





Experiences of menopause among non-binary and trans people

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ABSTRACT

Background: Conventional categorizations of menopause can be difficult to apply to trans, gender non-conforming and non-binary (TGNB) populations. Menopause has biological, psychological and social meanings that may be hard to clearly apply within a context of diverse experiences of sex and gender. Nonetheless, some TGNB people do experience menopause, and their experiences may be different from those of other groups due to those diverse biopsychosocial understandings and experiences.

Method: This paper thematically analyses the responses of 15 TGNB respondents who responded to a larger survey about LGBTQ+ experiences of menopause.

Results: Two key themes were identified: Menopause and embodied identities, and Navigating gender normativity and gender binarism. The first of these contains two sub-themes, shifting and (un)settled gender identities, and embodied dis/connections with femaleness.

Conclusions: These findings appear to be comparatively novel within the published academic literature but potentially have some parallels with prior observations regarding interactions between puberty and gender identity, and also regarding TGNB people's experiences of challenges in navigating other health and life experiences normatively understood as female. These explorations raise a number of potentially sensitive questions, given the current debate and controversies around gender, sex and identity. Nonetheless, they point to a need for further research and practice into menopause that is inclusive and supportive of a range of gender and sexual identities.

KEYWORDS

Menopause; transgender; non-binary; Experiences

Introduction: defining and understanding menopause in TGNB populations

Low levels of sex hormones (whether estrogen or testosterone) can cause physical and cognitive side effects such as hot flashes, mood swings, "brain fog", loss of libido, and increased risk of osteoporosis (NHS England, 2022a, 2022b). Commonly associated with menopause, many of these effects can also occur for other medical or psychosocial reasons. Menopause is the specific term used for the significant drop in sex hormones that typically occurs for cisgender women between the ages of 45-55 (but can occur earlier), resulting in cessation of menses and loss of fertility, alongside many of the symptoms of reduced sex hormone levels (NHS England, 2022a, 2022b). Clinically, menopause is defined in relation to the date of the final menstrual

period, and consequent cessation of ovarian function (Stuenkel et al., 2015). There is no direct equivalent of the male menopause, as testosterone levels for cisgender men tend to decline more slowly with age, but a small proportion of cisgender men will experience more significant issues around low testosterone levels, and may be offered testosterone replacement therapy (NHS England, 2022a, 2022b). Experiences of menopause are also often closely connected to gendered questions of wider personal, relational and social significance around, for instance, no longer being able to have children, or coming to terms with aging (Kruk et Al., 2021; Riach & Jack, 2021). Throsby and Roberts (2024) note that dominant biomedical narratives of menopause often universalize the experiences of white, heterosexual, non-disabled cisgender women and are typically deficit focused,

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for example by framing menopause in terms of through loss of fertility. There are also close interrelations between menopause and gendered ageism, with cisgender women experiencing menopause at work reporting disguising or managing their embodied experiences in order to avoid playing into stereotypes around older women (Beck et al, 2023; Grandey et al., 2020; Jack et al, 2019). Biomedical definitions of menopause are therefore closely entangled with normative social expectations of gendered lifecourses.

In this context, it is challenging to define menopause in relation to TGNB people's experiences because of the intersection of biological, social and personal experiences that do not necessarily conform to stereotypically female or male expectations. Many trans people commence gender affirming hormone therapy (GAHT) as part of a process of social and medical transition, which usually includes both a deliberate lowering of endogenous hormones, alongside the introduction of exogenous hormones, in line with the individual's gender identity (Coleman et al., 2022; Hembree et al., 2017). These experiences of lowering one hormone alongside commencing another may be simultaneously both similar to and distinct from, menopause. For example, a trans man starting testosterone who has not previously experienced menopause or oopherectomy will generally cease menstruating, may experience vaginal dryness, and his fertility may decrease—but he is also likely to experience increased libido, acne, deepening of voice and growth of facial and body hair (Hembree et al., 2017). He may prefer to construct these experiences as part of a desired move toward masculinity, and hence understand them primarily as male puberty rather than as menopause.

Some non-binary and gender-diverse people undertake GAHT regimes that do not seek to replicate cisgender 'male' or 'female' hormone levels, for example, non-binary people assigned female at birth taking 'low' or 'micro' doses of testosterone (Hodax & DiVall, 2023). These groups may prefer not to align their experiences with normative accounts of puberty, menopause or hormonal change Conversely, some trans women might apply the term 'menopause' when talking about symptoms such as hot flashes related to issues with hormone dosage, although

Mohamed and Hunter (2019) report that many trans women saw the concept of menopause as irrelevant due to expecting to remain taking GAHT for life. For TGNB individuals, therefore, the use of the term 'menopause' to name a drop in sex hormones and associated side effects may be ambiguous, and mediated both by gender identity, and by the different contexts in which trans people experience hormonal change.

There are also many TGNB people who will experience menopause not having commenced GAHT, whether through choice or lack of access. This may be particularly the case for non-binary and gender-diverse populations, who often have different goals for gendered embodiment. Nonbinary people often also face particular inequities in healthcare, for instance poorer access or lack of recognition, and while there is growing recognition of non-binary health needs, there remains comparatively little coverage of non-binary aging (Matsuno & Budge, 2017; Reisner & Hughto, 2019; Scandurra et al., 2019). Commentators have noted that gendered biomedical and sociological understandings of menopause implies a likely gap in understandings of non-binary experiences (Glyde, 2022; Throsby & Roberts, 2024), but at present there appears to be relatively little data to fill that gap.

Whether TGNB people are taking hormonal interventions or not, it is also likely that psychosocial experiences of menopause would be different for gender-divergent individuals compared to their cis counterparts. Understandings of menopause as a specifically female experience, and one that is closely tied to reproductive capacity, might well have a different personal and social significance for TGNB individuals, depending on their experiences and identities around such matters. At present, however, there is little formal documentation of such issues.

Understandings of menopause and age-related hormonal change that are framed around the needs of cisgender people may also create challenges in understanding and meeting TGNB people's needs within health services. Clinical definitions that define menopause in terms of a 'final' menstrual period, loss of ovarian function or loss of fertility may be ambiguous in TGNB populations, given the impact of any prior hormonal and/or surgical intervention, and assigned sex at birth. Many

medications used in GAHT are also used for hormone replacement therapy for menopause or for older men with low testosterone, meaning that prescribing and health advice for TGNB people is often derived from that for post-menopausal populations (Feldman, 2016; van Dijk et al., 2019; Vincent, 2018). However, TGNB people may have health needs that do not neatly align with conventional guidelines. For example a trans man may simultaneously be prescribed testosterone, and also topical estrogen for vaginal atrophy. Regardless of whether medical systems record sex based on his current identity or as recorded at birth, the combination of these prescriptions may be flagged as anomalous. Based on a small but diverse sample of LGBTQ+ people experiencing menopause, Glyde (2023) reports participants often describing negative experiences with healthcare providers, particularly around doctors who poorly understood LGBTQ+ lived experiences and needs. TGNB people may therefore face particular challenges in having their needs around menopause understood and addressed within health systems.

This paper therefore seeks to explore experiences of menopause and accessing services and support within the TGNB population.

Methodology

The data reported here are taken from a small UK online qualitative survey of LGBTQ+ people's current/retrospective experiences of the menopause. The study, approved by the University of York's Economics, Law, Management, Politics and Sociology (ELMPS) Ethics Committee, aimed to understand how minority gender and/or sexual identities impacted those experiences. Of 66 total respondents, 15 did not identify with the sex they were assigned at birth, and it is their data which is analyzed here.

The survey (Westwood 2023) comprised a combination of open-ended questions used in other recent UK surveys (Department of Health and Social Care (DHSC), 2022; Women and Equalities Committee (WEC), 2022) plus additional questions specifically relating to LGBTQ+ issues. Demographic and work-related questions (Sections A - E) were taken from the House of Commons Women and Equalities Committee's

'Menopause and the Workplace' survey (Women & Equalities Committee, 2022). Two further questions were added, one asking about any experiences of harassment/discrimination in relation to the menopause at work, the other a free text 'Would you like to let us know about anything more about your experiences of menopause at work?' The findings in relation to the workplace are reported elsewhere (Westwood, under review).

Section F of the questionnaire comprised questions taken from the recent DHSC 'Women and Health' survey (Department of Health and Social Care (DHSC), 2022), adapted to focus specifically on the menopause. Sections G and H asked questions about the relevance of sexual and/or gender identity in relation to the menopause, adapted from the Women and Equalities Committee survey. There was then a final open-comment question asking survey respondents if they would like to add anything else about their menopause experiences.

Recruitment was via professional and advocacy networks, social media and snowballing. The initial phase of the research was conducted by SW. She was joined by MT for data analysis of the TGNB data. SW's academic standpoint is feminist, intersectional, gerontological, and socio-legal. Her personal standpoint is lesbian, cisgender, postmenopausal. MT is an intersectional feminist scholar with a focus on trans health and aging. He is a trans man, active in trans masculine communities and is ambivalent as to the relevance of the concept of menopause to his lifecourse. Thematic data analysis (Braun & Clarke, 2006) was conducted by the two researchers, who initially separately compiled manually coded themes. These were then compared, amalgamated, and co-revised, until both researchers were happy that they had achieve a set of constructs which accurately reflected their interpretations of the data.

Results

Demographics

All respondents identified as white (English, Welsh, Scottish, Northern Irish, British, Irish, Gypsy or Irish Traveler, Roma, any other white background).

Of the fifteen respondents who indicated that their gender identity was not the same as their sex assigned at birth, twelve described their identity as non-binary, one as gender non-conforming, one as a (lesbian) man and one as a woman. Seven respondents identified themselves as queer, five as bisexual, two as pansexual and one as lesbian. Five respondents were aged 40–49, eight were aged 50–59, and two were aged 60–69. While these were the responses given to the initial questions about identity, some respondents gave more nuanced or fluid responses in qualitative answers. For example, some non-binary respondents also referred to themselves as transmen within written answers.

The survey did not include questions about sex assigned at birth, nor about medical transition. Within the qualitative responses to questions about experiences of menopause, the woman respondent indicated that she was a trans woman experiencing menopause as the result of unwanted interruptions to gender-affirming estrogen therapy. All other survey responses appeared consistent with participants who were assigned female at birth, experiencing menopause that was not due to commencement or cessation of genderaffirming care.

See Table 1 for respondents' reported symptoms.

Table 1. Respondents' reported symptoms. (Westwood, submitted).

	Gender NB/ NC			
	persons	Transgender	Transgender	Total
	(n = 13)	woman $(n=1)$	man $(n=1)$	(n = 15)
Problems with memory/ concentration	11 (85%)	1	1	13 (87%)
Hot flushes	10 (77%)	1		11 (74%)
Difficulty sleeping	9 (69%)	1		10 (67%)
Joint stiffness or aches	8 (62%)		1	9 (60%)
Reduced/loss of libido	7 (54%)			7 (47%)
Vaginal itching/ dryness	7 (54%)		1	6 (40%)
Anxiety and/or depression	6 (46%)			6 (40%)
Other changes to mood	6 (46%)			6 (40%)
Night sweats	5 (38%)	1	1	7 (47%)
Palpitations	4 (31%)			4 (27%)
Headaches	3 (23%)			3 (20%)
Irregular/excessive bleeding	3 (23%)			3 (20%)
Recurrent urinary tract infections	1 (8%)			1 (7%)

As can be seen from Table 1, among the non-binary/non-conforming respondents the most common concerns related to memory/concentration (85%), hot flushes (77%), difficulty sleeping (69%), joint stiffness or aches (62%), and reduced/loss of libido (54%). The transgender man was affected by problems with memory/concentration, reduced/loss of libido, vaginal itching/dryness and night sweats. The transgender woman reported problems with memory/concentration, hot flushes, difficulty sleeping and night sweats.

Findings

There were two core themes within the findings: Menopause and embodied identities, and Navigating gender normativity and gender binarism. The first of these contains two sub-themes, shifting and (un)settled gender identities, and embodied dis/connections with femaleness.

Menopause and embodied identities

shifting and (un)settled gender identities. Several non-binary respondents indicated that menopause had affected their gender identity, or led to new realizations about gender identity. This affected participants in various ways. For some participants, changes from menopause led to questioning gender identity:

I felt less libido but also this made me question my gender identity. (SR43, queer non-binary person, aged 40–49)

For other respondents, menopause led to a sense of renewed discomfort with their gender identity:

It's made me feel more female when I only just became comfortable with being non-binary. (SR30, bisexual non-binary person, aged 50–59)

Conversely, another participant indicated that menopause made them feel less female:

I'm not really sure how it affects other people, but I think my changing hormones made it more obvious to me that I am not fully female. (SR61, bisexual gender non-conforming person, aged 50–59)

For two respondents, menopause resulted in a clear change in in their sense of gender and



sexual identity, in both cases moving toward a sense of self as a man/masculine

I realised I was trans non-binary and masculine not a lesbian (SR17, queer non-binary person, aged 50-59)

I found I could affirm my identity as a man better after my periods stopped. It felt like I was prepubescent (if that makes sense) but I have compartmentalised my whole life with my dysphoria always rumbling along in the background so it makes sense that menopause would affect me. (SR59, lesbian transgender man, aged 50-59)

This latter respondent explained his experiences further, placing his experiences of changes in identity at menopause within a context of shifting self-identity within both sexual orientation and gender identity categories:

I went from feeling bisexual as a teenager to straight female (after going into gender flight) in my 20s, to lesbian in my 30s, and now feel I could actually feel like a straight guy? (SR59, lesbian transgender man, aged 50-59)

Several respondents therefore described shifts, fluidity in gender identity at menopause. However, these appeared to affect individuals in different ways. Some participants reported feeling more settled and certain in their identity, while others reported menopause bringing new questions or a definite sense of change in identity. Participants also reported differences as to whether they felt menopause drew them closer to, or further away from, feeling female, male or non-binary.

Embodied dis/connection with female-ness. Some respondents reflected in more detail upon attempts to disentangle why their sense of gender identity had changed. Often this was located in the sense of menopause as being a typically female experience, both in terms of bodily change, and in terms of social attitudes.

One person who found that menopause had led to them feeling more female linked this to feelings of increased focus on the body:

I feel like less of a person, but it has made me focus on my female body in a way that I am not totally comfortable with. (SR30, bisexual non-binary person, aged 50-59)

Another respondent explained how bodily changes linked to the menopause had brought with it both tensions and freedoms associated with an emerging/consolidating male identity:

A trans man for example will experience dysphoria while going [through] menopause and also euphoria too as I did when my period stopped but it made me more aware of my chest and I now struggle with this. (SR59, lesbian transgender man, aged 50-59)

Other respondents described ambivalent feelings around bodily change and menopause, for example welcoming the cessation of periods, but also experiencing other, less welcome changes:

As a non-binary person, glad of [the] end of the 'feminine' experience of periods, female hormone levels, etc. But also reduction in energy and wellness impacting ability to be energetic, capable, strong self. (SR39, bisexual non-binary person, aged 50-59)

Some respondents indicated that they found it difficult to be certain how far hormonal changes might be affecting their identity:

The change in hormones can create a fundamental disconnect to one's sense of self and gender in my opinion. So this can cause some trauma to come up (the way hormones interact with the brain can also cause this when they fluctuate and fall off a cliff during this phase of life). This can bring with it all sorts of issues, some I'm trying to unpack now. Am I certain in my gender identity? Or are my hormones triggering something in me that is causing a disconnect from my femininity? In my mind it's a mix of knowing my identity (fluid) but also confusion around a complete feeling of disconnection from my feminine side. It's confusing and exhausting." (SR24, pansexual non-binary person, aged 40-49)

Respondents also indicated that their experiences of changes from menopause were mediated by their identity and by the understanding of menopause, periods, etc. as being "female" or Several respondents "feminine" experiences. reflected on how the gendered social categorization of menopause affected them:

As a non-binary trans man it impacts my gendered experience to some extent because I'm experiencing something that's very gendered as a female experience... pushing me into an externally female gendered experience and category, as a trans man. I've always been non-binary, so maybe less impact than a



more binary-identified man." (SR55, queer non-binary person, aged 50-59)

Going through something which is socially/conceptually a very 'female' experience can be really challenging for one's own sense of gender identity. Personally I was fine (gender-identity-wise) with experiencing periods and pregnancy/childbirth, but I have found menopause much more conceptually difficult. I think in large part because the social narrative is so much about 'menopausal women' and also often denigratory or shame-laden. (SR42, bisexual non-binary person aged 40-49)

Within these accounts, participants reflected upon the contrast between their own identities, their bodily experiences, and surrounding social expectations. In the latter quote from SR42, they contrast their experiences of pregnancy with their experiences of menopause, and note that the difference in social narratives was a key factor in finding menopause to be a more difficult experience.

For many participants, therefore, questions around gender identity were addressed in the context of menopause's position as a perceived female experience

Navigating gender normativity and binarism. When discussing practical experiences of menopause, many respondents highlighted that issues around connection with 'female-ness' extended to challenges in identifying support resources and finding space to talk about experiences with others. Some participants also alluded to wider issues of societal prejudice that further affected their sense of security as a TGNB person. These factors came together to create real barriers in being able to express their experiences as a trans or non-binary person experiencing menopause.

I have found navigating menopause as a non-binary person challenging, in that it is such a conceptually 'female' experience, and there are so few resources available that respect my experience of my body or my interactions with the world. I've found it hard to find a way of both acknowledging peri-menopause and being willing to talk about that with my family and with therapist, and feeling secure in my identity as non-binary. I don't think it's actually changed my gender identity, but it has made me feel less happy/ secure with it. (Although I would note that other social trends are also making it harder to feel secure

as a non-binary person). (SR42, bisexual non-binary person, aged 40-49)

As someone very masculine/male read conversations can feel very feminising in some way (SR19, queer non-binary person, aged 60-69)

Some respondents highlighted that these gender normative expectations also directly impacted on their experiences of accessing health services.

Menopause can affect anyone's identity. It's very hard for anyone who doesn't identify as cis female to overcome barriers to treatment, and infuriating. So this affects the number of people who try to access treatment due to the stigmas of having to navigate heteronormative health care provision and dealing with medical ignorance. (SR27, queer, non-binary person, aged 50-59)

Gender normativity and binarism in healthcare was particularly an issue in relation to perceived barriers in accessing hormone-related healthcare that recognized diverse experiences, identities and expressions of gender, sex and sexuality:

GP's do not consider different types of sexual contact other than penis and vaginal sex. They only use binary genders. There's very little awareness of pronouns. They have very little knowledge of female menopause never mind anyone who doesn't identify as female. They have little idea about the impact different hormone treatments (e.g. testosterone) have on menopause. They don't routinely check testosterone levels of people who aren't cis male. Despite the fact that testosterone levels drop in women and non-binary people during menopause and can impact on libido, there's a reluctance to prescribe HRT and even more reluctance to prescribe low dose testosterone as part of HRT. (SR27, queer non-binary person aged 50-59)

The following respondent highlighted how cisnormativity and binarism intersect with masculine stereotypes to produce complex exclusionary healthcare experiences:

Doctors don't think about it, don't automatically make the connection. I think there's limited experience especially thinking about and responding to menopause symptoms in trans+people, especially trans masculine people, and trans men... I didn't really receive much support. I went about specific things, and had done a bit of research before, and GP and I worked collaboratively to try to address those. These were early on, and GP at time hadn't made the link between changing hormones, and vaginal atrophy leaving me vulnerable to UTI - hadn't thought to

consider my situation as a non-binary trans man as similar to menopausal/postmenopausal woman. When I saw a GP about menopause symptoms later at around usual age, I think I was not offered anything, and came away feeling like I was expected to just 'ride it out' (SR55, queer non-binary person, aged 50-59)

The single transgender woman respondent specifically highlighted the challenges of experiencing menopause as a trans woman. She had experienced menopause symptoms as a result of decisions about her hormone dosage taken by doctors.

... withdrawal or reduction from HRT in trans women can and often does cause hot flushes, night sweats and can affect concentration, often associated through lack of sleep. These can occur multiple times, every time the gender clinic determines to reduce your oestrogen to below the expected amounts, or when a GP refuses to issue you a prescription and you temporarily run out. (SR66, pansexual transgender woman, aged 50-59)

She commented that, in her view, the survey in itself did not reflect her experiences, and that this was located in a context of menopause discourse that excludes transgender women:

The world falsely disbelieves that we experience menopausal symptoms when our HRT is reduced or stopped. (SR66, pansexual transgender woman, aged 50-59)

Respondents therefore identified barriers to feeling recognized and/or accessing support with menopause as a transgender, non-binary or gender non-conforming person, and in being able to openly discuss their needs and express their identities. They located this within a context of normative understandings about menopause, gender, hormones and bodies. In part, this was linked to issues raised in the preceding theme about the understanding of menopause as a female experience. Several participants also highlighted issues of others, particularly medical professionals, having a poor understanding of non-binary and trans people's needs.

Discussion

Within this sample of trans, non-binary and gender non-conforming respondents, respondents clearly highlighted interactions between menopause and gender identity. For some respondents, this was a noticeable shift in personal identity that occurred at menopause. For others, this was about how their identity mediated their experiences of menopause, and the extent to which society and services recognized their experiences of gender in the context of menopause. The majority of participants reported physiological and cognitive symptoms from menopause, most commonly problems with memory, hot flushes and difficulty sleeping, and some participants linked their experiences directly to these symptoms. However, participants also emphasized the impact of social narratives around menopause, in particular the understanding of menopause as a cisgender female experience. This is consistent with the observations of Throsby and Roberts (2024), who similarly noted the impact of normative assumptions around menopause occurring within a (cisgender, heterosexual, non-disabled) "female" lifecourse. There were clear contradictions and counter-narratives within participants' accounts: some respondents experienced a shift toward feeling more female, others experienced a shift away from feeling female; some respondents were more troubled by embodied aspects of menopause, others by social attitudes and assumptions. Some respondents reported that their identities or sense of connection with their bodies had shifted, others indicated that they didn't feel their identity had shifted, but they felt less comfortable with themselves, or experienced more barriers to expressing who they were. In this relatively small sample, no specific narrative appeared to be dominant.

These findings potentially complement prior discussion in the literature on gender identity and puberty. Steensma et al. (2011) report that some adolescents experience changes in gender identity at puberty, and that this is interlinked with somatic change, social norms, and romantic and sexual attraction. They further note diversity in such changes, with some adolescents becoming more certain of their identity as trans, while others re-identified with their birth-assigned sex or moved toward a more fluid identity. While there are clearly differences between puberty and menopause, there are also parallels in terms of hormonal and bodily changes, changes in

sexuality, and both personal and social understanding of puberty and menopause as a move to a new stage of life. As such, it is perhaps not wholly surprising that there might be some parallels in terms of interactions with gender identity.

In highlighting this issue, the authors are conscious that the suggestion that menopause may be associated with changes in gender identity, and that this may have some parallels with puberty, is a potentially sensitive one for multiple reasons. Firstly, fluidity in gender identity is sometimes viewed as inherently less authentic (Garrison, 2018; Newhook et al., 2020). Secondly, the suggestion that sex hormones can change sexual or gender identity is one that has been associated with historic medical abuses, such as hormones being used within so-called conversion therapies, and contributes to current controversies over adolescent care (Ashley, 2020; Murphy, 1992). Thirdly, the delineation between trans masculine, lesbian and non-binary identities, and the perception that people adopting one identity term detracts from or undermines other groups is one that has been subject to commentary and controversy for several decades (Halberstam, 1998; Mackay, 2021). Fourthly, gendered societal biases delegitimise experiences associated with normatively "female" hormones and changes in life stage. In this context, discussing changes of identity at menopause may be perceived as undermining the legitimacy or validity of certain identities, or even as actively attempting to impose gender and sexual normativity. It is possible that these sensitivities around the topic may contribute to some of the difficulties participants described in accessing support that recognized and affirmed their experiences.

It is therefore essential to be sensitive to such histories, controversies and abuses around the interaction between hormones and sexual/gender identity, particularly for individuals who may have experienced a degree of fluidity around identities such as transmasculine, lesbian, butch and/or nonbinary. Research, clinical care and social discussion on topics around menopause and gender identity should commence from a perspective of recognizing the validity and value of all identities, and respecting diversity of experiences and lifecourses, including those that involve fluidity of identity.

In practice, however, this study's respondents described significant difficult accessing care and support that met their needs. They described struggling to identify inclusive resources; challenges in talking about menopause with friends, family and loved ones; and difficulties in accessing practical support through medical services. Some respondents had not approached health services in part due to their concerns that services would not understand their needs, or that the challenges of explaining their needs would outweigh the benefits. These issues appear broadly consistent with the experiences of interview participants described by Glyde (2023 and 2022), who also described concerns about GPs not understanding gender diversity and not considering diverse sexualities when providing menopause care. Similar issues around lack of inclusivity, inappropriate resources, assumptions about gender and avoidance of healthcare have also been described in other contexts where trans masculine and non-binary people need to access health and ancillary services commonly characterized as female, such as cervical screening, pregnancy and antenatal care (Berner et al., 2021; Falck et al., 2021; Greenfield & Darwin, 2021). This may suggest that some of the issues raised by participants in this survey are not exclusive to menopause, but are broader structural concerns in meeting the needs of TGNB people.

Some respondents specifically highlighted normative assumptions about hormone replacement therapy, an issue that potentially affects menopausal people of all gender identities, but which may be particularly salient for TGNB menopausal people. In the UK, estrogen and progesterone are licensed for menopause and indeed steps have recently been taken to increase accessibility, for example through improved pre-payment arrangements (Department of Health & Social Care, 2023; NHS UK, 2023). In contrast, testosterone replacement in post-menopausal women remains off-license and only available through specialist care, despite the fact that research studies report positive outcomes with relatively few side effects (Islam et al., 2019; Johansen et al., 2020; NHS UK, 2023). This may in part be linked to gendered perceptions of testosterone as a "male" hormone leading to heightened concerns about risk, or assumptions that a decline in testosterone are less important for women. Anxieties about the possibility of masculinization feature particularly strongly in the literature about use of testosterone for menopause (Islam et al., 2019). Such debates tend not to even acknowledge the possibility that for some individuals, masculinization may be a desirable side effect. However, individuals who want to discuss testosterone therapy in the context of being both menopausal and non-binary/ transgender may experience particularly difficulty in accessing services that are knowledgeable and supportive on both of these issues (Glyde, 2022, 2023).

Limitations

This study utilized a volunteer sample, which was relatively small, and appears not to have received responses from a full spectrum of TGNB communities. Notably, only one transgender man and one transgender woman responded. It is possible that the strong representation of non-binary respondents indicates that these are the TGNB group who are most affected by menopause, perhaps because other groups are more likely to be taking gender-affirming hormone therapy, which would typically prevent menopause symptoms. However, it is also possible that the circulation of the survey may have tended to reach more TGNB people with a connection to lesbian, bisexual and queer communities. There may also be groups of trans people who have relevant experiences but prefer not to categorize their experiences as menopause, or who assumed that their experiences were not in scope of this study, for example because they were not assigned female at birth. The one trans woman who responded clearly identified her experiences as menopause but commented that she had not felt that the survey fully reflected those experiences. The study was also located in the UK, and the sample did not include participants of color. There may be important geographical or intersectional factors in experiences of menopause that were not captured.

Respondents were asked whether they identified as a woman, a man, non-binary, gender non-conforming or other. They were also asked whether their gender identity is different from the sex they were assigned at birth. However, respondents were not directly asked for their sex at birth, nor about whether they had undertaken any elements of medical transition. These can be sensitive questions for TGNB people, for example because they could be seen as delegitimising current identity, or as being prurient about medical history. However, in the context of understanding experiences of menopause, it may have been helpful to have collected this data, in order to better understand the different contexts in which TGNB people experience menopause.

Conclusion

This study highlights intersections between menopause, gender identity and access to services for TGNB populations. There was substantial diversity within personal accounts of these intersections, suggesting that menopause may interact with gender identity in multiple ways. However, respondents were relatively consistent in highlighting that normative understandings of menopause meant that they experienced challenges in discussing their experiences with others, and were at best uncertain as to the ability of health services to understand and meet their needs. These challenges may be further heightened by particular sociohistorical sensitivities around considering fluidity in identity and the interaction with hormones.

Further research could usefully explore the spectrum of experiences of menopause across all TGNB populations, and explore suggestions and good practice as to inclusive support. This might include the development of inclusive information and guidance, addressing potential deficits in health provider knowledge, and considering the need for distinct clinical pathways, for example the use of testosterone as a hormonal intervention to help alleviate menopause symptoms in TGNB groups. The context of a seldom-heard population who appear to have limited trust in conventional health services may lend itself to research and good practice approaches that are

centered within TGNB communities, such as peer-led interventions, potentially making use of online services to counteract geographic dispersal. Given the apparent parallels with discussions around inclusivity within, for instance, maternity and cervical screening services, as well as potential parallels with puberty, it may also be appropriate to address menopause within more holistic and/or lifecourse based approaches to helping TGNB people navigate services and life experiences conventionally addressed from a single-sex perspective.

Ethical approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent

Informed consent was obtained from all individual participants included in the study.

Disclosure statement

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