be able to identify me from my answers to the questions.
- 3 *I agree OR I do not agree* for the discussion to be recorded. My name will not be recorded and any details identifying myself will be removed when writing up the recording.
- 4 I have understood that if I want stop the interview I can do so without giving any reason. There will be no problem if I stop taking part at any time.
- 5 *I agree OR I do not agree* that the recordings can be kept at the University in a safe place without my name. They may be used in the future by others doing research.
- 6 *I agree OR I do not agree* that Joanne Hemmings may use quotes from this interview, without my name being attached.
- 7 My questions concerning this research have been answered by

I agree to participate in this research:

Sign here : _____ Thumb print here if you do not wish to sign: _____

Date: _____

I have explained the above and it seems to be clearly understood.

Signature of interviewer : _____ Date: _____

Signature of principal investigator : _____ Date: _____

UMOYO WA WANAKAZI KU KARONGA – MAFUMBO - CONSENT FORM

Name: _____ ANAID/Subject No.: | _____ |

Village: _____

- 1 Napulikisya vyose vya kukhuzana na kafukufuku uyu. Napulikisya kuti kafukufuku uyu wakukhumba kumanya umoyo wa banakazi mu Karonga.
- 2 Napulikisya ivyo vitichitikenge pala nazomela ku njira mu kafukufuku. Kutiwenge na mafumbo na za umoyo wa banakazi. Napulikisyo kuti zina lane litiwusyikengeko ku vyakulembeka vya kukhuzana. Vidumbilano chifukwa mafumbo ghanji agho yatifumbikenge nga chisisi chane. Kulijeso banthu banyakhe padela pa aba tadumbishana nabo na Joane Hemmings abo bangandiphalila zgolo la mafumbo ghose.
- 3 *Ine nkhozomela ORO nkhozomela chala* kuti vyakudumbilana ivi vijambulike. Zina lane litilijambulikenge chala ndipo vinji vyakukhuza ine vitiviwusyikengeko pala vyakudumbilana vyamukulembeka.
- 4 Napulikisyo kuti pala nkukhumba kuwukapo pavidumbilano ninga wukapo kwambula kupeleka chifukwa. Pazamukuwavya chilango chilichose pala naleka kafukufuku uyu nyengo yose.
- 5 *Nkhozomela ORO nkhozomela chala* kuti vyakujambulika vyane vikasungike ku University ya ku UK mumalo ghaweme kwambula zina lane. Vingaza kagwirishika ntchito munthazi na wanji awo wazamkupanga kafukufuku wawo.
- 6 *Nkhozomela ORO nkhozomela chala* kuti Joanne Hemmings angalembe mazgo yane pa umalilo, kwambula zina lane.
- 7 Mafumbo ghakukhuzana na kafukufuku uyu gha zyoleka na.....

Nkhozomela kunjila mu kafukufuku uyu:

Sayinani apa : _____ Njowe yinu pala mundakhumbe kusayina: _____

I have explained the above and it seems to be clearly understood.

Signature of interviewer : _____

Signature of principal investigator : _____ Date: _____

Appendix G

i) Age cohort and marital status adjusted % 'currently polygynously married' and SMRs, ANC and ANA women

	n	Observed cases	Crude %	Expected cases	Adjusted rate	95% Confidence Interval		SMR	95% Confidence interval	
ANC parous	3523	1108	31.5	1040	31%	29%	33%	1.07	1.00	1.13
ANC nulliparous	1335	183	13.7	196	27%	24%	32%	0.93	0.80	1.08
ANA parous	467	185	39.6	171	32%	27%	37%	1.08	0.93	1.25
ANA nulliparous	208	36	17.3	36	29%	20%	40%	0.99	0.69	1.37
ANA primary inf	92	21	22.8	21	29%	18%	45%	1.00	0.62	1.52
ANA second inf	225	95	42.2	86	33%	26%	40%	1.11	0.90	1.35
ANA fertil treat	108	29	26.9	28	31%	20%	44%	1.04	0.69	1.49

ii) Age cohort and marital status adjusted % 'married more than once' and SMRs, ANC and ANA women.

	n	Observed cases	Crude %	Expected cases	Adjusted rate	95% Confidence Interval		SMR	95% Confidence Interval	
ANC parous	3625	803	22.0	759	20%	19%	21%	1.13	0.99	1.06
ANC nulliparous	1489	71	4.7	113	12%	9%	15%	0.63	0.48	0.62
ANA parous	713	403	56.6	219	35%	32%	38%	2.03	1.67	1.84
ANA nulliparous	707	48	7.2	49	19%	14%	25%	1.31	0.73	0.99
ANA primary inf	105	37	35.2	16	43%	30%	60%	3.15	1.61	2.28
ANA second inf	278	146	52.5	90	31%	26%	36%	1.90	1.37	1.62
ANA fertil treat	109	38	34.9	19	39%	27%	53%	2.80	1.45	2.04

iii) Age cohort and marital status adjusted 'HIV prevalence' and SMRs, ANC and ANA women

	n	Observed cases	Crude %	Expected cases	Adjusted rate	95% Confidence Interval		SMR	95% Confidence Interval	
ANC parous	3611	409	11.3	423	9%	8%	10%	0.97	0.87	1.07
ANC nulliparous	1482	111	7.6	97	11%	9%	13%	1.15	0.94	1.38
ANA parous	619	169	27.3	59	26%	23%	31%	2.87	2.45	3.34
ANA nulliparous	645	53	8.8	30	16%	12%	21%	1.78	1.33	2.33
ANA primary inf	91	20	22.0	8	24%	15%	37%	2.60	1.59	4.02
ANA second inf	244	50	20.5	23	20%	15%	26%	2.16	1.61	2.85
ANA fertil treat	102	28	27.5	9	29%	19%	42%	3.18	2.11	4.59

1.5.1 Appendix H

Summary of participants in qualitative data collection

i) Parity-for-age distribution used to select low and medium/high parity samples

Parity for age			
<i>Age groups</i>	<i>Low</i>	<i>Average</i>	<i>High</i>
Under 20	-	0	1 +
20 – 24	0	1	2 +
25 – 29	≤ 1	2 – 3	4 +
30 – 34	≤ 2	3 – 4	5 +
35 – 39	≤ 3	4 – 5	6 +
Over 40	≤ 4	5 – 6	7 +

ii) Life history women: key to table

AGE: Age in years at interview	
SAMPLE: Criteria used to select participants	
A	Reported currently using fertility treatments (by default, married), aged c.20-30
B	Low parity-for-age, divorced, aged c.20-30
C	Medium to high parity-for-age, married, aged c.20-30
P	Interviewed during pilot study; recruited opportunistically
R	Referred by ANA fieldworkers, aged over 30
FERTILITY: Fertility status at time of (last) LH interview	
C1 (n)	Currently primary infertile (years spent trying to get pregnant)
C2 (n)	Currently secondary infertile (years spent trying to get pregnant since last live birth)
P1 (n)	Previously primary infertile (years spent trying before live birth)
P2 (n)	Previously secondary infertile (years spent trying to have a child before next live birth)
F	Fertile: no history of infertility
U	Unmarried: cannot say whether fertile/infertile

Code	Age	Sample	Fertility	Fertility history	Marital history	Current marital status
F13	33	P	C2(5)	Secondary infertility. Her three children live with first (now ex-) husband. No pregnancy since marrying her second husband five years ago	Divorced from first husband due to his violent behaviour towards her. Re-married five years ago. No children at second husband's house as they had all died	Monogamously married, second marriage, for five years
F21	45?	P	P1(14)	Previous primary infertility. Nine years in first marriage before first child born, now has two children (had miscarriage between their birth)	Married as second wife. First wife died leaving two children. Husband married another wife who had two more children with him	Polygynously married (senior wife), first marriage, married for 13 years
F22	21	A	C1(2-3)	Primary infertility: no pregnancy in first marriage (nine months) or current marriage (two years)	Divorced first husband after he fined her for visiting her sick mother. Lives with second husband and eleven year old step-daughter from husband's deceased wife	Monogamously married for two or three years, second marriage
F23	34	R	C2(>1)	Secondary infertility after having two children in first marriage. No pregnancy after a year in her second marriage, or after trying with boyfriends. Her living child (one died) lives with father but she visits regularly	Divorced first husband after he insulted her father. Divorced second husband due to co-wife bewitchment and infertility. Currently has boyfriends	Single, living with father
F24	22	A	C1(3)	Primary infertility: no pregnancy in three years of marriage	First marriage. Husband has no other children	Monogamously married for three years, first marriage
F25	30	A	C2(9)	Secondary infertility: no pregnancy for last ten years since only child born	Lives with her husband and their ten year old son	Monogamously married for eleven years, first marriage
F26	27	A	P1(9)	Previous primary infertility: married nine years before first child born	Lives with her husband and baby	Monogamously married for ten years, first marriage
F27	28	A	P2(3)	Previous secondary infertility: had one child after first marriage (who lives with her parents); took three years for child to be born in second marriage	Brief first marriage, which she left before first baby born. Married second husband as second wife, first wife had four children. Has a baby.	Polygynously married (junior wife) for four years, second marriage

F29	32	R	C1(>3)	Primary infertility: stillbirth in first marriage, no pregnancy in three years of current marriage	Divorced first husband after bride price dispute (length of marriage not known). Now lives with step-son (aged ten) and step-daughter (aged eight) from husband's ex-wife	Monogamously married for three years, second marriage
F30	21	A	P1(1)	Previous primary infertility: had a miscarriage before her son was born	Married to first husband. Now has baby.	Monogamously married, first marriage, for two to three years
F31	25	A	P2(2)	Previous secondary infertility: had one child before marriage (who lives with her parents), then took two years for first child to be born in second marriage	Married as second wife, first wife had four children. Now has baby.	Polygynously married (junior wife) for three years, first marriage
F32	22	A	F	Mistakenly reported using fertility medicines. She had taken medicines for stomach pain and a traditional healer had told her she had a blocked path, but she had not been infertile	Married to first husband and has a baby	Monogamously married for two years, first marriage
F33	36	R	C1(>1)	Primary infertility: no pregnancy in over a year of current marriage	Married at a late age to her husband for over a year. Lives with three teenaged step-children from husband's ex-wife	Monogamously married for a year, first marriage
F37	21	A	P1(4)	Previous primary infertility: married four years before first child born	Married to first husband for five years, has a baby	Monogamously married five years, first marriage
F38	21	A	P1(2)	Previous primary infertility: married two years before first child born	Married to first husband for three years, has a baby	Monogamously married three years, first marriage
F39	23	A	C1(6)	Primary infertility: no pregnancy in six years of current marriage	Started off as junior wife in polygynous marriage, but first wife left. Lives with step-son and step-daughter from husband's ex-wife	Monogamously married six years, first marriage
F40	29	A	C1(?)	Primary infertility: probably for eleven years, though she was not sure how long she had been married for	Monogamously married, husband has no other children	Monogamously married eleven years (according to ANA data)

F41	21	A	F	Did not consider herself to have been infertile: took seven months to get pregnant; used fertility medicines to hurry things along	In first marriage, has a baby	First monogamous marriage, married almost two years
F43	30	A	C2(?)	Secondary infertility: due to chronic illness (TB) Lives with her two daughters	Married as second wife, husband married another wife	Polygynously married for twelve years, middle of three wives
F44	28	A	C1(7)	Primary infertility: seven years in first marriage without becoming pregnant	Started as third wife, first and second wives had six children each	Polygynously married for seven years, two co-wives, junior wife
F45	28	A	C1(>12)	Divorced after ten years primary infertility; no pregnancy in two to three years of current marriage	Divorced from first husband following his abuse over her infertility. Re-married as third wife, two co-wives have nine children between them	Polygynously married for two to three years, two co-wives, junior wife
F46	22	A	P1(2-3)	Primary infertility: for first two - three years of marriage. Currently pregnant	Husband married a new wife four months into their marriage but she only stayed for two weeks	Monogamously married for three years, first marriage
F47	22	A	C1(5)	Primary infertility: five years	Married for five years, husband has no other children	Monogamously married five years, first marriage
F48	24	A	P1(6)	Primary infertility five years before had first child	Husband married second wife after five years. New wife left (without having a child) after less than a year, when F48 had a baby	Monogamously married six years.
F51	29	B	C1(7)	Seven years of primary infertility in first marriage; no pregnancy in six months of new marriage	Divorced first husband after seven years due to his bad behaviour. Although selected as being divorced, she had recently re-married. Junior wife, co-wife with six children	Polygynously married six months, junior wife
F52	19	B	C1(1)	Primary infertility during her one year of marriage (but recently separated)	Husband married second wife after one year. F52 then left him because of his poor behaviour, inadequate marriage procedures/payments and possibly infertility	Currently separated

F53	31	B	C2(5-8)	Five to eight years secondary infertility during first marriage after only child died in infancy; no pregnancy during relationship with new husband (married for three months but going out with him before this)	Divorced first husband when he rejected her after he married another wife. Married as second wife, co-wife has six children	Polygynously married for three months, junior wife
F54	32	B	U	Exposure to pregnancy unclear so not possible to determine. Only child died at birth.	Appears she had a short, informal marriage; duration unknown	Single and living with mother and brother
F55	27	B	C2(>3)	Had a child before marriage which died in infancy. Secondary infertility during three years of marriage	Divorced from first marriage due to co-wife bewitchment & infertility. Has boyfriends	Single and living alone
F56	31	B	U	Had one child, then has not been pregnant in six years since despite having boyfriends/not using condoms. Could be secondary infertility, but sometimes uses condoms	She was marked as divorced in database, probably because she had a child, but was actually never married. Has boyfriends	Single and living with child and younger sister
F57	32	B	U	Has not been married: not possible to say. Had one child who lives with her sister	Had a boyfriend who she was 'married' to when she had her baby for two weeks.	Single and living with mother
F58	22	A	C1(4)	Primary infertility: no pregnancy in four years of current marriage	First marriage ended in divorce after a few months after she fell out with co-wife. Re-married and lives with step-daughter.	Monogamously married for four years, second marriage
F59	22	A	C1(5)	Primary infertility for five years of current marriage	Married as first wife. Husband married second wife after three years who now has a baby. F59 temporarily left husband over bride price dispute.	Polygynously married for five years, senior wife
F60	36	R	C1(>6)	Primary infertility: total marital durations unknown but first marriage lasted six years	Divorced twice. First divorce: violent brother in-law, Second divorce: husband's bad behaviour. Re-married as second wife, first wife has seven children	Polygynously married for three months, junior wife
F61	23	C	F	First child born before she married and died at a few months old. Now lives with her three children	In first marriage: no marital problems	First monogamous marriage, married for seven years

F62	25	C	F	Lives with her son and daughter	In first marriage: no marital problems	First monogamous marriage for seven years
F63	31	C	F	Four living children, two babies died at birth	In first marriage. Husband married new wife after two of their children died in infancy. That wife has since left.	First monogamous marriage for fifteen years
F64	22	C	F	Used traditional fertility treatments nine months into marriage and became pregnant immediately. Had one child and currently pregnant	Husband married another wife three months into their marriage, and treats his new wife to greater attention/resources	First polygynous marriage for four years, senior wife
F65	32	C	F	Seven children, no reproductive problems	In first marriage, no marital problems	Monogamously married in first marriage for fifteen years
F66	31	C	F	Four children, <i>cheka</i> after childbirth with two of them	In first marriage, husband got another woman pregnant but did not marry her	Monogamously married in first marriage for fourteen years
F67	27	C	F	First pregnancy ended in miscarriage, has two living children	Started as second wife, husband married another wife who has subsequently left. They lived apart for two years (she stayed with her mother) after her miscarriage while he worked away	Polygynously married, junior wife, in first marriage for eight years
F68	31	C	F	Three children	Husband married another wife because he wanted sons and her first two children were girls	Polygynously married, senior wife, for twelve years
F69	29	C	F	First child died at ten months old, three living children	Left her husband after he married another wife and started to neglect her. Local court ruled she should return to him but she has not done so yet. Has a boyfriend and doing business at market. Staying with father	Currently separated after fourteen years of what had recently become a polygynous marriage
F70	31	C	F	Had one child in her first marriage who lives with her sister. Had three more children with current husband	Left her first husband after bewitchment by co-wife. Re-married to man with one wife. He then married another one, but both have now left. Then he married another wife	Polygynously married for eight years, now the senior wife, second marriage

F71	24	C	C2(3)	Three of her four children had died: two at birth (born prematurely), the third died in infancy. Remaining child lives with grandmother. Three years secondary infertility since last child died	Lives with husband, poor marital relationship.	First monogamous marriage, married for nine years
F72	32	C	F	Had a child before getting married who lives with her mother. Has had three children with husband.	Didn't know her husband already had a wife when she married him. Does not get on with co-wife.	First polygynous marriage for ten years, junior wife
F73	23	C	P1(2)	Previously primary infertile: took over two years to have her first and only child so far. Had a miscarriage and used fertility treatments.	First monogamous marriage; husband works in southern Malawi (fishing) for much of the year.	First marriage, monogamous, married for four years
F75	26	C	F	Two of her five children have died and she is left with three sons.	First monogamous marriage	First marriage, monogamous, married for eleven years
F76	32	C	F	Had two children with first husband (who live with their father's parents) and three children in second marriage	First marriage ended in divorce due to husband's bad behaviour after about six years. Re-married to a man who had two wives, but both of those wives have since left	Second monogamous marriage, for five years

iii) Focus group participants

	Date and Description	Brief notes on participants	Recruitment
1	16.04.04 Grown/married women Pilot/training focus group (my first one) All housewives (none in paid employment) Moderator: P (employed temporarily during pilot work) Held in P's living room.	A: age 23, four children. Sat in the corner and didn't really speak unless prompted. B: age 20, one child. C: age 26, four children. Dominated the conversation. D: age 30, two children. Looked much older. E: age 23, four children. F: 29, three children. G: 30, six children. Patricia's younger sister.	Friends and neighbours of the sister of a colleague at KPS, Hangalawe (1 mile from Uliwa trading centre)
2	23.02.05 Teenaged girls, secondary school Moderator: DB Notes: CK None have children apart from G. Held under tree in grounds of Chilumba Secondary School.	A: Age 17. Form 4. Speaking quite a lot. B: Age 16. Form 4. B is pretty shy at the start. C: Age 17. Form 3. D: Age 19. Form 3. E: Age 16. Form 3. F: Age 16. Form 3. Stares and stares at me. G: Age 19. Form 4. One child (and has returned to school: very unusual)	Requested that headmaster organise a group for me, in exchange I gave a talk at the school about KPS and research in general.
3	02.03.05 Teenaged girls at secondary school None have children. Same place as Group 2. Moderator: CK, Notes: DB	A: Age 18. Form 4. B: Age 20. Form 4. C: Age 19. Form 4. Two girls who were meant to attend are absent.	As for Group 2.
4	29.04.05 Grown/married women Behind the house of F27 DB & CK moderate. JH present only for first 20 mins. Notes (right) made by DB & CK	A: 3 or 4 children. Age 28-30. Baby on back, not very open, somehow fearing someone would laugh. Schooling: Std 8? Does farming. B: 2 children. Age 25-27. Shouting, very talkative, pregnant. Arrived late, missed some explanation. Std 8? But clever. Husband has business: Tanzanian imports. C: 2 children. 29-31 Owner of house and stand-in organiser of group. Pregnant. Std 8 – Form 2? Husband is Chewa (from southern Malawi) and does business. D: 3 children; 1 died. Age 25-26. Baby on back – Talkative. Wife of owner of successful Bar – he has two wives. Form 4 completed – husband has cars and business. E: 3 children. Age 25-26. Quiet – but became talkative especially after JH had left. Tried to explain every answer. Std 8. Business maybe? And a little farming. F: Age 25-26. 1 or 2 children. Not very talkative. Quiet. Form 3.	F27 (a very chatty LH woman) agreed to assemble a group of peers in Chambogh (1/2 a mile from Uliwa)
5	09.05.05 Grown/married women DB & CK moderate JH takes notes.	A: 35 years old, 1 child from previous husband; re-married here now (no kids), ?infertile B: 24 years old. 2 children (including small girl breastfeeding during discussion) C: 27 years old. 3 children, including a week old baby. D: 30 years old. Four children. Sleeping child on back. Third wife of F's brother in law.	F62 (very articulate) agreed to assemble a group of peers in remote rural part of Vinthukutu

Appendix I

i) Sample LH interview transcript with parallel translation

CK: Kasi imwe na fumu winu mukadumbiranako vya kukhumba wana

CK: Did you discuss wanting children with your husband?

F: Enya

F: Yes.

CK: Kasi iwo wakatingipo vichi pa nkhani ya wana iyi

CK: What did he say about children?

F: Pankhani ya wana iyi ivyo ivo tikadumabangapo tikati ipo tende mumamnkhwala, sono wanyane mumunkhwala ndimo wakakhumabngamo cha, kwenda mumunkhwala kweni wa dumbu wawo wakakhumbanga kuti tende mung'anga, tikendapo waka kamozi mbwenu zii no kuya kweso mbwenu tikajikhalira waka.

F: About children, we discussed that maybe we have to go to the traditional doctors. So, my friend didn't want to look for medicine, but his sister wanted us to look for traditional medicine. We just went only once then we stopped, not even going again.

CK: Kasi umo mukatolekera mukawapo na nthumbo

CK: The way you have been in marriage, have you ever had a pregnant?

F: Ine ningayowoya mumulandu wakuti, vimanyikwiro vyake ivyo vikanichitikiranga ningavipanikizga kuti kwali nkawa nanthumbo kwali nkawa nanthumbo yayi manyi mwakuti pala nageza mwezi unyake kamoza mbwenu nkhusanga kuti kumoyo kwamba kuchita vich, pamanyuma yikawa ngati myezi four mbenu walalikere, kumoyo phakfu, sono pala nkhamanya yayi kuti kwali nkawa nanthumbo kwali nthumbo yayi ningapanikizga cha

F: I can say that the signs, which were happening to me, I did not know exactly whether I was pregnant or I was not because of my monthly period. If I will have my monthly period this month then I will just find that my stomach start doing what? Then afterwards, I did not know where it went, my stomach went

normal again. Therefore, I did not know that, whether I got pregnant or it was not pregnant.

CK: Sono mwati nthengwa yinu yakwamba iyo yikamala

CK: You said that you divorced in your first marriage.

F: Enya, yikamala chifukwa cha m'nung'una wake, daily kutuka, ine na mfumu wane timbanapo cha kweni mulamu yula ndiyo kutuka sono nkati nawera daninkhe ku nyumba knkawone wanthu nkapumulepo, namachero ningazakhala pa ndekha angazanikoma, mbwenu nkazakajikhalira pasi, nakumulemba kalata kuti nbatondeka pala ukhumba utole mwanakazi munyake, ndimo yikamalira nthengwa.

F: Yes, we divorced because of his young brother. He was insulting me everyday. But I was not quarrelling with my husband but his brother was everyday insulting me. So, I said that I have gone home to see the people to get rest. Maybe tomorrow he will kill me if I will remain alone. Then I just came and sat down here. I just write a letter that I have failed to come back so if you wish marry another wife. That was how our marriage was.

CK: Chifukwa chavichi wamulamu wino wakatukanga

CK: Why had your brother in-law insulted you?

F: Wakakhwewanga vyamba, wakawaso na matenda ghithu gha Edzi agha, sono mtima wukawa wakatukanga

F: He was smoking marihuana and he was affected with HIV/AIDS. Therefore, his heart was always full of insults.

CK: Kweni pakawavya chifukwa icho wakalongosola kuti akumutukirani

CK: He did not explain the main reasons why he was insulting you.

F: Malinga akhwewa pera mbwenu olo wanyina akawatukanga; pala atuka wanyina mbwenu akuchimbira wakuluta ku mzimba, sono pala ndakhala ndekha mbwenu kutuka kose kula kumalira kwa ine.

F: If he has just smoked, that is all, he was even insulting his mother. If he has just insulted his mother, his mother will run away to Mzimba. So if I remain alone it means all insults will be to me.

ii) Sample field notes

F22. First interview.

24.06.04

Time of interview 11.35 – 12.23

Date of birth 1984

Area: Mulyabweka

Head of household: Husband, born 1964

Also daughter of husband (from a deceased wife of his), age 10, lives there all the time.

Household is an attractive house surrounded by flowering shrubs, set back from the main path through a cassava field. As we approach there is a radio playing in the yard. We sit on the shady, leafy khondi, which reminds me (a little) of a Spanish patio. F22 comes outside and we sit there with her mother in law. We have started rejecting to sit on chairs (feels too formal) and sit on the mat instead, so F22 sits on the chair for a while. She looks young and confident, with a bold posture on the chair, and looking calmly at us. She moves to sit near us after a few minutes. Her mother in law comments that I look old, when I say I am 24 she remarks that ‘our friends eat well’ (does this mean I am fat for my age? Guess I am compared to young women here). F is wearing a patterned shirt and blouse. She has little sticking up plaits in her hair. She is quite smiley and laughs readily. They tell me that I am lucky that I don’t have to put chemicals in my hair. I reply that I have to wash it every day and put creams in it (not strictly true...). DB tells the mother in law that the interview is a secret, and she leaves, no problem. Then we ask them to turn off the radio before we start recording, again, no problem. The history of where she has lived is quite long. I’ve been introduced to them as a mwana wa sukulu – a school child – which I feel indignantly is a bit of a demotion! It is explained that I am doing my ‘practicals’. That’s probably why they think I look quite old, which I do for a school child.

Some way through the interview five very ragged children arrive, two of whom have extremely distended bellies with very curved backs. They stop and stare, and at Doris’ prompt, F shouts at them to go away. This is a different type of interviewee: she is younger than Doris and I sense that the power relationship is slightly different. I am not sure I detect a certain adolescent surliness, or tendency to be monosyllabic, or whether that is me projecting my interpretations onto her behaviour. Is it that younger women

have less to say, as they haven't as much experience or confidence, or they are not used to engaging in such dialogue?

We 'ran out of questions' from the interview schedule after half an hour – though on writing down the content of the tape I am not entirely happy that all of the guide was adequately covered. DB asked for guidance. I think we need to prepare better for things like this. However, after trying a bit more, we hit upon something which gets her talking. It seems that everyone has a story to tell, you just have to hit upon the right questions to open the flood gates.

The cover sheets for each interview are not being filled in well; they need to be checked in the debriefing at the end of each interview. DB isn't noting the relationship of other household members to the subject and isn't writing who Head of household is.

iii) Sample LH case summary

Childhood

She was born at Jetty in the hospital in 1977 (KPS database) or 1978 (what she says).(checked in interview 2: she still says 1978). Her parents lived at Chisumbu near the centre of Chilumba. She lived with them and went to school there. Then she went to stay with her (second born) sister when she was six years old, who lived at the Garrison (her sister's husband was a soldier), because she had no one to help her work, so she took her to help her. She just had young sons. Then she went to Mzuzu. Then she came home again. She left school in Standard Eight. She did go to school whilst living with her sister as well.

First child and marriage

She got pregnant with her first child when she was in Standard Eight, in 1993. She didn't sit the end of school exams. The father of that child was her boyfriend from when she was at school (she says it was her only boyfriend at school). Then she went to live with her husband (the boyfriend). She stayed there for eight months, but their parents disagreed over lobola. In I2 she explains about the disagreement:

F: Enya mwanalume tose tikatolana wana wa school pera ndalama yoti akayisange apereke yikawa yosuzga, wana ukawaso unandi, mbwenu kuti asange ndalama yayi mbwenu ine anipasa nthumbo, mbwenu iyo akuzayambaso course pa Uliwa operekaso nthumbo kumwanakazi mnyakhe kuno nthena nimlamu wane alipo kamwana nikala kali pambele kala kafuma mu wala, mbwenu vikamalira moti nthengwa yila mbwenu yatitonderapo.

F: Yes, that man and I got married while we were at school, so there was a problem on how to get money so that he can pay. He was also childish manners, so instead of looking for money he just gave me pregnant. He started a course at Uliwa and he got another woman pregnant at Uliwa. That woman is my in-law here and the child is that one there at the front, that one is from that one. Then it just ended there.

So they took her back home and she gave birth at CRH. He didn't come to try and take her back. The child was born in 1994. (INT 2: 1993). She says she was 14 when she got married. In the second interview she talks about the problems she had giving birth to her first child at St Anne's:

F: Enya suzgo likawapo nati nachira chibabiro chikasweka chamukati sono pakuwona tikati nichilaso cha wanthu wakanitema mankhwala kweni vikasinthanga cha, mbwenu tikaluta ku Vinthukutu wakaniwika pa drip kufika kula wakuti mwana anguwa mukulu sono chibabiro chasweka sono ndiyo wakanipasa treatment sindano wakandilasanga mapilisi wakanipasanga mbwenu mpaka kupora, nkakwaniska mwezi.

F: Yes, the problem was, my uterus was broken after giving birth, so, the way we saw it, we thought maybe it is that thing which those people cut from me, they give me medicine but it didn't work, then we went Vinthukutu hospital and they give me a drip. So that is when they said that a baby was too big and it has broken the uterus. So, that's when they give me treatment, injections, tablets then I was cured. I was there for one month.

She is fine up to now and her child is fine. That child was living with her parents, and then was staying with her eldest sister in Lilongwe and Blantyre, because her sister 'just wanted to'. Her sister was married with five children. She stayed with her mother until she met her second husband, who she says was the only boyfriend she had. She has since gone and brought back her son from her sister's place, because:

F: School mwana akasambira yayi, nawo uko wakakhalanga kutali na school, sono nati nakala kuno ayayi nkamutore mwana wane, nkamuwone, sono nkamuwona umo okhalira nawa kulu mbwenu nkuwona ngati akusuzgika, mbwenu nkuti tiyeni wakulu muzamutola mwana uyu pala mwiza, sono kuti wangawa wakudandaula kuti mwanibana mwana. Nakuvwira nako kukawoneka kuti mwana wakumuvwira yayi, akavwalanga yayi mbwenu akakhalanga waka mu town.

F: He was not schooling, where they were living was far from school so after some time I said no I have to go and see my child. When I saw him, the way he was living with my sister then I thought my child was suffering. Then I said lets go, my sister you get him when you come. I thought maybe she will be worried that she has come to get her child. She wasn't helping him, she wasn't even dressing him, and he was just living with her in town.

Second marriage

When she was going out with her current husband, she had the injection for two years (once every three months) to stop her getting pregnant because she was worried that he wouldn't marry her if she got pregnant:

F: Apo sono nkha, ndati ndababa mwana yula, so, vikanditonda kuti aaa [no] kuti apa ine ndasanga chibwezi ichi, so kuti ndipoke luwiro thumba mbwe vikandisuzga. Nyengo zinyake atinditole yayi, ipo ndilele

F: It was when I gave birth to my first born child, so I failed to aaa, so I found that boyfriend [who is now her husband], so I was worried about getting pregnant quickly. Perhaps he wouldn't marry me. So I thought I'd better use contraceptives.

The relationship started when she was living at home, and he used to come and see her, and was living with her (?) for two or three years, but when he got tired of doing 'chikmwini' (matrilocal living) he said, let's go home. She stopped using the injection when she moved in with him (she said she got married to her current husband in 1991 but I think it was 2001). (I2: 2001) And then she stayed for years without giving birth. She seems to even attribute her years of childlessness to the injection: Mbwe lekani ...and that's why... there was a long time when I didn't give birth.

He didn't pay lobola but he paid chibadala to her aunt. (INT 2: to her dad, chikhola is paid to the aunt, and now her dad wants that cow!). He sent one cow to her father, but he wanted two, so her father sent it back. They just got married without a wedding.

She found another wife here when she arrived, who ran home when F got there. This other wife has four children. When she first married they all lived at the mother in law's place (INT 2: no, just the first wife), but there was a disagreement when F married her husband, so they moved to her father in law's place. After she had her baby the first wife came back, but she lives a little way away, at the Post Office at Uliwa, at the mother in law's place.

Her husband's home is his mother's place, it was where he grew up and was born, and where F got married. Then there was the disagreement, which meant that they moved. The disagreement wasn't because she hadn't had a child; it started right at the beginning of the marriage. They came and beat F, and the police have been involved.

F: Nandi uuu [yes] so pankhani za mwana izi iwo wakayowoya vinandiso chomene, thumbo wakate ndawikamo visuka, tiwone ababa, aaa [yes] atifwenge. So kuchila kwamwana uyu nkhachita kusamala apa nkhakachilila ku Rumphu... Eee [yes] So kawukilo ka thumbo wakaka manya cha, kweni wakachalenjanga kuti ubabengi cha.

F: Really, yes. So, on the issue of the child she spoke about many things. They said that my pregnancy was just pieces of cloth stuffed under my clothes [to cheat them, as if to pretend that she is pregnant], we will see if she will give birth. Aaa [yes] she is going die [because she has been quarrelling with her mother in law]. So during the delivery, I ran away from here and I gave birth at Rumphu [so that they can't know the exact date and time to do their witchcraft]...

Yes, so they didn't know when I sick [with labour pains], but they were challenging me that I wouldn't give birth.

His first wife tried to use his fertility as leverage when they broke up following his marriage to F:

F: Uuu [yes] wakandisekanga. Iwo pakuwela, wakawela kuti, aaa [no] chanakazi chila atola, chitimubabile mwana cha. So ndiweli, so akachiti kundinyengelela ko, kaine kaine ndina wana....Eee [yes] Sonu mbwenu mwakukhala, khala, iyo iyo ku kwaki, vyaka vitatu, mbwenu akasanga ine ndinathumbu yamwana iyu. Mbwenu yekha, khongono zamutonda kuti aaa [no] uyu ayeso nathumbu, nditikhale ine, vyaka vitinditondengi. [Laugh] So ipo ndilute waka ndekha mbwe akizaso yekha.

F: Uuu [yes] she was laughing. Because when she returned to her home [left the husband], she said, aaa [no] that wife he has married is barren. So I should go home, so he will come and plead with me, because me, I have children, I have children.... Yes. So after three years of just staying there with nothing happening, I found that I was pregnant with that child. And then herself, her strength/power had failed, so that aaa, this one should be pregnant, I will stay here for years and years, [her plan to win her husband back due to F's barrenness] will fail [laughs] and so she decided 'I will come back alone' and so she just came back herself.

When they broke up, her husband didn't send her soap or anything, and three of the first wife's children came and lived with F for three years. One of them was still young so stayed with his mother. She says that her husband fears his mother, so he didn't say anything or help F. F coped for four years with the insults, but eventually went to the police, who said that she should sort it out at home. And when they came back from the police his family (mother and little brother) beat her husband.

Her husband doesn't spend any time at this other wife's house but he sends her all the things she needs. He gives her more than she gets because she has more children.

In I2 she explains the cause of the arguments: she doesn't like F, she wants the first wife. So everything F does is bad to her, she wants her to leave so that he gets back with the first wife. His mother said that he could marry another wife, but not F because she is old and they don't want a woman who is old.

DB: Chifukwa wuli wakuti muli walala.

DB: Why do they say you are old?

F: Chifukwa cha mwana wakwamba uyo wa 1993 uyo. Kutu waka wotemwa misinjiro kwa ine chifukwa choti wakunikhumba cha, suzgo lake ndilakuti wokhumba mwanakazi mulala yula, sono mwanakazi

mulala yula na mfumu wakhe wakupulikana cha. Ndipo pali suzgo apo, sono tupulikana naine mbwenu wakuwona ngati chichekulweso ichi.

F: Because of my first born who was born in 1993. It's only because they like insulting me just because they don't want me. The only problem is that they want the first wife, so the first wife and my husband are not in good understanding, that is the only problem. My husband and I loved each other. So because we loved each other and they thought that I am old.

It seems 'old' is not being used chronologically here: it's to do with her having had a child a long time ago. F explains that her husband hasn't divorced his first wife because of his mother who wants her there. When his first wife went home, his mother-in-law went to carry her back, saying they should go to look after her children because F and them wouldn't understand each other. In I2 she explains at length how one day her mother came and beat her up. Other local people got involved. They weren't speaking to each other and it escalated into violence.

Infertility and second child

They discussed the fact that it was a problem that they were staying a long time without having children. They just kept thinking that they would have a child, but then people were talking about them, and they thought they should look for herbs and the healer would help them. Things were OK with her husband, but weren't good with her mother in law and his relatives:

F: Vitusi wakayowoyanga, nyengo zinyake kwiza wuziku 2 o'clock mbwe wokwiza. Eee [no] iwe mukulu, unatolala mwanakazi wabula kubaba uyu? Ati babe uyu? Vyaka vojuphaka waka nokubaba cha, mbwe ukuti ndi mwanakazi? Ndivo wakatukanga.

F: They were insulting me, sometimes at 2 o'clock they would come. No, they were saying 'my brother, why have you married a barren wife? Years are passing without giving birth, then you say is this a woman? That's how they were insulting me.

DB: So, nangawafumu winu, kukayavya suzgo lililose?

DB: So, what about your husband, he didn't have a problem with it?

F: Aaa [no] pala wakatukanga iwo, mbwe wakandizgola wakatengi. Ine nkhati mbwe ndiwelengi, poti nkhubaba yayi. Mbwe wakandi zyola kuti yayi, kulije chizala chakuti nkhatuyileko pakuti ukubaba yayi. Mbwe vikhale mwambu, vikhale thena, titiwonenge. Kweni wanandi wakanganiza kuti panyake phapu ndafumayamu.

F:27: No, so when they were insulting me, that's when he answered, he was saying. I said that I should leave there, because I am barren. But then he said no, there is no rubbish pit to throw you

in, because you don't give birth. So let's stay like this, we shall see. But many people were thinking that maybe I had removed my fertility.

Other people weren't laughing at her, because they knew that she had given birth, but maybe in their hearts they were secretly laughing. But the talk didn't reach/bother her. Her mother in law would talk about her to her brother in law. She was worried about these insults:

F: Uuu [yes] Kundandawula kwaki, nkhadanda wula, kuti aaa [no] so ine phapu mbwe nandi ndili kufumyamu? Yayi nkhaluta khukuchipatala kuti nkhafumyemu. Mbwe nkhuwafumba wanyane, mbwe wanyane wakuti aaa [no] yayi we, nkhalala waka ndikuti mbwe mweneku chiwuta andakhubi kuti achite vi? Atipase mwana, mbwe tiyeni tikhale waka....Eee [yes] ndimu akandi kwimichilanga the.

F:27: Yes, I was worried that was it true that I had removed my fertility, No, I went to the hospital where I had taken it out, I was asking my friend [husband?], and my friend was saying, 'no, you, let's just stay like this, God is not willing to give us what? A child. So let's just stay here like this.' ... Yes, he was giving me hope by saying that.

They went to a traditional doctor at Chewa.(INT 2: Kwa KwaZgewa) but it didn't help them. They went to a doctor at Wovwe (the rice scheme) by the mountains who checked her with a mirror:

F: Mbwenu, wakatata wanga, wakupuputa ngapu mbwe wakati tata, wakatatawanga. So iwo wakayowoya kuti. Aaa [no] iwe mowolu waku uyu angababa cha, pali mwanalume munyaki. Uyo iyu akukhumba cha, kuti atoleki nayo iwe, ndiyo alikuwika vi? Alikutola kalundi ka uyu muwolu wake, alikuwika muthethi, kuti uyu no kubabaso, pekhapekha aweleko kwa iwe, amutole iyo ko, kula.

F: And then, he looked at it, he rubbed the glass, and then he said, and he looked and looked at us. So he said that, no, your wife can't give birth because there is another man. The one you didn't want to marry you [the father of the first baby], he is the one who is doing this. He took your wife's leg [the footprint from where she had stepped], and put [that sand] inside a reed/fencing stick, so that she couldn't give birth anymore, unless she went back to him, and he should take her where? There.

Basically, the father of her first child had bewitched her. So they had to clean her with herbal medicines. They charged 5000MK which the husband paid because he wanted a child. She didn't stay there, they went there on a bike. The medicine made her vomit a lot and gave her pain in the stomach. Then she drank it for three months. She was told that she should stay in the bush there, and she did, but became weak from vomiting. So she went back to the doctor who gave her some herbs to stop her being sick. But it

didn't work, so she drank it for another month and finished it. Then they didn't go back to the doctor because it was too far away. Her husband said, that if a child comes, fine, but we shouldn't be troubled by the lack of a child. So they said goodbye to that doctor. She went with her husband to all of these healers. They said that the problem was with her. F was dubious about this traditional healer, placing the responsibility onto her husband:

DB: So, umu mukalutila kung'anga yakwamba, mwaweneko mukasimikizga kuti nadi, mbuhawi?

DB: So when you went to the first witch doctor, did you agree with your husband that you had been bewitched?

F: Yayi, ine vila wakayowoyanga kula, vikanditindikaso, so poti munyane akati tiyezgi, kugongowa cha, lekani nani nkhati waka aa [Yes] mbwe tilute wuwo.

F: No, I was wondering with what they were saying, but because my husband said that we should try, aah [yes], that was why we went there.

They thought themselves that they should go to the hospital to check what was wrong, and because the traditional healer hadn't helped them, and the healer accepted that was true, but they didn't go. They went to another doctor, who said that she had a lot of air in her stomach, and when the man comes, the air just scatters them (mphepu zila zupalanya waka). They checked her with their magic. She stresses that her fertility was really there, but the traditional medicines didn't work. After this they didn't go to any more healers. She didn't get any advice from other people; she just went looking with her husband. Then her sisters in law came and asked what the problem was:

F: Ine mbwe nkhati kwali mulamu. Muna nthowa imwi? Nkhuti kwali nkhuvimanya nthowa ine? Ndi kuti panyake nthowa mulije, nkhati kwali. Mbwe wakuti tiyenani tikamuwonani, so wakaya wawiri pamitala. Iwo wamulamu awo... Mbwe ndanjila munyumba mwawu, mbwe wandigoneka pasi, wakundiwona nthe, wopapasha wakuti aa [No], imwe mulamu nthowa mulije, panyaki lekani chifukwa. Mwe nthowa ndilije, nthowa yikukhala mpha? Wakundilongola, wakuti yikukhala apa, apa wakundijokola nthe. Nkhuti nadi nkhuvimanya ine. [Laugh] Nkhuvimanya cha, wakuti nadi panu, ndipo sonu wakaluta ku Thunduti wakandipenjela munkhwala, nkhwawala, nkhwawala waka three days.

F: So I said to my in-law, 'I don't know'. She said 'do you have a path?' I said 'do I know if I have a path? Maybe there is no path', I said 'I don't know'. Then they said 'let's go and check', so there were two sisters in-law [co-wives of her brother]. So we went into the house together, and then they laid me down, they checked me like this, they felt me, they said aaa [no], 'you, in-law, you don't have a path, that's the reason [that you aren't having children]. I don't have a path, where is the path? They showed me, they said stay here, while they were feeling/poking me. Yes I know. [laugh] but I don't know, they said it's true, that was when they went to

Thunduti [after Uliwa on the way to Fuliwra] to look for medicine, which I only wore [inside] for three days.

Then they went to Thunduti (INT 2: Libnarumba) to get some medicine which she wore inside for three days. After that, she didn't have another period: she got pregnant. She agrees that this medicine seemed to work: there hadn't been a path, but then it was found. She felt a lot of pain in her stomach and after three months went to the hospital. She was examined at St Anne's and told not to do any work in case she miscarried. They said that the pregnancy was very 'close' [to the path] and that she shouldn't carry water, do pounding, or cough as she might miscarry. Her reasoning behind it is:

DB: Oh. So, umu mukatolela nthumbu iyi, mukalwalangapo lwalangapo or..?

DB: Oh. So, were you getting sick when you were pregnant then or...?

F: Yayi kulwalapo kuti malaria cha. Kweni kuti kulwala kuti nkhuji pulika mumoyo umu. Kwali chifukwa chakuti nkakhala chomene, nkhumanya cha, mbwe kwali viwanga vyose vikawa vyahangayika.

F: No, I was not suffering from malaria. But I was feeling pain in my stomach. I don't know, maybe it was because I had stayed for a long time [without giving birth], I don't know, maybe even all my bones were broken [bones in the back].

However, she was doing work, as she was on her own there (no women around, only her husband) so she was getting a lot of pain in her back. She was told to go to ANC twice a month. She gave birth in Rumphu: her husband came with her. She stayed with her brother there for two weeks. There were no problems with her second birth. Her son is now one year and three months old.

When asked about the idea of trying to get pregnant with another man, she says:

F: [Laugh] Yayi kwayise tanakazi chikuwa chakusuzga; kweni kuwanalaume, vikuya, weneku vikuwawira viwemi, ka pala wowona kuti waka, munyumba yayi, mbwe wakuti waka chiwemi panyaki ndinga sanga mwana. Eeee [yes] kweni kwa isi tanakazi, kuti yayi tikapenji chibwezi. Aaaa [no] Panyake tingafwilamo waka, nokubaba.

F: [Laugh] No, for us women it is difficult, but for men, it is good, when they discover that there is a problem at home with having a child. Eeee [yes] they just get a girlfriend in order to have a child. Eeeh, but us women, we can't look for a boyfriend. Aaaa [no]. Sometimes we can die without having had a child.

But she had never heard of her husband having another girlfriend.

Reproductive health

She hasn't used any other methods of family planning apart from those injections. She has never had an abortion/miscarriage. She thought that she wasn't infertile (wachumba) and that it wasn't that her fertility had gone out (mphapu ndafumyamu cha).

Since having her baby she had pain on urinating, and went to the hospital where the doctors said:

F: Wakati nthenda iyi, njaimwe mwawanakazi, kuti ndithenda yakupokeka kwali ku wanalume aaa [no] kweni njaimwe mwawanakazi, so wakandilasa sindano, nafumu wane nawo wakawalasa. Kuti nyengo zinyaki, kwali. Pala ine ndalasika ine ndekha yamala kwaine, tingakhala malo yamoza. Tingakhala malo yamoza, mbwenu ndingawapilaso, iwo kwali.

F: They said that this disease was a women's disease, that it is not a disease which is carried by men, aaa [no] but it's for you, women. So they gave me an injection, they even gave my husband an injection. Because sometimes, I don't know. If I have been injected myself, alone, then it would cure me, could we stay together? We could stay together, but I don't know if I could transmit it to him.

She has some itching but not very often, no discharge, pain or burning. Her periods are fine apart from if she is injected, when she might miss her period for three months. It was the fourth month when she was injected that she would have her period again. At the hospital, they said 'that's the power of the injection'. Then she says initially she was taking pills, but she was misusing them (forgetting to take them?) so she started using the injection. In I2 she expands saying they were using condoms:

F: Tikagwiriska vishango tikakwaniska chaka, sono vikakonda vikafika size yoti vikanunkhanga uheni, kujula waka nthena mbwenu tikati yayi pala ndi edzi tawanthu tutemwana mbwenu yitikore waka, mbwenu ndimo sono tikagwiriska waka ntchito kweni ine nkhaleranga iye akamanyanga cha akakananga.

F: We were using chishango for one year, so we were fed up it came a size that chishango was giving a bad smell. If we have just opened the packet and smell come out, so we said that no if either of us have aids, we have already loved each other, so it is better for us to be affected. So we started doing it plain and I was taking contraceptives but he did not know because he was refusing.

So even just as a girlfriend he didn't want her to use contraceptives. She also expands in I2 why she stopped taking the pill:

F: Nkhamwapo waka pa miyezi kweni ghakanisuzganga chifukwa pala nkhulya chakulya chilichose mbwenu yayi mtima ukasamalanga, nakutiso vyakubilizga ivi watindikore ipo nkalasiske waka ka vyavhibisibisi.

F: It was only for some months. But when I was taking it was only troubling me when I was drinking it. I didn't want any food and my heart was running too much and also I was doing it secretly, was fearing to find me that why I decided to start injections also secretly

She has heard of infectious diseases but they have never affected her. She knows syphilis, mageleketa (an old disease?). Some say you get swellings that break open and pus comes out.

Socioeconomic status

In the past she was working at Jetty at the maize mill collecting money, before she was married. At the moment they aren't working, friends are just helping them. Then she says her husband is working at the telephone exchange. If one of them is sick, it is the healthy one who can go and buy food. They are planting cassava. They don't sell crops but they just rent gardens [as tenants]. The garden is at Thunduti, it is his father's land and they only have enough space for a house.