Title: Understanding experiences and views of the menopause in Zimbabwe and South Africa: a qualitative study

Special issue: Menopause in low- and middle income-countries

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Abstract

Background

Menopause experiences are diverse and vary by social and cultural contexts. We explored midlife women's experiences and views about menopause in urban settings in Zimbabwe and South Africa to inform co-production of supportive interventions.

Methods

Forty semi-structured interviews were conducted with women aged 40–60 years. Purposive sampling identified women, considering age, comorbidities, HIV status and socio-economic background. Data were audio-recorded, transcribed, and analysed thematically.

Findings

Three inter-related themes were identified: (1) loss and decline, (2) uncertainty, (3) acceptance and growth. For some women, fertility was integral to their identity, without which they felt "incomplete". Several women described shock and confusion at their unanticipated experiences of bodily changes. Difficulties arose distinguishing menopause symptoms from other conditions, and women highlighted absence of information about symptom management. To gauge what was "normal", women compared their experiences with those of trusted women. Some women in South Africa welcomed menopause as their transition to a respected elder; menopause meant freedom from menstruation and childbirth. Acceptance related to women's sense of whether they experienced menopause at "the right time".

Interpretation

The study highlights similarities in women's menopausal experiences across Africa, as well as affirming the existence of wide and varied local views.

Keywords

Southern Africa, qualitative, menopausal women, sexual and reproductive health

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Tables and figures: 2

Introduction

Biomedical definitions characterise natural menopause as 12 months after a woman's last menstrual period without any other apparent physiological cause [1]. Hormonal changes during the perimenopause are associated with symptoms such as weight gain, anxiety and mood changes [2] and joint and muscle pain [3]. Menopause can also represent a social transition. Experiences of menopause are mediated by factors, including attitudes towards ageing [4], social roles [5] and the biomedicalization of the reproductive life course [6, 7]. 'Biomedicalization' refers to the ways in which aspects of life previously considered 'natural' such as childbirth and menopause are now viewed as medical issues needing regulation and treatment [8]. The ways in which people experience social and physical conditions varies locally and internationally, exemplified by Lock and Kaufert's concept of 'local biologies' [9].

Research with women in Africa has reported several physical, psychological and social challenges during menopause [4, 10, 11]. These include weight gain and increased urinary frequency in Limpopo, South Africa [12], hot flushes and night sweats in Ghana [13] and forgetfulness, irritability and depression in Eastern Nigeria [14]. Women in Limpopo reported several negative social and cultural impacts such as feeling socially isolated and devalued [7] and in the Congo, menopause was associated with a loss of womanhood [15]. Women in Africa have also reported positive experiences such as improved quality of life amongst Igbo women in Nigeria [14] and elevated social status for some women in South Africa [16].

Despite the challenges associated with menopause in many African countries and its significance within the life course, policy has tended to focus on sexual and reproductive health in women of childbearing age and failed to address menopause [17, 18]. However, the policy landscape in Zimbabwe is changing, with attention beginning to being paid to the needs of older people. This includes the Zimbabwe National Healthy Ageing Strategic Plan (2017-2020) that aims to promote healthy ageing and improve access to services for older people. The Plan includes recognition of the specific challenges facing older women [19]. At the time of study, South Africa had not introduced any legislation to protect the rights of older people since the Older Persons Act of 2006 [20]. However, the country has implemented several initiatives to support older people including free public primary healthcare and social pensions and older persons grants [21]. Notably, there is little policy in either country that specifically references the needs of midlife women.

To support the provision of care for women through menopause that is sensitive to local contexts, it is vital to first understand women's experiences [22]. This study aimed to explore and characterise the experiences and views of women towards menopause from two large urban centres in Zimbabwe and South Africa with high HIV prevalence, and to understand how these intersect with their wider circumstances. This enabled us to understand the views of Black women in Southern African urban centres, as well as to compare their experiences across different settings.

Methods

Study population and approach

In-depth interviews in South Africa were carried out with women living in Soweto, a former township bordering Johannesburg's mining belt. In Zimbabwe, interviews were conducted with women in Harare and the neighbouring satellite city of Chitungwiza. Study sites were chosen to

reflect two large urban centres in Southern Africa, with high HIV prevalence, representative of other large urban centres in the region. Selection enabled us to understand the views of Black African women living in Southern African urban centres, as well as to compare their experiences across different settings.

Criteria for this study was midlife women aged 40 – 60 years. Women were identified using purposive sampling to account for menopausal stage, age, morbidities, HIV status and occupation [23]. This strategy was designed to provide diversity and opportunity to achieve sufficient depth and breadth of experiences [24]. In Zimbabwe, participants were recruited from a mixed-methods study that aimed to investigate the effects of menopause on bone health [25]. In South Africa, participants were recruited from the Africa Wits-INDEPTH Partnership for Genomic Research (AWI-Gen) study, a cross-sectional study to understand factors that affect cardiovascular and metabolic health [26]. Potential participants were identified by screening research records of participants who had provided consent to be contacted for future research. The study team contacted potential participants by phone and provided them with information about the study. 41 women were approached to take part (21 in Zimbabwe and 20 in South Africa). Of these, only one woman declined. Final sample size was determined by data saturation. That is, the point where no new themes or subthemes were identified in the data [27].

Following consent, participants were classified as currently experiencing one of three menopause stages. Women currently having regular periods were classified as pre–menopausal. Women having irregular periods, or having missed three months of consecutive menstrual periods within the past year, were classified as peri–menopausal. Women who had had no bleeding for more than 12 months were classified as post–menopausal [28].

Ethical approval and consent processes

Research ethics approval was provided by the Medical Research Council of Zimbabwe (Ref: MRCZ/A/2551) and the Biomedical Research and Training Institute IRB (Ref: AP152/2019) in Zimbabwe and by the Human Research Ethics Committee (HREC) (Medical) of the University of the Witwatersrand (Ref: M200429) in South Africa. Participants in Zimbabwe provided written informed consent prior to interviews, while those in South Africa gave verbal audio-recorded consent.

Data collection

Data collection was carried out between August – November 2020 by female researchers, fluent in local language and living in each country (ZT, KK and NB). Interviewers were experienced in carrying out health-related research, and were supported to elicit the views and experiences of women sensitively and in ways that respected cultural norms and values. Throughout the study, interviewers reflected on their approaches and modified questions to help build and maintain rapport. Interviews were conducted by telephone in South Africa due to the COVID-19 pandemic restrictions in place at the time. Interviews in Zimbabwe were conducted face-to-face, either at the participants' homes or at the research offices depending on preference. Interviews were conducted in English or local languages. Two topic guides were used, with a list of domains and sub-domains to guide the discussions [29]. Domains and sub-domains were agreed by a team that included healthcare professionals and those with country-specific experience. As well as asking questions about experiences and views of the menopause, interviews also explored impacts on lifestyle, relationships and treatment-seeking behaviour. Those with a confirmed diagnosis of HIV were also asked about their experiences of living with HIV to understand how it may affect menopausal experiences. Women who were pre-menopausal were asked to reflect on their expectations of menopause, including how the views of women who have been through menopause (e.g. their friends and

family) influenced their views. This provided further information about the context in which menopause is experienced. Four pilot interviews were carried out in each country to inform the development of topic guides. Since refinements were minor, initial pilot interviews were included in the main analysis. Interviews were flexible, which meant that while interviews all covered the same topic areas, when participants raised new topics then the interviewer would explore these with them [29].

Analysis

Interviews were audio-recorded, translated and transcribed, and analysed iteratively. Researchers reviewed transcripts to identify themes that informed development of data collection tools. Final datasets were then imported into NVivo qualitative data management software. Data were analysed using an inductive thematic approach to identify themes and subthemes in the responses [30]. Transcripts from both settings were analysed as discrete datasets to enable comparison. To ensure rigor, 20% of the transcripts were independently analysed in duplicate and themes reviewed and refined to reach an agreed code list [30].

Results

Characteristics of participants

Participants' characteristics are shown in Table 1. Of the 40 women included in the study, 11 women from Zimbabwe and 2 women from South Africa were HIV positive. All names are pseudonyms to preserve anonymity.

Table 1: Characteristics of women from Zimbabwe and South Africa

ZIMBABWE				
Pseudonym	**Age**	**Morbidities**	**Menopausal stage**	**Occupation**
Chipo	45	None	Pre-menopause	Vendor
Blessing	44	Tuberculosis	Peri-menopause	Vendor
Sekai	43	Mini-stroke Asthma Cardiovascular disease Fibroids	Peri-menopause	Unemployed
Praise	45	None	Pre-menopause	Teacher
Chiedza	60	Arthritis	Post menopause	Hospital warden
Tanaka	58	Tuberculosis Hypertension	Post menopause	Vendor
Primrose	53	Thyroid disease	Post menopause	Neighbourhood Watchman (Police)
Tinashe	43	Thyroid Disease Hypertension	Peri-menopause	Nurse
Nyarai	59	None	Stage non-applicable Hysterectomy	Vendor
Wadzanai	52	None	Post menopause	Vendor
Tafadzwa	46	Hypertension Diabetes	Peri-menopause	Porter

Mufaro	48	Hypertension	Pre-menopause	Police Officer
Nyasha	50	None	Peri-menopause	Nurse Aid
Tsitsi	60	Hypertension	Post menopause	Unemployed
ZM015 Vimbai	46	None	Peri-menopause	Nurse
Hazvinei	57	Hypertension	Post menopause	Personal Assistant
Rejoice	58	Arthritis	Post menopause	Unemployed
Rumbidzai	40	None	Pre-menopause	Teacher
Tinotenda	54	Hypertension	Post menopause	Hospital Warden
Yeukai	40	Genital Herpes	Pre-menopause	School Matron
SOUTH AFRICA				
Pseudonym	**Age**	**Morbidities**	**Menopausal stage**	**Occupation**
Kwezi	49	None	Post menopause	Unemployed
Mpho	50	None	Peri-menopause	Unemployed
Zanele	50	None	Pre-menopause	Employed
Lethabo	47	Depression	Pre-menopause	Unemployed
Dimpho	52	Hypertension	Post menopause	Unemployed
Karabo	53	Chronic Renal disease	Peri-menopause	Unemployed
Dudu	52	None	Peri-menopause	Unemployed
Makati	58	None	Post menopause	Unemployed
Nomsa	54	Arthritis	Peri-menopause	Unemployed
Mbali	51	None	Post menopause	Pre-school teacher
Ntsiki	53	None	Post menopause	Domestic Worker
Kaone	59	None	Post menopause	Unemployed
Sinah	49	None	Peri-menopause	Accountant
Gugu	49	None	Peri-menopause	Unemployed
Matsatsi	56	Hypertension	Post menopause	Unemployed
Jabulisa	56	None	Post menopause	Bakes scones and seamstress
Matsela	61	Respiratory Disease	Post menopause	Unemployed
Aphiwe	59	None	Stage non-applicable Hysterectomy	Employed
Ntsako	61	Hypertension	Post menopause	Unemployed
Thoko	54	Hypertension	Post menopause	Cleaner

We identified a range of menopausal experiences and attitudes, some common to both Zimbabwe and South Africa, and others unique to either setting. These can be understood within three inter-related themes: (1) loss and decline, (2) confusion and uncertainty and (3) acceptance and growth. Acceptance related to women's sense of whether they experienced menopause at "the right time". Illustrative quotations for each theme are presented in Table 2.

Loss and decline

For many participants, menopause threatened self-identity and ability to fulfil their social roles. Menopause was strongly associated with a loss in sexual desire, intimacy with partners, youthful attractiveness and the end of childbearing. Several common words for menopause in Zimbabwe and

South Africa had negative connotations, perpetuating shame and a sense of loss. This includes "*kuguma ura"* ("no longer bearing") in Shona (Zimbabwe) and *"phelelo maikutlo"* ("the end of one's feelings") in Setswana (South Africa).

Women in both countries were concerned about their decline in sexual desire. Many viewed sexual intimacy as something expected of them and an important part of their marital role. Some participants, particularly in South Africa, shared that they often had intercourse with their partners to fulfil a sense of obligation. Women worried that sex became less pleasurable for men around menopause as women become sexually "cold" rather than "warm" or that menopause caused a change in "taste". It was seen as a time when some men had affairs as they saw women who no longer had their periods as being old and "past it" which was viewed as unjust.

Women expressed insecurity about changes to the shape of their bodies that they associated with an end of youth and attractiveness. This was particularly prevalent in Zimbabwe where most believed that menopause caused the *"chimimba muteku"* ("menopausal belly"). *Chimimba muteku* is defined as swelling of the stomach when a woman stops having periods but continues to have sexual relations with a man. The man's sperm—referred to as "dirt"— is described as building up in the womb without menstrual blood to wash it out. Some women felt that *chimimba muteku* became an embarrassing, visible sign that a woman is still having sexual relations "past her time", which they explained was frowned upon. Women explained that for some men, this justified their infidelity.

There was concern that menopause could cause health problems including cancer and infection due to build-up of menstrual blood. Several women in Zimbabwe explained that menstruation ("kugeza" or "washing" in Shona) washes dirt and disease from the body or womb. Women in both countries explained that menopause had made them confront ageing, which could be difficult to accept. A few women in Zimbabwe characterised menopause as synonymous with ageing challenges like loss of strength and increased infirmity. One woman explained that her strength had left her now she was in menopause.

The infertility and loss of childbearing status was experienced by several as a profound loss, especially for those who had not become mothers. One woman in Zimbabwe, who had not had children, expressed her pain and described being taunted by family and the community, especially now that she had reached menopause. Another in South Africa described her difficulty in accepting that she had reached menopause without having a child and explained how she had found strength in her faith to help her manage this loss. For some, menstruation and childbearing felt integral to their identities as women. Without this, they explained, they were "incomplete" and indistinguishable from men. To halt this sense of loss and decline, a small number of women in Zimbabwe discussed using traditional medicines to stop menopause.

Confusion and uncertainty

The menopausal transition could be a time of confusion and uncertainty. Several women reported that they had not heard about the menopause before experiencing bodily changes. For these women, cessation of periods and other bodily changes were a source of "shock". One woman in South Africa who presented at a clinic with menopausal symptoms thought she was "dying". Others mistook changes in their bodies for pregnancy symptoms, which for a few women was met with excitement about the prospect of another child. One woman had been beaten by her husband who thought she was carrying a child from another man.

Women identified several disruptive physical and psychological symptoms that they associated with menopause such as hot flushes, night sweats, changes in mood, less desire to have sex, vaginal

dryness, changes to their menstruation and pain. They often drew on biomedical terms, describing menopause as a “disease” or likening symptoms to “attacks” or illness. Some women felt that they had lost control over their moods. One woman reported angry outbursts at her children who were bewildered by the sudden change.

Similarly, women struggled with menstrual changes like heavy bleeding and clotting during the early stages of the menopausal transition that alarmed them, along with unpredictable changes to the timing and duration of their periods. Several expressed dismay when their periods returned after several months and wondered when they would be “done”. They were unsure what had caused their periods to restart and sought explanations. One woman in Zimbabwe thought it may have been caused by a recent medical scan. For some, disruptive symptoms compounded existing challenges such as sickness.

Women described difficulty distinguishing menopause symptoms from other medical conditions. Presence of heavy clotting and pain in the womb caused concern about presence of cervical cancer or “diseases of the womb”. Symptoms were sometimes interpreted as side effects of medications. Those with health conditions, including HIV, were unsure how these impacted menopause-related issues. A small number of women living with HIV in Zimbabwe were unsure if menopause made their antiretroviral therapies less effective.

With little information about menopause available, women expressed uncertainty in how to manage their symptoms. Some identified coping strategies to treat hot flushes such as eating ice-cubes and opening windows and exercising to lose excess weight. In South Africa, women avoided certain foods such as vinegar, which they believed contributed to the “heat” they experienced. A few described traditional medicines that were available to manage these challenges, although only one woman in South Africa reported using them. Another explained her friends had advised her to use birth control. The small number of women who approached healthcare professionals often left feeling frustrated, since they were told that menopause was natural and were not offered treatments to manage uncomfortable symptoms.

To address this uncertainty, women compared their symptoms to those of trusted women, particularly older relatives such as aunties or mothers. From these discussions they gauged what were “normal” or abnormal changes to their bodies.

Acceptance and growth

Contrary to this sense of loss and confusion, for some women menopause marked a transitional period from midlife to older age that could be accepted as part of the natural life course. It was viewed as a process of ageing that was often attributed to God’s will. One woman in Zimbabwe described it as part of a cyclical process that was like going back to being a “child” before her periods had started. Another woman in Zimbabwe compared the menopausal transition to the life cycle of a tree.

Those not troubled by severe or debilitating symptoms were most able to embrace this notion. For some, menopause passed almost unnoticed and was described simply as reaching “that stage”. Women in South Africa were more likely to welcome menopause as part of their transition to “granny” or respected elder. They identified several characteristics as important to this role including nurturing children, sharing knowledge, and instilling discipline in younger people. Reaching older age was viewed as an achievement or privilege and they compared themselves to many others who had died young. It enabled them to share in the celebrations and successes of their children and grandchildren.

Menopause could also mean freedom from the somatic challenges of menstruation that made women in both countries feel uncomfortable and self-conscious. Women expressed concern about "smell", period pains, and risk of "spoiling" their clothes. Menopause also released women from the financial burden of purchasing pads. Those who had experienced challenging menstrual symptoms more keenly embraced this new phase of life. Contrary to the images of dirt and disease described elsewhere, for some women in South Africa, menopause was associated with "cleanliness" and a freedom to be themselves since they were no longer menstruating. Menopause could also represent freedom from the challenges of childbirth and previous concerns about pregnancy. One woman in South Africa explained that menopause would enable her to start having sexual relations again as she could not "risk it" while she was menstruating. These women believed childbearing should be for younger women who could manage this burden.

The 'right' time

A sense of acceptance and growth depended on women experiencing menopause at what was perceived to be "the right time" and their fulfilment of other key roles within the lifecycle. One woman in Zimbabwe explained that she was able to accept the menopause because she had had her children but otherwise, "it would not do". Similarly, those in South Africa expressed a sense of shame or embarrassment about menstruating past a certain age. One woman explained how her grandchildren teased her for still menstruating and how her friend's husband was "disturbed" that she continued to menstruate into her fifties.

Table 2: Illustrative quotations

Loss and decline
"I know people who have their husbands treat them differently and sometimes cheat because they don't bleed anymore, they say that they are "cold" their vaginas aren't warm anymore. Like a river, water that lives flows but water that's still smells and all living things in it dies. Blood has to flow out to keep the vagina alive, once the blood stops, the vagina stops and you become cold. Its cold meat." **Meladi, 52, South Africa, Peri-menopause** *"So they say when you are no longer having your period, you will no longer have the desire for a man. That is when they start using traditional medicine."* **Chipo, Zimbabwe, pre-menopausal** *"We just wish that [menopause] does not change one's body shape and you just keep your nice shape. There will not be anyone who can point at you and say. "Oh look at what is now happening to her; she is getting a big stomach and all".* **Blessing, 44, Zimbabwe, peri-menopause** *If you see yourself reaching menopause it is another phase of life of a woman. You are now getting into the last phase, right. You can be affected, your strength…. For me now to even lift up a child—the girls were here, my grandchildren, I do not lift them…. That is some of the weakness that we feel.* **Chiedza, 60, Zimbabwe, post-menopause** "We will be asking amongst each other that, "All right, a woman has stopped having her period...no longer having periods means you are no longer bearing, then how does it end? What does that mean for your life?" **Primrose, 53, Zimbabwe, post-menopause**
Confusion and uncertainty

There are moods here and there and you ask yourself, "what is going on with me and why did I talk to the kids like that?"… I am very sensitive, I don't want to see anyone hurt. I feel like crying sometimes randomly watching TV and that never used to happen. **Ntsiki, 53, South Africa, post-menopause**

When you having always had good blood flow, then you now see clots you feel scared that, "Ah could I have cancer now..." because that is the one thing that is talked about that there is cancer that brings out clots.... You first get scared because you think "am I becoming sick"? **Rejoice, 58, Zimbabwe, post-menopause**

"I had to admit that okay, now I'm facing this situation [with hot flushes], then I went to my mom and told my mom that this is what's happening. So when I got to my mom I told her that, "mom I'm sick" and my mom said "no you're not sick it's just the time that comes for all women". So after I spoke to my mom and she told me that I felt better, because I felt like I was going to die". **Noxolo, 50, South Africa, post-menopause**

Acceptance and growth

"Menopause we are looking to say that we have come from there and we have climbed the steep, you have climbed on top of the house ... you are now looking to come down. We are now looking to come down in life until it just perishes." **Chiedza, 60, Zimbabwe, post-menopause**

"I did not have any problems, I just told myself that it is nature. For as long as I did not experience any pain, I did not worry." **Dimpho, 52, South Africa, Post menopause**

"I feel blessed that I am working at these [older] stages. Where I am, I see so many young people passing by. I feel like I'm not getting old but I feel like I am getting wiser. So I'm not feeling any bad about it and I feel privileged that I am reaching, uhm you know higher ages, I am happy to see my grandchildren. I would like to see my other sons getting married and grandchildren, I am looking forward to seeing their children as well." **Aphiwe, 59, South Africa, Hysterectomy**

I'm just excited about being free like no longer having discharge…not having problems like discharge … you'll be clean, you'll just be clean and be yourself! **Gugu, 49, South Africa, peri-menopause**

I do not dread [reaching menopause], especially with the issue of children. You need to have children while you are still capable of caring for them. **Blessing, 44, Zimbabwe, peri-menopause**

[Menopause is] the body accepting that the woman can't bear a child anymore. **Lethabo, 47, Zimbabwe, Pre-menopause**

The 'right' time

I have a friend who is 51. She still goes on her period and her husband gets upset with her. He says things to her like "You are disturbing me, your friends and age mates don't bleed anymore, you are disturbing me … why don't you stop this thing … drink something [traditional medicine] so it stops for a lifetime ".... He says "you want us to have kids at our age". That's what they fight about. **Meladi, 52, South Africa, Peri-menopause**

Discussion

We identified a range of menopausal experiences and views, some of which were expressed by women in both Zimbabwe and South and others that were specific to each setting.

This study contributes to the growing literature around women's experiences of menopause in Southern Africa. Women's perceptions of menopause took place through a social lens rather than a biomedical one [5]. The perception of menopause as a marker of ageing is supported by other studies [5, 31], although these differ between contexts. For instance, studies in Nigeria and South Africa indicated that women felt menopause represented a decline in youthful attractiveness [12, 31], whereas a survey in Namibia found most thought that it was a time when women acquired the wisdom of older age [32]. Previous research has demonstrated how beliefs attached to menopause and menstruation shape society's expectations for women's bodies post-reproduction [31, 33]. For instance, previous work in Nigeria has shown women who reach menopause are expected to disengage from sex to avoid "folk pregnancy" (fibroids) [31]. This is analogous to our findings from Zimbabwe where engaging in sexual relations was thought to cause a swollen belly, an embarrassing sign a woman is having sex past an appropriate time.

Similar to our findings, menopause in other communities in Southern Africa has been described as accepted as part of the life course [34] and viewed as a temporary and manageable change [13, 33]. Previous research in Zimbabwe suggests menopause can be seen as a time when women regain their strength [33]. Previous work reflects women's feelings of liberation from menstruation [5, 35], childbirth [13, 35] and the financial burden of buying pads [5, 11, 35]. Among some women in the Zulu culture and in Nigeria, menopause was associated with cleanliness, enabling them to perform new and important roles within the community [36, 37]. As such, our study supports similarities in women's experiences of menopause across Africa, as well as affirming the existence of wide and varied 'local biologies'.

While previous studies have quantified menopausal symptoms in Africa [38-42], this study contributes to understanding women's attitudes, including feelings of loss, confusion and uncertainty or acceptance. Previous research in Zimbabwe has highlighted that acceptance of menopause is informed by several factors, including women's sense of menopause as a natural stage of the life-cycle and women's childbearing status, such that women who have had children may find the transition more acceptable than those who have not [33].

Although all three themes were present in the narratives of women in both settings, experiences of loss and decline were more prevalent in Zimbabwean women, whilst those in South Africa were more likely to experience menopause as a time of freedom and growth. Acceptance of menopause was shaped by beliefs in the important social roles of older women and viewing reaching older age was a privilege. Whilst previous research carried out in South Africa has emphasised these positive attitudes [16], our research builds on this by identifying feelings of uncertainty about reaching this stage. Attitudes in both settings were also informed by unique understandings about the physiological changes that occurred. Our findings align with previous work carried out in Zimbabwe highlighting a belief about the importance of menstrual blood as a means of washing disease from the body [33]. By contrast, menopause in South Africa could be associated with 'cleanliness' in women who no longer menstruated, a finding supported by previous studies [16].

Given the diverse experiences of women through menopause in these two settings, initiatives that seek to support women need to be sensitive to context. Based on these findings, we have used a co-production approach to develop contextually relevant information resources about the menopause for women in Zimbabwe and South Africa [43]. An iterative and dynamic process was applied that

incorporated the views and experiences of midlife women identified in this study, alongside those of researchers, healthcare professionals and representatives from non-governmental organisations. This work shows how local attitudes and beliefs can be incorporated into interventions to support women during the menopausal transition. Information resources are available in several African languages [44, 45].

Findings from this study highlighted areas for future research. Women reflected on their partners' attitudes and beliefs about menopause which could be a source of worry and distress. They also discussed frustration with healthcare services, where they were unable to receive support and treatments for symptoms. Understanding men's views, along with those of healthcare workers, may provide the basis for further interventions.

Strengths and limitations

Qualitative methods enabled us to undertake a detailed exploration of the experiences and views of women. The final sample size enabled us to achieve data saturation, that is the point where no new themes or subthemes were identified in the data [27]. In the presentation of findings, we do not distinguish between the views of women at different stages of the menopause as we found that conceptualisations of the menopause were relatively consistent. Using an iterative approach to data collection and analysis enabled us to refine and develop interviews in order to explore areas that appeared to be particularly important or were raised by women as the study progressed. In keeping with a qualitative research paradigm we did not seek to develop representative or generalisable findings, although the depth of analysis and breadth of participants should provide confidence that findings have resonance in the included populations.

Data collection was carried out during the pandemic, which meant that data collection had to be conducted remotely in South Africa. In-person interviews may have enabled researchers to build deeper rapport with participants which could have led to further insights. Interviews in South Africa were carried out by two different qualitative researchers which may have influenced the data collected. However, given the similarities in the data, we are confident that this was not the case. There were some differences in the characteristics of women recruited from each study site. This included a higher proportion of self-reported co-morbidities and HIV in Zimbabwe. As we found little difference in the perspectives of different groups of women, as defined by comorbidities, it is unlikely these differences influenced the conclusions of the study. Of note, participants only included women living in urban settings meaning that caution must be used in transferring findings to other settings, particularly to rural areas where there may be other life circumstances that inform attitudes towards menopause.

Conclusions

This study provides novel findings about experiences and beliefs of midlife women towards menopause in Zimbabwe and South Africa. It highlights similarities in women's menopausal experiences across Africa, along with supporting the existence of wide and varied 'local biologies'. Findings underpin ongoing work to co-produce tailored interventions with women from different settings to improve menopausal health experiences.

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Potential conflicts of interest

The authors have no conflicts of interest to report. The authors alone are responsible for the content and writing of the paper.

Data availability statement

Access to anonymised interview and workshop transcripts will be made available to bona fide *researchers for ethically approved research projects. Requests for data access should be made to the country co-investigator leads. For access to data collected in Zimbabwe, contact Professor Rashida Ferrand, email*: rashida.ferrand@lshtm.ac.uk. For access to data collected in South Africa, contact Professor Lisa Micklesfield, email: lisa.micklesfield@wits.ac.za.

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