Approaches for Research on Healthcare Worker Practice in Maternal and Newborn Health Services

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Thesis submitted in accordance with the requirements for the degree of
Doctor of Philosophy
of the
University of London

Department of Infectious Disease Epidemiology and International Health
Faculty of Epidemiology and Population Health
LONDON SCHOOL OF HYGIENE & TROPICAL MEDICINE

No funding received

Abstract

In many low- and middle-income countries, where an increasing percentage of women are giving birth in facilities, poor healthcare worker practice is seen as one of the key obstacles to providing quality maternal and newborn health care services.

In this PhD by Prior Publication, I use four illustrative papers, linked by a 15,000-word text, to argue that to understand and improve healthcare worker practice it is important to recognise that healthcare workers, like all of us, are not "robots" or "angels" but complex human beings, embedded in complex hierarchical health systems and wider communities, with a range of identities and motivations that shape their everyday practice.

Paper One, an ethnography of maternity wards in South Africa, explores how policy to improve public finance management was implemented in a way that replicated existing hierarchies, alienated staff, and undermined improvements in quality of care. Paper Two, on work in South Africa, Russia, Uganda, and Bangladesh, highlights the importance of recognising that what is officially expected to happen in health systems often differs from reality, and that this ambiguity lies in the lived reality of many healthcare workers and contributes to implementation failure. Paper Three, a mixed methods process evaluation of a social franchise intervention in India, used ethnographic methodologies to show how the logic and motivation of private healthcare providers distorted the implementation process. Paper Four documents experience with primary health care clinic managers in Senegal using reflexive diaries and how their engagement with the research process was initially shaped by the health system context where they felt constantly audited and "reported up" the system.

A continuous theme in all four papers, and my research during the past 20 years in general, is that researchers who are working to better understand healthcare worker practice and how to improve it must take time to understand the health system and wider context in which healthcare workers operate to be able to ask the right questions. The health system context—often bureaucratic, top down, punitive, and not inclusive of healthcare workers' voices—also shapes how healthcare workers react and respond to researchers and their questions, and this must be taken account of at all stages of the research process.

Acknowledgements

First and foremost I would like to thank my kids, Manchadi, Mothibi and Nobantu who, although I don't tell them often enough, are the lights of my life. Among the driving motivations to finish my PhD was the reminder from my kids: when I would point out that they hadn't done things, they would roll their eyes and say, "like you haven't finished your PhD!"

I would also like to thank my mother, Helen Penn, whose fierce intelligence, breadth of interest, and commitment to the idea that that the purpose of research is to advance social justice has always been an inspiration.

I have worked with many amazing people over the period covered by this PhD. From my days at the University of the Witwatersrand I would like to thank Lucy Gilson, Helen Schneider, Duane Blaauw, Precious Modiba, Nonhlanhla Nxumalo, Laetitia Rispel, Sue Armstrong, Mary Kawonga, Barbara Klugman, Sharon Fonn, Makhosazana Xaba, Mpefe Ketlhapile, Haroon Wadee, Thulane Matsebula, Daphney Nozizwe Conco, Liz Thomas, Pascalia Munyewende, Nzapfurundi Chabikuli, Di McInyre, Bronwen Harris, Veloshnee Govender and Nicola Christofides—all have had huge influences on my research, on understanding and improving health systems and life beyond that. From the Gender and Health Group at the MRC I would like to thank Rachel Jewkes and Naeema Abrahams. Gail Andrews, Eddie Mhlanga, Precious Robinson, Pulane Tlabere, and Mickey Masasa, who taught me valuable lessons about working in government. And special mention to Dr Busi Kunene, former President of the Society of Midwives of South Africa—an inspiration, mentor, and friend—who has taught me more than anyone about why we need to work with midwives to improve quality of care, and ways to go about it.

At London School of Hygiene and Tropical Medicine I have also worked with many brilliant colleagues who have taught me so much more than I can mention. These include Barbara McPake, Sarah Atkinson, Catherine Goodman, Tim Powell-Jackson, Helen Burchett, Gaurav Sharma, Veronique Fillippi, Carine Ronsman, Joy Lawn, Joanna Reynolds, Hannah Blencowe, Louise Tina-Day, Jenny Cresswell, Sarah Moxon, Shreya Pereiria, Neha Singh, Isabelle Lange, Lenka Benova, and Katherine Fielding. I want to give special mention to Diane Duclos, a "proper anthropologist," and Emma Radovich, who have given their time for so many theoretical, angst-ridden conversations about the nature of the research process and how to interpret research findings.

I have also worked with amazing colleagues in international collaborations who have had a lasting impact onmy research. . These include Fred Ssengoba, Charles Hongoro, Asha George, Tidiane Ndoye, Neil Brandes, Isabelle Moreira, Sundha Sharma, Rajani Ved, Helen de Pinho, and Kerry Scott. I would particularly like to thank Sunita Singh who I worked with on the evaluation of social franchises in India, who taught me a lot, and looked after me in India and when I was unwell in the UK. And Lynn Freedman for her ways of thinking, ability to combine learning from a range of disciplines, and commitment to human rights and constant refrain that that we need to listen to, and do research for, district managers and others on the ground trying to improve quality of maternal and newborn health in often very challenging circumstances. Annie Portela at WHO, who put me up during visits to

Geneva, and taught me so much about how to think about global evidence, guideline development and meaningful community engagement.

I have worked with many Master's students, PhD students and young researchers who have also taught me so much. These include Sharmada Siveram, Eva Van Braam, Mary Mbou, Veronika Riengberger, Jhulia Santos, Seema Das and Sulata Karki. Sorry I have been distracted while finishing this PhD.

My line manager, friend, and mentor for the last decade at LSHTM has been Oona Campbell. She has taught me so much about doing good quality research, maternal and newborn health, using global data sets intelligently, and how to write papers and project reports. She has supported me through periods of ill health and other personal dramas. I realise that I have at times been challenging to work with—wanting to read more, research more, do more analysis, think and reflect more, argue and debate more, and not get on and finish writing the paper or report.

In terms of getting this PhD finished I need to thank Laura Rodrigues who supported me and nagged me to get it done. To her husband, Chris Fowler, who has cooked me numerous meals. Mylene Laguard and Natasha Palmer, who with me make up the "cynics united" Whatsapp group, have also provided endless support in numerous ways. Tanya Marchant and Wendy Graham have been incredibly supportive, patient, and committed PhD supervisors. I am not sure I am so supportive of my PhD students! Thank you to Andrea Meeson, who has been a good friend through so many stages of my life and flew over from Canada to marshal me through the final stages of the PhD submission process.

And finally I would like to thank the healthcare workers who I have worked with, who delivered my children, and those in the haematology unit at Kings College Hospital who have kept me alive. I could never do what you do, and I am full of admiration.

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Table of Abbreviations

ANC Ante-natal Care

ASHA Accredited Social Health Activists

CHP Centre for Health Policy, School of Public Health, University of the Witwatersrand

DfID Department for International Development (UK)

DHS Demographic Health Surveys

DRC Democratic Republic of Congo

HIV/AIDS Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome

HSD Health Systems Development Programme.

ICM International Confederation of Midwives

LMIC Low- & Middle-Income countries

LSHTM London School of Hygiene and Tropical Medicine

MCIS Multiple Indicator Cluster Surveys

MCH Maternal and Child Health

MDG Millennium Development Goals

MMR Maternal Mortality Ratio

PFMA Public Finance Management Act

RCT Randomised Control Trials

SBA Skilled Birth Attendance

SDG Sustainable Development Goals

TBA Traditional Birth Attendants

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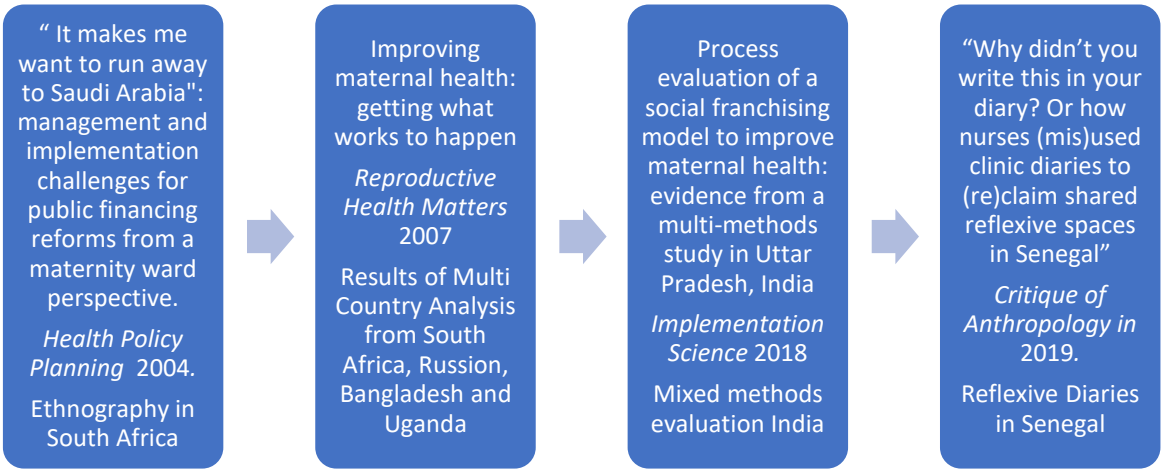
Chapter 1—Introduction

1.1 Overview of the thesis

This PhD by prior publication includes four papers written at different stages of my academic career between 2004 and 2019. The papers are based on research conducted to better understand health worker behaviour in maternal and newborn health, and family planning services. The papers were written on research projects that used different methodologies, carried out in different countries, over a 20-year period (see Figure 1). I played a different role in the respective projects as I moved from being a junior researcher to managing research programmes. A common thread across the four papers, and much of my other research, has been understanding health worker practice, what shapes it and the best methods to explore this. In this thesis I synthesise learning from the four papers and other work that I have conducted and identify connecting themes and emerging findings.

Figure 1. Publications included in this PhD by Prior Publication



This chapter provides an overview of the thesis, the use of terminology, and some considerations about context in maternal and newborn health services. Chapter 2 provides a motivation for why research of healthcare worker practice is important, including some key debates in the literature around quality of care and service delivery. Chapter 3 sets out the four papers and synthesises methodological learnings from each. Chapter 4 discusses in more detail the contributions and limitations of the thesis, the importance of health system context to understanding healthcare worker practice and how healthcare workers engage with researchers and the research process, as well as addressing decolonization of health systems. In conclusion, Chapter 5 briefly draws together key methodological learnings and offers some recommendations.

1.2 Use of terminology

One of the challenges of bringing together work that has been published over years is that the language and debates change over time. The papers included in this thesis are a result of research that was carried out in different settings and aimed to understand the implementation (or lack thereof) of very different programmes.

1.2.1 Maternal and newborn health

When I started work in this field my focus was on maternal health. This was largely in response to the argument that maternal health was neglected on the agenda of improving maternal and child health (MCH)(1). More recently there has been the argument that and that insufficient attention was paid to stillbirths (2) and newborn deaths (3). There is now widespread recognition that maternal and newborn health are very much interconnected; that to address the burden of maternal deaths, stillbirths and neonatal deaths, and to ensure that as many women as possible give birth healthily and have a healthy baby, it is important to meet the needs of women during pregnancy, labour and birth, and the postpartum period, alongside the needs of their newborns (4). What women want is to go home healthy with a healthy baby. In three of the papers discussed in this thesis, the research was carried out with a focus on "maternal health". I therefore use that term in these papers. In the rest of the thesis, I use the term "maternal and newborn health".

1.2.2 Healthcare worker terminology

Preferred terminology and definitions in the field of human resources for health have changed during the time period that the research in this PhD was carried out. The terms "healthcare worker", "health worker", "providers", and "health professionals" are often used interchangeably. Indeed, I have used a range of terms in my publications. In this thesis for the purpose of consistency I use the term "healthcare worker".

Notwithstanding that many of the healthcare workers who I engaged with were skilled and experienced, I chose not to use the WHO-preferred term of "skilled health personnel" (5), because in my experience this was not a term that healthcare workers used in the places where I conducted research. The terms "doctor", "nurse", and "midwife" are also widely used, and although international definitions and criteria exist (6, 7) these terms are often used to describe healthcare workers who have very different levels of training, scope of practice, and working experience (8, 9). In this thesis I use terms that healthcare workers that I was working with used to describe themselves at the time of the research.

Different health systems have evolved with different configurations of healthcare workers providing maternal and newborn care (10), and this is true of the settings in which the research in this thesis took place. In Paper One the focus is on midwives working in maternity wards in South Africa, where who is a midwife and whether they are sufficiently qualified have been up for debate (11). All professional nurses in South Africa undergo four years of training, including in midwifery. Therefore the vast majority of professional nurses are also classified as midwives, and the terms "nurse" and "midwife" are used interchangeably in legislation and regulation (12). There is also a category of Advanced

Midwives who have done additional post-basic training. There is no direct entry midwifery training (11). Midwives manage most deliveries.

In Paper Two, the healthcare worker configuration in South Africa (described above) and Uganda is similar. However, in Russia and Bangladesh maternal health services doctors play a more significant role.

In Paper Three the intervention that was evaluated included a range of providers in the public and private sector. These included Accredited Social Health Activists (ASHAs), who are community health workers, as well as a range of health providers trained in the biomedical tradition and homeopathy, Ayurvedic, Yoga, Unani and Siddh traditions, all of which are recognised in India's health system. The programme also involved village doctors, who often have no formal training but make up a large percentage of the rural health workforce in India (13). There have been concerns about the quality of training and regulation of biomedical training of doctors, nurses and midwives in the country (14).

Paper Four was written as part of an evaluation of a family planning supply chain intervention in Senegal. The intervention included clinic managers—qualified nurses who work at the rural periphery of the health system, largely without doctors, to provide the bulk of health care in Senegal (15, 16).

1.2.3 Health systems and health services

Health systems is a widely, but not always consistently used concept, and sometimes used interchangeably with the term health services. Within this PhD I have used the term health systems to encompass "a broad range of people and actions whose primary intent is to promote, restore or maintain health" (17). This involves actors that are not directly involved in service provision and both state and non-state actors (17). I have used the term health services to refer to the spaces where health care is directly provided to individuals and communities.

An in-depth outline of development of health system thinking is beyond the scope of this thesis. However, there are some key developments in health system thinking that have shaped this PhD. In 2006 the WHO suggested that health systems was made up of six building blocks: "service delivery; health workforce; information; medical products, vaccines and technologies; financing; and leadership and governance (stewardship)" (18). Subsequent work on health systems has argued that it is important to move away from quantifying inputs and outputs and to recognise health systems as "interconnected, complex, dynamic and driven by human actors and values" (19). The concepts of "software of health systems" (20), "people-centred health systems" (21), and more recently "learning health systems" (22) have all been suggested as useful approaches to think about how individuals, families, and communities are served by and are able to participate in trusted health systems that respond to their needs in humane and holistic ways.

Health systems research (HSR) and its identity as a discipline has also evolved during the span of this PhD. In the late 1990s and early 2000s, the focus of HSR was primarily on health service delivery, with early studies concentrated on assessing efficiency, accessibility, and

equity. Quantitative methods dominated, with a strong emphasis on econometric modelling and large-scale surveys to assess health system performance. The evaluation of health interventions and programs was often framed within a linear logic, assessing inputs, processes, and outputs, underpinned by traditional cost-effectiveness and cost-benefit analyses (17, 18). With the changes in how health systems were conceptualised there has also been recognition that a wider range of research methods can better capture the complexity as well as the relational and performative nature of health systems. Key players in the HSR field have argued that inter disciplinary approaches including qualitative research methodologies, ethnography, policy analysis and participatory action research, as well as system dynamics modelling are essential (23-31). The advent of realist evaluation and complexity science further led to an understanding that health systems are adaptive, evolving entities, requiring more nuanced and iterative evaluation frameworks (32-38). More recently there has been a growing emphasis on equity-focused evaluations that consider the voices of marginalized populations and promote the co-creation of knowledge and learning (22, 39).

Anthropological approaches to health systems have evolved along a slightly different path, sometime intertwined and sometimes independent from developments in the HSR field (19, 40). There has been a recognition from many in the health system field that anthropological approaches can provide useful insights (30). Other have looked at how to 'adapt' anthropological approaches to the funding and timelines of much health system research (15, 41). Anthropologists have reflected on the challenges of work in multi-disciplinary research teams with different underlying knowledge paradigms and approaches (42-44). There have also been calls that anthropologists need to consider more how their research can engage with and influence global policy and systems as the insights from critical anthropological approaches can provide valuable insights into how heath systems are enacted, negotiated and experienced by various stake holders (19, 40, 45).

The papers in this PhD have contributed to and been influenced by this evolution of health system research. Paper One and Paper Two were used to argue the importance of social sciences and qualitative research methodologies within HSR. Paper Three illustrates a mixed methods evaluation. And Paper Four is more embedded in the anthropological literature, promoting an understanding of health systems as dynamic, socio-cultural processes that are constantly "performing" in different contexts. This paper also talks to the importance of moving towards co-creation of knowledge with health workers.

1.2.4 Maternal and newborn health services and health systems

The research presented in this thesis is centred either on maternal and newborn health (46-49) or family planning services (15). These have been areas of research focus for most of my career. Maternal and family planning services are provided within the context of a wider health system. Many of the factors identified as influencing healthcare worker practice in the papers featured herein are not maternal and newborn health services-specific but highlight particular challenges in the health system more broadly, such as funding, staffing levels, management styles, availability of drugs and equipment, and emergency referral.

In facilities and countries where human resources are limited, healthcare workers usually provide a wide range of services. Many healthcare workers who are providing maternal and newborn health services are also providing other health services. For example, in some countries that do not have specially trained midwives, nursing staff (who may or may not have midwifery qualifications) are sometimes rotated through maternity units, with many not uniquely working in maternal and newborn health services. Junior doctors are also regularly rotated through maternity and newborn services. If facilities have doctors, it might be just one who works in all departments.

Many health system researchers argue that maternal health and newborn health services are good tracers to understand and evaluate overall health system functioning because they require a complex service operating at a range of levels and co-ordination between different components of the health system, including health education, primary, secondary and tertiary facilities, referral systems, blood banks, functioning supply chains etc (50, 51). For these reasons maternal mortality and maternal morbidity are often perceived as sensitive indicators to the performance of the health system (50, 51).

1.2.5 Context

Context is an increasingly used and recognised concept, but it is not clear that everyone agrees on the what the term means, and how to measure it. May *et al*. (2016), defined context "as a set of characteristics and circumstances that interacts, influences, modifies, facilitates or constrains an intervention and its implementation" (52). Poland *et al.* (2006) define context as the "the circumstances or events that form the environment within which something exists or takes place" (53). Sabot *et al*. (2018), having reviewed the literature and consulted with others working in the implementation space, suggested that in practical terms understanding context requires understanding "demographics and socio-economics, the epidemiological profile, the health system, health service uptake, infrastructure, education, politics, policy and governance as well as maternal and newborn health policy and implementation" (54). These authors also argue that some elements of context are "structural", which are unlikely to change throughout the project. Others are "situational" factors that can change quickly and require monitoring or measuring a number of times throughout the study—for example other health programmes that are introduced in the facilities in which the research is happening or a period of political turmoil (54). After a more recent stakeholder consultation, Squires *et al.* (2022) included additional factors such as "facility characteristics" (55).

Qualitative researchers—and particularly those on the anthropological end of the spectrum—are often called on to "understand context" and complexity (42, 56). There are various ways that context is defined in more qualitative and anthropological work. Many argue that the idea that there is "intervention" or "programme", and a "context" is problematic and misses key issues and power dynamics (42, 57, 58). Kleinman, for example, argued that key anthropological contributions in the field of global health have not been to describe context or behaviours, but to introduce key social theories that include: "the unintended consequences of purposive (or social) action; the social construction of reality; social suffering (i.e. not just individual) and the importance of thinking about power and

how structural inequalities create poor health and shape global health interventions" (59, 60).

1.2.6 Gender

I have used the terminology women and woman throughout my papers, and this thesis, recognising that it reflects the biology and identity of the great majority of those who are childbearing. For the purpose of the thesis, these terms include girls, and people whose gender identity does not correspond with their birth sex or who may have a non-binary identity. All those using maternity care and services should receive individualised, respectful care including use of the gender nouns and pronouns they prefer.

Chapter 2—The Importance of Researching Healthcare Worker Practice

In the maternal health field—if not so much the newborn health field—it has long been argued that that we know what to do; the challenge is how to do it (61, 62). Latest maternal mortality data published in 2023 shows that although there have been improvements since 2000, progress has stalled in many countries over the last decade (63).

Many factors have contributed to this poor progress. In the introduction to the latest maternal mortality data Dr Tedros Adhanom Ghebreyesus, the Director General of the WHO, suggests that climate change, prolonged conflict, poverty, lack of essential supplies and medicines, underfunded health systems, persistent gender norms, and lack of education for girls and women are key to understanding this lack of progress. Ghebreyesus also highlights the need to "fortify our health workforce" (63).

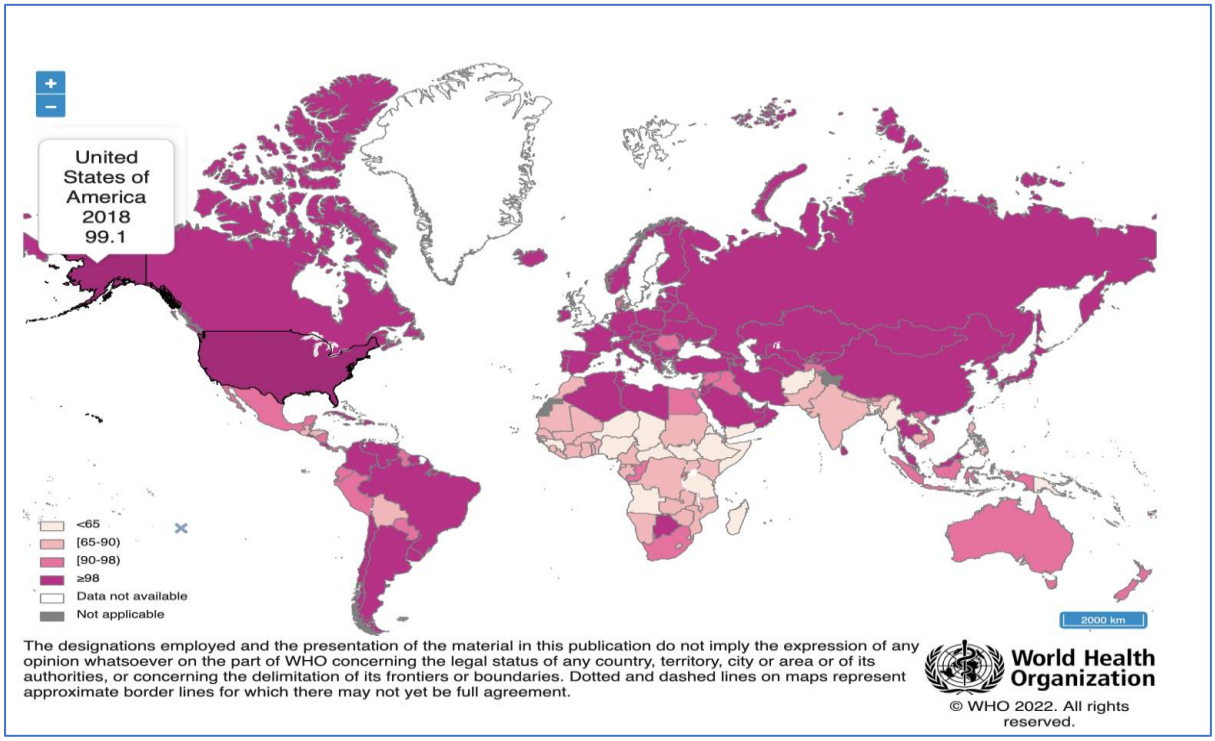
2.1 Skilled birth attendance (SBA)

Promoting skilled birth attendance, rather than training traditional birth attendants (TBA), has been a key strategy in safe motherhood orthodoxy since 1997 (64). Increasing the percentage of women who give birth with skilled birth attendants (SBA, or skilled health personnel which is now the preferred terminology at WHO) was a key target in both the MDGs and the SDGs. That indicator is often used as a proxy measure of quality and has been used when modelling MMR estimates in many countries (65).

The justification of focus on this indicator largely came from work on the epidemiological relationship observed between countries with higher skilled birth attendance coverage and reductions on maternal mortality carried out at the end of the last century (66). Alongside this, an evaluation of programmes with trained TBA's showed that they were not effective in reducing maternal mortality—in part because they were not able to deal with obstetric emergencies when they occurred (67).

In recent years there has been concern that although the reported percentage of births with "skilled attendance" has increased dramatically (see Figure 2), overall rates of maternal and neonatal mortality and stillbirths have not declined as expected. Several explanations have been offered as to why this is the case. One is that it is a measurement issue and that reported high levels of births deliver by skilled personnel is a reflection of poor measurement and not of the care that women receive—often from low-skilled health workers (5). This indicator is largely calculated using DHS or MCIS surveys where women are asked who delivered them; there is evidence that women cannot accurately assess the skill levels of those who attended them (5). The measurement also does not include the enabling environment (despite being specified in the definition of skilled health personnel) (5, 65). Furthermore, governments are including relatively unskilled healthcare workers in the categories counted as skilled health personnel.

Figure 2. Percentage of births delivered by skilled health personnel (2022)



While acknowledging these challenges and despite the increase in skilled attendance, a number of authors have argued that to understand persistent maternal and newborn mortality we need to look more at the health workforce; that the focus should not only be on the number and distribution of healthcare workers, but also on understanding factors that shape healthcare worker practice (24, 68-73).

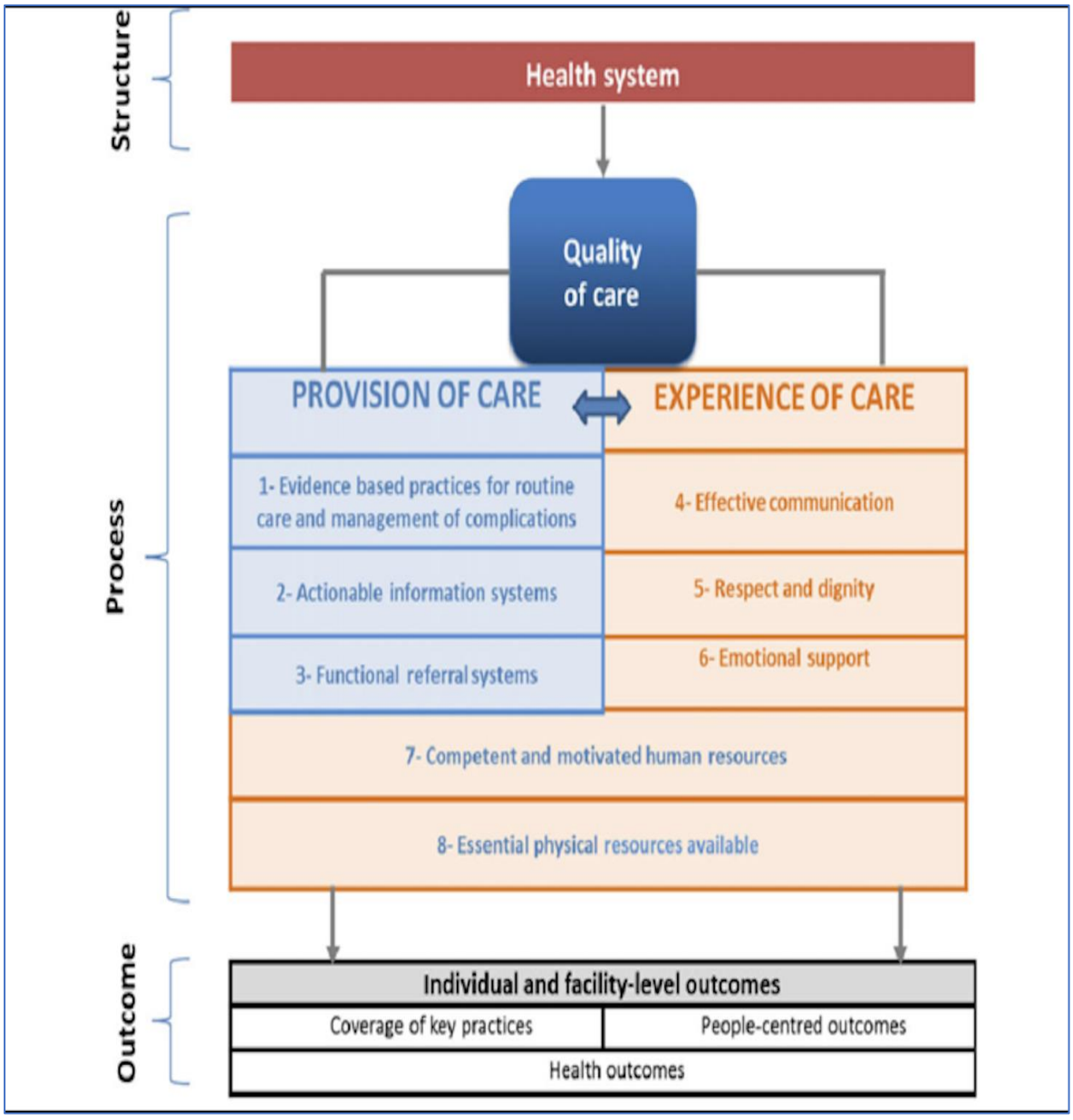
2.1.1 Importance of quality maternal and newborn health services

During the first period of safe motherhood campaigns the focus was on getting women to give birth with skilled attendance. Although initially there were some programmes that promoted skilled birth attendance at home, the analysis of programme outcomes suggested that skilled birth attendants working in the community were not able to deal with many obstetric emergencies. The dominant discourse became to promote birth in facilities with skilled birth attendance with a focus on provision of emergency obstetric care (74). Much of the research and programme work during this time was on understanding barriers to women getting to facilities if they developed complications and creating demand for facility-based delivery from women and families.

The seminal work that shaped much of the thinking at this time was the three-delays model developed by Thaddeus and Maine (75). They argued that the three key delays that lead to women dying were: 1) delay in recognising the need to go to care; 2) delay in getting to care; and 3) delay in receiving care at the facility. Although the need for quality emergency obstetric care once women reached facilities was a key concept embedded in the three-delays model, the focus in many programmes was on creating demand and making services accessible.

Although always part of the safe motherhood agenda, in the last decade there has been increased attention on the supply side of maternal and newborn health services: how to organise services and the need to improve quality of care. In the 2014 Lancet Series on Midwifery, it was argued that having properly trained midwives managing maternal health was important to improve quality of care and women-centred care (76-78). In 2015, the WHO published its framework for the quality of care for pregnant woman and newborns (see Figure 3), which focused on both the provision of care and the experience of care (79). The Lancet Maternal Health Series published in 2016 emphasised the importance of quality (80-82), arguing that some women and newborns received "too little too late" while also raising the problem of overmedicalisation leading to some receiving "too much too soon" (83).

Figure 3. Quality of care for pregnant women and newborns: The WHO Vision (2015)



The Lancet Global Health Commission on High Quality Health Systems in the SDG era, published in 2018, while not specifically focusing on maternal and newborn health services made similar arguments that there had been too much attention on demand and not enough on supply (84). Gabrysch and colleagues, for example, found that despite what looked like an impressive increase in the number of women delivering in rural Ghana, the outcomes had not improved. They concluded that "facility birth does not necessarily convey a survival benefit for women or babies" unless "facilities are capable of providing emergency obstetric and newborn care and capable of safe-guarding uncomplicated births" (85).

Kruk and colleagues argued that insufficient attention was paid to quality of services provided at facilities and that "the care that people receive is often inadequate, and poor-quality care is common across conditions and countries, with the most vulnerable populations faring the worst" (84). The Commission went on to propose a framework outlining key components of a quality health system (see Figure 4).

Figure 4. High-quality health system framework (Freedman & Kruk, 2014)

2.1.2 Disrespect and abuse in maternal and newborn health services

Integral to the debate about quality of care has been to recognise the importance of women's "experience of care" (79) or a "positive care experience" (84). Although acknowledged as an issue previously (86), over the past decade the volume of literature highlighting the poor treatment of women, and more recently newborns, in maternal and newborn health services increased significantly. Documented in the literature is evidence of women and newborns being neglected, verbally abused, physically abused, administered treatment without consent, experiencing lack of privacy, unnecessary interventions, and breaches of confidentiality (87-92). A range of health system and wider societal factors have been identified as key drivers of disrespect and abuse (93-96), and this has also focused attention on healthcare worker interactions with mothers and newborns, why they are sometimes problematic and how to improve them.

2.1.3 Understanding poor healthcare worker practice

To be able to "get on with what works" (62), motivated, trained, and well supervised healthcare workers are essential. The majority of women globally are now delivering with skilled birth attendants (despite shortages and variations between and in country), there is increasing consideration of women and newborn experience of care (79, 84, 91, 92), and assessments indicate that healthcare workers understand what constitutes good quality of care (68, 70, 97). Yet, the provision of quality care is still lacking.

Rowe and colleagues argue there is "Overwhelming evidence of the inadequate quality of care delivered to many patients in LMICs justifies increased attention to improving health worker performance" (71), and that healthcare worker performance is a "core issue to be tackled for successful implementation of policies and programmes to improve the quality of care" (68). Lagarde and colleagues argue that "there is widespread concern that health systems are not getting the most out of the their workforce" (97). In many implementation studies, evaluations, and quality improvement initiatives in the wider health system—and in reproductive health and maternal and newborn health systems—problematic healthcare worker practice is seen as a key area for intervention, and is often used as an explanation for lack of impact (31, 98-104).

This is the academic research space in which I have worked for the past 20 years and which I hope this thesis contributes to developing.

Chapter 3—Contributions to the Literature

3.1 Paper One

Penn-Kekana L, Blaauw D, Schneider H. 'It makes me want to run away to Saudi Arabia': management and implementation challenges for public financing reforms from a maternity ward perspective. Health Policy Plan. 2004;19 Suppl 1:i71-i7.

3.1.1 Background

Paper One was a contribution to a special edition of *Health Policy and Planning* that looked at the lack of dialogue between reproductive health and health systems research (105, 106). The paper focused on the unintended consequences of financial management reforms on quality of care in two labour wards in South Africa. It was one output of a larger project that looked at factors shaping daily midwifery practice in these labour wards (107). It emerged from research that was not actually designed to understand the implementation of the Public Finance Management Act (PFMA) in the public health system in South Africa.

The article was based on findings from fieldwork where I observed meetings, discussions, and record keeping efforts related to correctly implementing what the managers believed were the aims of the PFMA, rather than any interventions or efforts to improve quality of maternity care, which was the original focus of the research project. As the article illustrates, policies put in place to improve the quality of maternal health care—such as recruiting advanced midwives or allowing women in rural areas to lodge in the facility in early stages of labour if they lived far from the facility— in fact were undermined by how the PFMA was being implemented.

The study was developed as part of a range of work conducted by the Centre for Health Policy (CHP), an academic research group based at the University of the Witwatersrand in Johannesburg and explicitly set up to support development of post-apartheid health policy (108). The CHP worked closely with government, and there was significant movement of individuals between roles in government and roles at CHP

The work was focused on maternal health due to widespread concern in government and the wider society about the quality of maternal health services in South Africa. The South African Confidential Enquiry into Maternal Deaths 2002-2004 (109) stated that poor provider practice contributed to more than half of maternal deaths. Although practices by both midwives and doctors were blamed, there was considerable concern about the behaviour of midwives, as they made up the majority of the workforce that cared for women and newborns. An article in *Soc Sci Med* (1998) entitled “Why do nurses abuse patients? Reflections from South African obstetric services” was published as part of an evaluation of maternity obstetric units in South Africa (86). There was considerable mainstream media coverage of woman being badly treated in maternity services. For example, a cartoon published in *Sowetan*, a Johannesburg daily newspaper, showed a heavily pregnant woman arriving at a maternity unit wearing boxing gloves—the implication being that she would be ready to hit back if the nurses did anything to her (110) (see Figure 5). An initial rapid appraisal of the quality of maternal health service provision (111) conducted by CHP concluded that poor provider practice, both clinically and with respect to how women were treated, was a serious concern.

Figure 5. Cartoon published in Sowetan (2001)

3.1.2 Influences

Paper One was based on an ethnographic study of two district hospitals, one rural and one urban. I spent six months in both hospitals and in the case of the rural hospital I lived on the premises in doctors' accommodation for most of the time. The ethnographic approach was chosen for a range of reasons. The research team wanted to move away from blaming healthcare workers to understanding factors that shaped their practice. We recognised a large range of issues and felt that this necessitated in-depth research of a complex situation. Prior to the research we developed an ecological model theorising the range of factors that might influence healthcare worker practice. In terms of the wider societal context, gender, race, and class were identified. At macro and meso level we thought the following would impact on healthcare worker practice: policies and process within national, provincial, and regional departments of health; unions and political allegiances; nursing and midwifery education and continued education; nursing and midwifery professional bodies, HIV/AIDS; coverage in the popular media; and community and local politics. At the micro level in the facility we theorised that management style, relationships between patients, nurse-midwives, and support staff would all be important to understand (107).

Work by Shula Marks on the history of nursing in South Africa (115) showed how successive colonial and apartheid regimes attempted to embed associated structures and values within nursing education and practice in South Africa. Research by the Women's Health Project within the Health Workers for Change programme also highlighted the range of reasons that black South African women went into nursing, including apartheid-era policies impacting employment opportunities for black women (116). Thus, the research question was complex and multi-layered and unlikely to be answered using other than in-depth methods.

Generous funding from DfiD over five years, and the support of Principal Investigator Prof Barbara McPake at the London School of Hygiene and Tropical Medicine (LSHTM), made it

possible to pay for a significant amount of staff time for long periods, which is necessary for this type of research.

3.1.3 Positionality

The research was carried out with a group explicitly committed to transforming the South Africa health system through working with government. The injustices of apartheid, their impact on both health seeking and health provision (117), and a strong commitment to addressing health inequities were motivations for all the South African researchers involved in this project. Every member of the research team had been involved to some extent in the anti-apartheid struggle.

The project was funded from the UK, but the research was conducted exclusively by South African researchers (I have dual South African/British citizenship and lived and was employed in South Africa from 1994). The Centre for Health Policy in all collaborations argued that it was important that South African researchers were not treated as fieldworkers gathering information for UK-based researcher to write up, but that South African researchers should play a key role in analysis and write up of both the South African and cross-country research. There were sometimes tensions with LSHTM during the project. These were mainly related to management regarding funds and processes that CHP had to comply with, which served as reminders, however unintentional, of who really held the power in the overall project.

Race and class are important factors to consider in all research carried out in South Africa. At the time this research was conducted, South African academia was overwhelmingly white, and all members of the research team were white and lived privileged lives. The fact that I was married to a black South African, had black children, and a black South African surname seemed to help to break down barriers and facilitated social interactions during the research that might not have been possible otherwise.

The rural hospital where I carried out the work was situated about 30km from where my in-laws were based. I was a “makoti” (daughter-in-law) in the area, and some of the nurses knew my grandmother-in-law who was a community leader. This fascinated the staff at the hospital, who had previously few interactions with white people, and even fewer of them positive.

The urban hospital where I worked was previously reserved for whites only and still had several senior white staff. The matron and the CEO, however, were black—a first in this hospital. When I started the fieldwork, the white staff assumed that they had my ear and could complain about what was going wrong in the “new South Africa”, and the black staff seemed quite suspicious that I would align with the white staff. I was informed towards the end of the research that this was something the black staff had expected and experienced previously.

I also took care to not engage with patients in both facilities. This was partly due to the focus of the study, but also that I was aware that nurses at the time felt that their previous respected status was under attack, that they were constantly being criticised and

undermined by government initiatives, such as the Patient's Rights Charter, which they believed gave too much power to patients. Healthcare workers also shared how extensive, negative coverage in the media about patient care, and statements from politicians and senior managers critical of healthcare workers, also made them reluctant to engage with and trust researchers.

3.2 Paper Two

Penn-Kekana L, McPake B, Parkhurst J. Improving maternal health: getting what works to happen. Reprod Health Matters. 2007;15(30):28-37.

3.2.1 Background

This paper was written at the end of a five-year, DfiD-funded health system research project. The aim was to develop cross-country learning using maternal health services as a tracer to better understand health system dynamics.

The paper was written as a response to a Lancet paper, published in 2006 as part of a maternal health survival series. The Lancet paper argued that it was known what should be done to reduce maternal deaths; that what was needed now was implementation of known successful strategies to reduce maternal mortality, i.e. "getting on with what works" (62). Our paper was published to coincide with the inaugural Women Delivers conference held in London in 2007. *Reproductive Health Matters* organised a session exploring how health system approaches could improve implementation of maternal health programmes.

3.2.2 Influences

This paper combined results from a range of studies employing different research methodologies in four countries. The paper was influenced by early work in the health systems and the evaluation fields promoting the use of a theory of change (118), the need to incorporate complexity into evaluations (119-122), and Pawson and Tilley's "realistic evaluation" approach (123). This paper was also influenced by work of Atkinson (124), Yin (125), and others conducting research on how learning from local case studies could provide global lessons.

3.2.3 Positionality

This was the first paper that I wrote that included findings from research conducted by other team members from a range of countries that I had not visited and where I tried coming to globally relevant conclusions and to participate in global debates. Previously, my research was focused on South Africa, which was a country that I lived in, whose history I knew and was committed to improving, and where I had been directly involved in the politics and culture all my adult life. My experience, knowledge and understanding of Bangladesh, Uganda, and Russia were comparatively limited.

As part of the Centre for Health Policy's participation in the Health System Development research programme there was a strong push that South African researchers did not just publish research papers on their own context, but that authors from LMIC countries needed to write cross-country papers. This was helped by the fact that Lucy Gilson, who was the deputy director of the Centre for Health Policy at that time, had a joint appointment at LSHTM. That the South African researchers on the team were white, and privileged, and spoke English as their first language may also have been part of the explanation for this. Members of the team in Uganda also participated in writing of cross-country papers (126) but this was not the case with researchers from Bangladesh and Russia. There are a number of reasons why this might have been the case including length of funding.

3.3 Paper Three

Penn-Kekana L, Powell-Jackson T, Haemmerli M, Dutt V, Lange IL, Mahapatra A, et al. Process evaluation of a social franchising model to improve maternal health: evidence from a multi-methods study in Uttar Pradesh, India. Implement Sci. 2018;13(1):124.

3.3.1 Background

The research reported in this paper was carried out within the Merck for Mothers Programme at LSHTM. The programme aimed to work with the private sector in LMICs to improve the quality of maternal and newborn health and reproductive health services. Our research project looked at the role of the private sector in maternal and newborn health and carried out several evaluations of programmes funded by Merck for Mothers. Key questions for the overall project included the role that that the private sector played in providing ante-natal care (ANC), delivery, post-natal care and family planning (127-132), whether the private sector could be harnessed to improve access to services, and how to improve quality and regulate the private sector (9, 133-137).

Despite prior mixed evidence on the usefulness of the approach in clinical services (136), Merck for Mother's funded three programmes that attempted to use a social franchising approach to improving access to and quality of maternal health services in two states in Indian and in Uganda. Across the three programmes, overall, the research showed that social franchising did not improve equitable access to quality services. Factors that explained this included lack of suitable facilities in the poorest areas, the inability of the poorest women to afford any private sector fees, and competition with free or even incentivized public sector services (134). Moreover, there were tensions between targeting poorer groups, and franchise objectives of improving quality, business performance and enhancing financial sustainability, meaning that middle income and poorer groups were unlikely to be reached in large numbers in the absence of additional subsidies (134).

This paper is the process evaluation of the Matrika Social Franchise model, based on the idea that the implementing non-government organisation created a brand that became associated with good quality ANC care and maternal healthcare. Private providers could buy into the brand, which would then, in theory, attract more patients. Buying in to the brand meant adhering to certain quality standards, which the implementing organisation would support and monitor. The impact evaluation of the Matrika Social Franchise model found that it was not "effective in improving the quality and coverage of maternal health services at the population level" (138).

3.3.2 Influences

The inclusion and overall design of the process evaluation largely followed the UK Medical Research Council guidance "Process Evaluations of Complex Evaluations" (139). These guidelines have been developed in response to the argument that information on the impact of interventions provided by randomised control trials is not sufficient to explain in detail what was done and how the intervention worked. Those advocating for including process evaluations (and not just looking at impact) argue process evaluations provide information on what happened during the implementation of the intervention—information that is often most useful for policy makers to assess "how an intervention might be replicated in their specific context" (119). The process evaluation approach we adopted incorporated a theory of change including three key components: implementation, mechanisms of impact, and context (139).

As is often the case in mixed methods papers, Paper Three only briefly describes the qualitative data that was collected beyond stating it involved participant observation and semi-structured interviews. Participant observation was carried out by an Indian qualitative researcher, working with one assistant, who spent six months in the research setting with site visits from two of the London-based anthropologists. The research team met online once a week to discuss emerging issues. The qualitative team made the argument about the need to do in-depth work due to the complex nature of the programme and drawing on learning from previous work presented in Paper Two (48).

3.3.3 Positionality

Merck for Mother's contracted the LSHTM to run the project. The LSHTM designed the study and then subcontracted two Indian partners to carry out the research. This was partly the result of the funding mechanism that required ethics approval to release funds. We struggled to find an Indian research partner that was available to do the work within the timeframe stipulated by the funder. We did a pilot and tested the tools with the Indian research teams. Pushing the anthological, more reflective research approach in many ways contradicted the qualitative training that some members of the Indian team had, and we also experienced some challenges with the Indian ethics committee.

I travelled to India to visit the research site. I do not speak Hindi, and in the rural areas where we carried out the research and in the facilities that we visited it was rare to see a white researcher, so I attracted a lot of attention. Class, gender and caste issues among the Indian team, hierarchies in the Indian research group, and some harsh judgements of research participants by some of the Indian researchers also added complexity. For example, our female researcher struggled with interviewing male doctors. She felt she had to wear a bindi (suggesting she was married although she wasn't) as a way of gaining the respect of the ASHAs she worked with. There were also challenges when the researchers discovered that ASHAs were working more closely with the private sector than was officially allowed. How to write up semi-illegal practices that were observed was also a challenge. Funding for the Indian team members ran out before papers were completed and published.

3.4 Paper Four

Duclos D, Ndoye T, Faye SL, Diallo M, Penn-Kekana L. Why didn't you write this in your diary? Or how nurses (mis)used clinic diaries to (re)claim shared reflexive spaces in Senegal. Critique of Anthropology. 2019;39(2):205-21.

3.4.1 Background

Another project funded by Merck for Mothers that I was involved in evaluating was the Informed Push Model, which aimed to reduce stock outs of family planning in primary health care clinics in Senegal. The key intervention was introducing private sector logisticians into the health system to deliver family planning methods to the clinics that were paid by performance (i.e. lack stock outs in facilities). The LSHTM team was asked to develop a mixed methods evaluation of this intervention. Details of the intervention and the evaluation are published elsewhere (129, 140-143). The ethnographic work carried out as part of this evaluation found similar results to that of the work to understand the social franchise interventions: 1) the intervention was unclear, and 2) the programme documents did not reflect what researchers observed while travelling with private logisticians delivering family planning commodities, and spending time with clinic managers and others monitoring stock levels (56).

3.4.2 Influences

The methodological approach reported in Paper 4 is referred to as a reflective diary approach. It had two main components: 1) asking clinic managers to fill in a monthly diary about what was happening with the supply chain intervention in their facility, as well as other relevant events that that they were dealing with; and 2) bringing together, at the middle and the end of the project, everyone who had made diary entries to discuss the issues reflected in the entries. The design was based on work of Plowman (144) and Munyewende *et al*. (145) in South Africa, and others who have used the diary approach to "provide greater insights into how individuals interpret situations and ascribe meaning to actions and events" (146). The motivation to integrate this approach into the evaluation was to acknowledge not only the focus of the evaluation on supply chain intervention, but also the fact that clinic managers were dealing with many other challenges, and it was useful to understand the context. Furthermore, it was hoped that acknowledging that they had a large number of challenges in the clinic would provide clinic managers the opportunity to express themselves outside the constraints of the evaluation research questions.

As discussed in Paper Four, the diaries project faced initial challenges but evolved and became a vehicle for "learning with the participants", and challenging traditional approaches in ethnography and qualitative research more generally. It also provided insights into how the context of the health system in which participants worked—"reporting up" on targets that they did not decide on—shaped how they responded to the research.

3.4.3 Positionality

The research process in this project in many ways felt more equitable. The LSHTM team worked with anthropologists at the Cheikh Anta Diop University in Dakar who were equal or senior to us in status, as well as a number of their Master's and PhD students. Although the protocol was written before the engagement of the Senegalese team, they played a large role in shaping and implementing the research. They were initially very cynical about whether the diary project would work but agreed to try it.

Although the team in Senegal was again subcontracted, and the funding for the researchers based at LSHTM was over a longer period, there was funding to bring the two co-authors to the UK to write up the analysis. A number of Master's students from the Cheikh Anta Diop University based their projects on research derived from the project. Our two Senegalese anthropologist colleagues argued that for their internal promotion they wanted to write single author papers, published in French. This was agreed within the research team, but it did not materialise, largely due to the workload of our Senegalese colleagues, and the fact that they had to move on to other research projects to ensure continued funding.

I did not visit Senegal or participate in the data collection directly, as my spoken French is limited.

Chapter 4—Discussion

Papers included in this thesis illustrate that I have worked in a range of country settings, explored the implementation of a range of policies and programmes, and worked with a wide range of colleagues from a range of disciplines. For more than 20 years, I have worked in spaces where discourses and debates, buzz words of UN agencies, and funders have come and gone. My research has operated in the messy middle between health systems and maternal and newborn health services, often with colleagues who were experts in one or other field, using an array of research methods that fall under what Duclos calls the "hazy label of qualitative research" (56).

I undertook a Master's degree in social and medical anthropology 20 years ago, and in my first project I was able to complete a conventional ethnographic study. But, like many working in the applied health system research arena, I realized that although funders and colleagues acknowledged the valuable insights from these disciplines, there was rarely time, funding, or willingness to engage with the difficult questions that using these approaches can raise (42, 58, 147, 148). I therefore worked predominantly in mixed methods teams, usually led by epidemiologists, where there were sometimes fundamental epistemological differences that remained unspoken, but also a recognition that using a range of methods could be hugely insightful.

At times I feel that I have been a jack-of-all-trades and not very good at anything; a magpie temporally attracted by a range of shiny theories or methodological approaches that I never study or understand in depth, truly grasp, or properly apply. Apart from my research in South Africa, I worry that I have written "with a foreign pose for a foreign gaze" (149), and it is not clear if the research has had any real impact; that every insight I had or argument that I made has been better and more profoundly expressed by those working in often less applied academic disciplines.

However, I would argue that I have contributed original work in maternal and newborn health services/ health system/ programme implementation and evaluation spaces. My methodologies and approaches to researching healthcare worker practice, have included learnings and debates from a wider range of literatures and discourses. I have built into research projects—those described in this thesis as well as ones that I have been involved in subsequently—research approaches that have added rigour and led to useful insights and lessons for programme implementation and evaluation. I have built in methods and approaches to enable the research project to at least begin to incorporate the social nature of health systems:

- Acknowledging that "healthcare workers are complex human beings, motivated by a range of different financial and non-financial incentives, steeped in cultural and professional value systems" (48); that "they are not robots, who blindly without thinking implement whatever they are told, or are they angels who think of nothing but the good of their patients" (48).
- Recognising, as argued in Paper Four, that healthcare workers are "embedded in bureaucratic processes that shape their medical and managerial practices, but also shape the way in which the respond" to research (15).

4.1 The health system and wider context shapes healthcare worker practice

The idea that context matters has been widely but not universally accepted and is increasingly integrated into implementation and evaluation research approaches (52, 103, 150-157). In realist approaches, which are increasingly being used to understand the implementation of a range of interventions (32-34, 103, 104, 123, 151, 152, 154, 158-161), and which influenced the research approach in Paper Two and Three particularly, the key is not whether an intervention works, but how and why a particular intervention works and for who? Integral to this approach is the idea that understanding the context, mechanisms, and outcomes is essential to evaluate any intervention (120). The literature on complex evaluations, which was particularly influential in Paper Three, also stresses the importance of understanding context (162-165).

In the health systems field there has been increasing recognition that to understand health systems it is important to move away from quantifying inputs and outputs or focusing on separate building blocks, and to recognise the health system as "interconnected, complex, dynamic and driven by human actors and values"(19). The concepts of "software of health systems" (20), "people-centred health systems" (21), and more recently '"learning health systems" (22) have all been suggested as useful approaches to think about. There is also a considerable literature that documents the top down, hierarchical, overly bureaucratic nature of many health systems, how power is used in health systems, and the importance of "trust" for health system functioning (22, 60, 126, 166, 167).

The four works included in this PhD by Prior Publication contributed to a growing body of literature that illustrates that policy or programme interventions in health systems are impacted by way that they are communicated, understood and implemented, which is almost always from the top down.

4.2 Impact of the health system context on healthcare worker engagement

Although the idea that context matters is widely accepted, it is less frequently acknowledged that health system context shapes how healthcare workers interact with research and researchers, especially in maternal health / applied public health literature. Context needs to be researched but is not seen as key to the research encounter, with the exception of those coming from a more anthropological perspective.

For example, in the South African hospital settings where I conducted research, healthcare workers struggled to understand the purpose of my research , why I was paid to sit around (168), and what would result from the research—despite the distribution of informed consent forms, information posters in the wards, and attempts to explain the research. I realised quite late in the fieldwork that they still expected that I would report back to the provincial managers about what was happening (and going wrong) in the hospital. It was very clear from my fieldnotes and from the interviews conducted over time, that the same healthcare workers would talk about what was happening very differently in formal interviews than in informal discussions. I used the knowledge from attending meetings, hanging around in wards, and observing day-to-day practice to push back slightly when I was

offered “the official position” about how things were working or what the challenges were when there was a divergence from what I had seen/experienced. The discussions that flowed from “push back” from me on discrepancies between rhetoric and reality often led to initial amusement or awkwardness, and then further insightful engagement and debates.

In the research that informed Paper Three in India, a key finding from participant observation and prolonged engagement in the field was the complicated and evolving nature of the programme and its implementation. A range of participants, including implementing officers, franchise owners, and the community healthcare workers understood how the franchise was meant to work in theory and often stated this in formal interviews and initial interactions Yet, over time and as a result of observation and discussions, it also emerged that despite the rhetoric that this programme ran one way, how people interacted with the intervention reflected local realities and context—often markedly different from the official position. In Senegal (Paper Four) the initial low completion of the diaries was explained by nurse managers as thinking that the diary project was just another ‘reporting up process’. It was only in the validation phase, halfway through the project, when the health managers got together and talked with each other and the research team and were asked about the diaries that they explained their understanding and perspective. Following this the completeness and content of the diaries changed.

Evaluation of another social franchise that was funded in Uganda—also using participant observation and in-depth interviews—found similar “discrepancies between the program's official profile and its actual operation” (169). In Uganda, the project implementers contributed to simple global narratives of the success of social franchising while adapting the programme to meet the needs of private sector facilities that they already had existing relationships with. This research was published in a paper entitled “The Ambiguity Imperative” that built on concepts of “not-knowing” and the “production of success” (152). In the paper it was argued that it was useful for everyone involved in the programme discussed to maintain ambiguity about what was actually happening at the level of facilities and in the country programme (169). What the social franchise intervention actually entailed on the ground was not clear. This ambiguity is not unique to this intervention. Mosse argues that a more useful question when looking at such programmes may be “not whether but how the development projects work; not whether a project succeeds but how success is produced” (170).

The challenge with taking on board Mosse’s question is that it challenges dominant positivist perspective that what we need is evidence to show which interventions work. In the mixed methods process evaluations in India, despite acknowledging complexity of the way that the social franchise was implemented, we still worked in the paradigm that the key question of the evaluation was whether the intervention worked or not, and why this was the case. This, despite the fact that it became obvious (and was unofficially accepted by members of the evaluation team) that what we were actually trying to evaluate was very unclear (26).

As discussed above, the research presented in this thesis was carried out in a range of different settings. Each setting had different gender, race, class, caste and professional dynamics shaping health worker performance and relationships between health workers

and the wider health system. These different dynamics also inevitably impacted on relationships between researchers and health workers.

Within this PhD I believe I have gained rich insights from working in multiple settings. The first part of my career was deeply embedded in South Africa, where the legacy of apartheid and the fight to overcome the inequalities dominated my understanding of what was happening and what needed to happen. Working in other settings has led to an understanding that while apartheid is undoubtedly important to understanding South African health workers practice and the nature of the South African health system, other health systems that have not had the experience of apartheid have some similar traits. The role of health system hierarchies, the performative nature of health systems, and the difference between what is meant to happen and what does happen, and that researcher presence interacts and is impacted on by this, has been something that has emerged from all the settings in which I have worked.

4.3 Integrating learning into current projects

I have taken the approach that methodology should be adapted as necessary to address the health system context—often bureaucratic, top down, punitive, and not inclusive of healthcare workers' voices—and how this shapes how healthcare workers react and respond to researchers and their questions.

How you design, carry out and analyse your research obviously depends on the research question, as well as funds, researcher staff and time that is available. However, I would argue that it is useful to build into every stage of the research process some reflection and adaption to the health system context in which you are carrying out the research and how you as a researcher interact with that context.

In the preparatory stage, I have found that the more trained the research team are on the health system, the research tools to use, the overall research questions, and on positionality and reflexivity around the role of the researcher, the higher quality the research output is likely to be. Getting the whole research team to think about the concerns that health workers may have, the pressures they will be under in the maternity wards or elsewhere, and the interactions that they are used to having, and how they may interact with the research team, is essential. Similarly, the research project should acknowledge that what is meant to happen and what does happen might be different. The longer the research team is in the field the better and repeat interviews are also very useful for building rapport with health workers, gaining useful insights on what is happening in the maternity wards, clinics and hospitals, as well as deepening the understanding of the context.

During data collection, often only interview transcripts or fieldnotes are treated as data. I would suggest widening the definition of what is data, for example taking notes or recordings of project meetings and researcher debriefings. All interactions and discussions in the research process provide useful insights and learning. For example, writing up the experience of getting access to the facility, researchers' impressions of the facility in which they are working, and keeping records of regularly debriefs where things that have been observed in clinics or come up in interviews, are discussed as a team. Building in a validation

process can be a useful way to engage health workers in the research and the questions being asked.

The analysis stage should not just happen at the end of the project but be conducted throughout. Fieldworker debriefing and repeat interviews can be used analytically to explore issues that have arisen earlier in the research project, as can the validation meetings.

Analysis should be guided by an awareness of the fact that health worker responses may vary over time for a range of reasons, including as the relationship with the research team evolves, or as their understanding of the research project deepens. All data from the same health worker should be analysed as a whole document. For example, if a health worker says at the beginning of the interview, or in subsequent interviews, that a policy is great and then later states that the policy has caused lots of problems and isn't implementable, the differing statements should be analysed and interpreted together recognising the contradictions and complexity.

4.4 Positionality and decolonising public health

In this thesis I have reflected on my positionality with respect to the research on which each paper is based. My roles in the research have varied over time, contexts, and geographies. My research has been done mostly in the Global South. Apart from one small project looking at intimate partner violence and abortion services (171), and despite being professionally based in the UK for the past 14 years, I have not done research in the UK and have read very little of the high-income literature on maternal and newborn health services.

At the beginning of my journey, I lived in and was committed to the Global South (despite huge race and class advantage), and then later researched on the Global South from the Global North. I played the role of a researcher, who has some control over funds or is managed by people who have the funds, who drops in and has only a superficial knowledge of the country and doesn't really engage in changing the health system. This was a role I so disapproved of at the beginning of my career.

The need to address entrenched power imbalances in global health and in global health partnerships has rightly been receiving increased attention. These imbalances exist between "researchers in high-income countries (often the source of funds and agenda) and those in middle-income and especially low-income countries (where the research is often conducted)" (149). For each of the four papers included in this thesis I have tried to name and acknowledge the power imbalances and my evolving roles and positions therein.

Authorship is another way that these power imbalances have played out over my career and is a complicated issue in all projects where there are a range of people involved at different times, and various roles are not equally valued. It is also further complicated by the need for all researchers to have first author publications to get their PhDs, promotions, attract funding and generally advance their careers. The papers that I have included I did insist on writing and being first or last author, but I have also in my career spent a great deal of time working to ensure that others have the chance and the support needed to write papers. I

wish the time and commitment it takes to work with people to support them writing papers for English language academic journals was also valued by promotion committees. I have felt frustrated myself when people who are better at writing papers than me get first authorship when I feel that I have done a huge amount of the work and thinking but I am not very good at finishing papers.

Addressing who sets the research agenda, designs the research, does the research, writes up the research, and what gets done with the research are crucial and will help to shift these imbalances and undoubtedly improve global health. The role of researchers in the Global North in this process is up for debate and needs to be carefully reflected on. I am not sure where I stand on the future of global health.

As well as acknowledging power differentials between researchers in the Global North and South and how this has influenced my research and my role in it, I have also struggled with power dynamics in organisations I have worked with in the Global South. I have worked a number of times with mainly female, less senior researchers in organisations and struggled when I have felt that their roles and perspectives are not recognised by the mainly male leaders in these organisations. I have also struggled with whether it is my role to intervene in these cases.

Working in this field of researching healthcare workers, the power dynamics between researchers and the researched, and what knowledge and whose voice is valued also need to be addressed. Instead of research “on” healthcare workers, it is important to think about what research methods and approaches can promote research “with healthcare workers” (15), and facilitate research by healthcare workers (172). Furthermore, we need to put in place systems that empower healthcare workers to participate, contribute, and value their voices in discussions on policy and programmes to improve the quality of maternal and newborn health services (46, 77, 173-176).

Chapter 5—Conclusions and Recommendations

Progress in reducing maternal deaths, newborn deaths and stillbirths is stagnating, and there are too many women and newborns receive poor quality care (4, 177). A range of interrelated factors explain this lack of progress, and one of these is poor healthcare worker practice. The purpose of research in the applied public health space is largely to help inform strategies to improve health systems and implementation of policies / strategies to improve quality of maternal and newborn health care services. It is therefore incumbent on researchers to do the work as rigorously as possible to provide useful, relevant and evidence-based results.

In this thesis I have argued that researchers who are working to better understand healthcare worker practice and how to improve it must take time to understand the health system and wider context in which healthcare workers operate to be able to ask the right questions. I have also argued that this very health system context—often bureaucratic, top down, punitive, and not inclusive of healthcare workers' voices—also shapes how healthcare workers react and respond to researchers and their questions. We need to take these considerations into account at all stages of the research process.

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