



HHS Public Access

Author manuscript

Cult Health Sex. Author manuscript; available in PMC 2023 February 10.

Published in final edited form as:

Cult Health Sex. 2022 October ; 24(10): 1408–1422. doi:10.1080/13691058.2021.1957151.

Improving menstrual equity in the USA: perspectives from trans and non-binary people assigned female at birth and health care providers

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Abstract

Menstruation research has largely focused on addressing menstrual management barriers facing cisgender women and girls in low and middle-income countries. Scant literature has assessed the menstrual management needs of trans and non-binary people assigned female at birth. To better understand these frequently invisibilised menstruation-related needs, we conducted a multi-method qualitative study in New York City which included: 17 in-depth interviews across trans and non-binary people ($n = 10$) and health care providers who serve them ($n = 7$); and seven anonymous post-interview participatory writing responses with trans and non-binary participants to further elucidate their lived experiences with menstrual management. Lack of health care provider transgender competency, public toilet design (i.e. gaps in cubicle doors and lack of in-cubicle menstrual product disposal bins), and the social dynamics of public toilets (i.e. work and school) were identified as significant barriers to managing menstruation safely and accessibly for trans and non-binary people. These findings have important implications for healthcare policy, public toilet legislation and advancing menstrual equity in the USA.

Keywords

Menstrual management; menstrual equity; public accommodations; transgender

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Disclosure statement

No potential conflict of interest was reported by the authors.

Introduction

Menstruation is an issue central to debates around civic participation and gender parity. The term ‘Menstrual Equity’ was coined to describe menstruation as a driver of social and economic inequity (Weiss-Wolf 2018). In the USA, this has led to several states passing legislation eliminating sales tax on menstrual products (Cotropia and Rozema 2018), policies mandating the provision of free menstrual products in public schools, as well as for those who are incarcerated and for those experiencing homelessness (Montano 2018). Such efforts have sought to increase menstrual product access and highlight the socio-political forces influencing its management. More recently, menstrual activism and critical menstruation studies have begun to more prominently acknowledge that bodies and identities other than cisgender women also menstruate (Bobel et al. 2020).

The term ‘menstruators’ has been increasingly used across academia, mass media and the grey literature to include transgender and non-binary people assigned female at birth (AFAB). However, this term may be perceived as reductively characterising a person who menstruates as only an embodiment of their bodily functions. Transgender (trans) is an umbrella term used to describe individuals whose gender identity differs from the sex they were assigned at birth. In recent years, terms like gender queer, non-binary and gender diverse have also been adopted by researchers to describe identities between, outside and beyond the gender binary (Thorne et al. 2019). The mixture of terminology highlights the methodological challenge of finding language to adequately describe the complexity of identity and embodiment. We use the term trans and non-binary people to acknowledge and respect the heterogeneity of identities described by the people who participated in this study including but not limited to trans men, non-binary, and or other trans people assigned female at birth. While critical menstruation studies have begun to make visible the lived experiences of AFAB trans and non-binary people who menstruate, efforts are also needed to better characterise gender-affirming solutions to menstrual challenges.

Gender-affirming care is defined by four constructs: medical, legal, social and psychological (Reisner, Radix, and Deutsch 2016). While gender-affirming care frequently refers to hormone therapy and a variety of surgical interventions that help trans and non-binary individuals reduce feelings of dysphoria by better aligning their body and gender identity, it is also a model aimed at depathologising trans and non-binary bodies by moving away from transition-centred care and focusing on the healthcare experience as a whole, with greater attention given to mental wellbeing (Reisner, Radix, and Deutsch 2016). The multidimensional aspects of gender affirming care suggests the need to reconsider domains of health beyond healthcare settings.

Gender-affirming solutions to meeting the menstrual health needs of trans and non-binary people must deviate from medicalised and social constructions of menstruation as a symbol of womanhood. Frank (2020) notes how medical providers’ professional authority on body norms and illness negatively impacts how transgender and non-binary people relate to their bodies. Many transgender and non-binary people’s healthcare experiences are characterised by over or under evaluation of their trans identity, misgendering, provider gatekeeping of transition-related care and providers’ insufficient knowledge in trans healthcare (Heng et

al. 2018). The limited research on sexual and reproductive health for transgender men is primarily focused on sexually transmitted infections (Scheim and Travers 2017), cervical cancer screening (Gatos 2018) and pregnancy (Obedin-Maliver and Makadon 2016); with little to no mention of menstruation.

Menstruation has long been considered an important aspect of sexual and reproductive health for cisgender women, however scant literature has examined the attitudes and experiences of AFAB trans and non-binary people towards menstruation and its management. Menstrual management has previously been discussed as emasculating for AFAB transgender individuals (Chrisler et al. 2016). Feminine menstrual product packaging, the vaginal insertion of menstrual products and the gendered association of menstruation have all been implicated as sources of distress (Chrisler et al. 2016; Frank 2020; Lowik 2021). For AFAB trans and non-binary with negative attitudes towards menstruation, Lowik (2021) notes the benefits of gender affirming hormone therapy and birth control for inducing amenorrhoea and helping relieve dysphoria. Previous studies exploring attitudes of AFAB trans and non-binary people towards menstruation also reveal heterogeneous experiences beyond dysphoria such as empowerment and indifference (Chrisler et al. 2016; Frank 2020). Lowik (2021) presents a more complex perspective in which preserving fertility and observing the menstrual cycle as a marker of good health complicates generalisations about trans and non-binary people's lived experience with menstruation. Given the importance of the menstrual cycle in sexual and reproductive health, the material and symbolic duality of menstruation, connected to cisnormative, binary understandings of gender, must be reconsidered.

There remains a significant gap in understanding the menstrual health needs of AFAB trans and non-binary people. Little is known about the barriers members of these communities face in relation to the onset of menstruation and its subsequent management. This paper identifies challenges AFAB trans and non-binary people face when managing their menstruation as well as practical solutions to make social and physical environments more inclusive and enabling for menstrual management. Using qualitative and participatory methodologies, the paper aims to: (1) better understand menstrual management barriers facing AFAB trans and non-binary people; (2) explore what gaps in menstruation-related knowledge and support currently exist for these communities; (3) describe menstrual management strategies in public toilets (i.e. product disposal); and (4) understand how health care professionals can better serve AFAB trans and non-binary people.

Methods

Conceptual framework

Our research uses a gender-expansive equity framework (Restar et al. 2021) which builds on the WHO (2011) Gender Responsiveness Scale (GRS) to include trans and non-binary people. The framework critiques programmes and policies aimed at being inclusive but not transformative, similar to the critiques of using 'menstruators' as an inclusive placeholder for the menstrual experience of AFAB trans and non-binary people. There are three levels to the gender-expansive framework of relevance to exploring the experience of menstruation: microlevel, mesolevel and macrolevel. At the microlevel, this study sought to understand

individual-level menstrual management challenges facing AFAB trans and non-binary people. At the mesolevel, we identified how to de-gender language and make resources and healthcare services related to menstruation more inclusive. Lastly, at the macrolevel we sought to capture practical solutions to meso and micro level challenges (i.e. gender norms and public toilet accommodation legislation) to make recommendations for institutional policies that create more enabling social and physical environments for AFAB trans and non-binary people to manage their menstruation.

Research design and setting

This study used a multi-method qualitative research design including: 1) key informant interviews (KII) with health care providers serving trans and non-binary communities ($n = 7$); 2) in-depth interviews (IDI) with self-identified AFAB trans and non-binary people ($n = 10$); and 3) follow-up participatory methodologies in the form of an anonymous online writing activity (WA). Participatory approaches have been utilised by the principal investigator (MS) in several prior studies exploring sensitive topics. Most participants resided in New York City, with a small number living in the larger New York region and two from other states in the USA.

Sample and recruitment

Key informant interview participants ($n = 7$) were purposively recruited through professional networks in New York City for a diversity of clinical and therapeutic roles. Inclusion criteria included: working for an organisation serving LGBTQ (Lesbian, Gay, Bisexual, Transgender, Queer) people, and having at least one AFAB transgender or non-binary patient. The selected key informants included primary health care providers, nurses, therapists and clinical psychologists.

In-depth interview participants ($n = 10$) were recruited virtually through convenience sampling. Recruitment flyers were circulated at various LGBTQ organisations across New York City, on social media, and among medical and service providers. Inclusion criteria included: aged 16–40, being assigned female sex at birth, and identifying as transgender, non-binary or another identity outside of the cisgender binary. Exclusion criteria included: individuals who had never menstruated.

Participants received a \$25 gift card as compensation for participation in the study. A waiver for parental consent and written consent was approved by the Columbia University Institutional Review Board (IRB # AAAS6629). The waiver was requested if a participant under the age of 18 had not disclosed their gender identity to their guardian. IDI participant ages ranged from 17–32 years old and included the following identities: male-aligned, transman, transmasculine, non-binary, queer man and FTM (Female to Male).

Data collection

A two-person team, (MS and BL) conducted semi-structured interviews between September 2019 – March 2020. All interviews were conducted over the phone and recorded using a software program called Free Conference Calls. We initiated the study with the KIIs, to ensure the language and interview questions used in the IDIs would be appropriate.

Key informant interviews—Interviews were 30–60 min long and sought to capture insights from the providers’ perspective on AFAB trans and non-binary people’s experiences managing menstruation as well as their own experiences discussing menstruation as part of the provider-client interaction. The interview guide was composed of six questions and explored barriers providers face when trying to provide competent care to their patients, types of menstruation-related conversations that occur and questions that providers hear from their patients, as well as examples of gender-affirming language they might use to make a patient feel more comfortable during a visit.

In-depth interviews: Interviews were 30–60 min long and sought to capture the lived experiences of AFAB trans and non-binary people in relation to specific aspects of menstruation. Given the sensitive nature of the research topic, we wanted to make the data collection process as unintrusive as possible. We only collected gender identity and age and chose to conduct the interviews over the phone to protect the participant’s anonymity. The IDI guide was composed of 11 questions and explored 1) participants’ understandings, meanings and preferred language around menarche and menstruation; 2) the ways in which participants learned about menstruation and its management; 3) how health care providers with whom they interact could improve their practices to be more supportive around their menstrual needs; and 4) how physical environments, particularly toilets, may support or impede the management of their periods.

Writing activity—After completing an IDI, all trans and non-binary participants were invited to respond anonymously to an online prompt to write a story drawn from their menstruation experiences. Personal narratives reveal lived experiences and enable individuals to share meanings behind behaviours (Sommer 2009). We provided each participant with two story-writing options: 1) Describe a time you had to buy menstrual products; or 2) Describe an experience managing menstruation in a public toilet. Participants were instructed to choose one of the prompts and provide details about what happened, how they felt, how they managed, and advice for their younger trans-selves in similar scenarios. The writing prompt was constructed using Google Forms and emailed to participants as a link they could fill out on their own time. Due to the intentionally anonymous submission approach, we could not track which participants responded, so a reminder email was sent to all participants one week, and one month, after the interview. In total, seven of the ten participants submitted stories.

Data analysis

Data were analysed (by BL and AS) using a six phase deductive thematic analysis methodology (Braun et al. 2018). Phase one began with familiarisation of the data by listening to the interviews and reading through the participatory writing responses. In Phase two, we used open coding to develop categorical concepts and began to look for patterns and relationships between codes. A codebook was created and uploaded to Dedoose for line-by-line coding of each transcript. Phase three involved developing themes by building connections within categories into a central organising concept. Phases four and five were dedicated to using the gender expansive equity framework (Restar et al. 2021) in order

to recognise cisgender biases and define themes based on equitable and transformational solutions. The sixth and final phase was used to refine themes and develop results.

Findings

Three major themes concerning menstruation and menstrual management were identified: 1) in clinical interactions, there is a lack of provider competency regarding trans and non-binary people who menstruate; 2) public toilet design impedes menstrual management; and 3) gender social dynamics in public spaces hinder menstrual management. Along with identifying distinct challenges for AFAB trans and non-binary people, key informants and trans and non-binary participants described common strategies utilised to improve patient-provider interactions, and to make social and physical environments more enabling spaces for menstrual management.

Lack of transgender competency in clinical interactions

Across both KIIs and IDIs, narratives discussed the impact of insufficient provider training to understand and support gender-affirming menstruation-related care. None of the key informants had received transgender competency training in relation to menstrual health during graduate school training or at their current organisation. While some of the informants described having received rudimentary guidance on respecting pronouns and LGBTQ diversity, informants noted that it was hardly enough information to be considered well versed in discussing menstruation within the field of transgender health.

Conversations around fertility or how to obtain informed consent, that's certainly involved. But I think this aspect around how are you managing menstruation, certainly isn't highlighted or, at minimum, has not been highlighted in my training experience. (KII 6_Clinical Psychologist)

From informal conversations to triage care, many of the clinicians interviewed noted how aspects of transgender health, tangentially related to menstruation, were perceived as intimidating to health care providers due to a lack of training.

I have another nurse at a different homeless site, and I've asked her, hey would you be able to cover some of my shifts if I leave town, and she said to me that sounds cool, but I don't feel comfortable to work with the population you work with. I don't feel I'm equipped to do that. (KII 7_Nurse)

Trans and non-binary participants and a few key informants noted 'when did you get your last period?' as a key point of tensions for trans and non-binary people during the clinical intake process. As part of many standard protocols, this question is incorporated to ascertain the possibility of pregnancy and inform what types of medications may be prescribed if needed. Although some participants acknowledged the medical relevancy of this question, several articulated feeling that it was othering and often unnecessary. One informant recounted the experience of a co-worker:

She [co-worker] asks about missed periods and it's prompted and required by Epic, our electronic medical record system, and she was saying she feels uncomfortable to ask that question to transmasculine folks ... because they are like what do you mean my period? I've been on T (Testosterone) for six months. (KII 7_Nurse)

Trans and non-binary participants also noted providers' disregard for correct pronouns and medical history, as well as their awkwardness in using respectful language when discussing pregnancy or menstruation. General practitioners in particular were described as less prepared and knowledgeable about transgender health, which led many participants to avoid conversations about gender identity. To circumvent possible discomfort, participants recounted seeking out more specialised care at clinics and community health centres.

Their [general practitioner] way of trying to relate to me was like "I used to have a trans friend, he became a girl too." I was like "why would I want to hear you misgender your friend as a way to relate to me?" That was a very underwhelming moment and like as much as I want to be very transparent about my menstruation with a general practitioner the fact that so many of them are under prepared to have these conversations with me or how they relate to me. That kind of comment caught me very off guard. (IDI 9_Age 19)

Trans and non-binary participants provided several recommendations for improving how health care providers discuss the topic of menstruation with their patients. This included calling for a recognition of diverse menstruation experiences including possible dysphoria around menstruation. To increase providers' sensitivity with this topic, trans and non-binary participants suggested providers ask for consent to discuss menstruation and its management, as well as preferred language to describe body parts. One participant suggested the question should be as simple as:

'Do you want to talk about this?' He went on to say, 'some people I think will be really relieved to be able to be like, 'actually yeah I'm still bleeding what the fuck' and some people will just be like 'I don't want to talk about it, google exists, I'll be fine.' (IDI 4_Age 29)

Across interviews, trans and non-binary participants noted their preference for standard clinical language and gender-neutral words when discussing menstruation, such as 'cycle' instead of 'period' and 'menstrual products' instead of 'feminine hygiene products.' Gender expansive terminology was described as helping to create a more welcoming clinical encounter and increase empathy in a patient-provider interactions. One participant described his vulnerability while menstruating and how compassion from a provider was especially important.

When I'm menstruating now, as a man, I definitely feel the inconsistency of my existence more sharply than I do usually and it definitely brings a lot of stuff to the surface. It's important for providers and caregivers to have a lot of compassion around that and to accept the fact that it's weird being a dude and having a period. For me it can trip me into some dysphoria and for a lot of guys I know it's that time where you feel extra vulnerable. (IDI 4_Age 29)

Public toilet design impedes menstrual management

From offices to schools to public recreational spaces, the structural design of public toilets was commonly cited as a significant barrier to managing menstruation. For example, numerous trans and non-binary participants described the frequent design of public toilets as having a large gap in-between stall doors, which left them feeling both exposed and

unsafe. Furthermore, the reflective gaze of the toilet mirror at the sink area was described as enabling surveillance, as any toilet user can monitor the space behind them despite their forward-facing position.

The stall that was closest to the mirror was very clearly visible through the crack in the door. Much to my frustration and embarrassingly enough, I made direct eye contact with another classmate and tried to deal with this embarrassment with my bottom dysphoria and the violation of my privacy. (WA_5)

Men's toilets were frequently described as preferred over the use of women's toilets for their gender affirming nature. Nonetheless, the high urinal to cubicle ratio in men's toilets often led to bathroom users waiting for a cubicle to become available. This waiting in turn increased surveillance around a cubicle door and put added pressure on the person within the cubicle to make less noise and take up less time occupying that space. As one participant explained:

I definitely appreciate when there are more stalls [cubicles] in a bathroom. That helps [create a] comfortable use of space. I don't think that I'm using space that someone needs; No one wants to have to say, 'just a minute.' (IDI 7_Age 23)

Key informants as well as trans and non-binary participants proposed increasing the number of toilet cubicles, adding stronger locks that display when they are occupied, eliminating the gap between the cubicle door and partition, and extending the height of the cubicle walls from floor to ceiling to increase their sense of safety and privacy. The availability of menstrual product disposal bins within toilet stalls for easy disposal of products was articulated as another significant challenge. Across both women's and men's toilets the lack of disposal units within the cubicles was an additional layer of complexity to menstrual management in an already unsafe environment.

If I have a period unexpectedly and I happen to have a pad or tampon, then let me shuffle something kind of gross in my pocket and casually put that in a men's bathroom trash can while I'm walking out, which is not my favourite situation. (IDI 7_Age 23)

Displaying a menstrual product around cisgender men may draw unwanted attention and increase the risk of harassment. While some older participants were not concerned with being seen holding a menstrual product, a few of the younger participants went to great lengths to avoid being seen or heard with any type of menstrual product. One participant explained, '... if the trash can was outside the stalls, just waiting till nobody else was there. So just sitting in the stall waiting for everyone else to leave. You need to get back to work.' (IDI 1_Age 22)

Trans and non-binary participants described using a wide range of products for menstrual management. While pads and tampons may seem easy to conceal when entering a toilet, they are often enclosed in a plastic or paper wrapper that makes a sound when opening. Participants who used menstrual cups explained how concealing sounds was less of an issue than the challenges around cleaning their product at the sink. However, many menstrual cup brands advise rinsing the cup before insertion and after removal and this was described as challenging in multi-cubicle toilets, which generally have communal sink areas.

Nobody is really paying an active amount of attention to what I am doing in the bathroom stall, but I don't like it. It's unpleasant hoping people in the stall stay there. If I make a slight mess while emptying a menstrual cup, then trying to figure out the convenient way to get blood off of my hands. (IDI 7_Age 23)

Participants commonly noted preference for single occupant gender-neutral toilets given their ability to offer a private, safe and affirming space. However, the scarcity of gender-neutral toilets in public spaces forced many trans and non-binary people to travel to different floors or buildings in search of a private toilet. In the absence of gender-neutral toilets, some trans and non-binary participants described getting their periods unexpectedly and reluctantly using either a woman's toilet or their high school nurse's office to seek out menstrual products. Further, these participants discussed the need for menstrual products to be made freely and easily accessible within both gender-segregated and gender-neutral toilets in schools and government run buildings to allow trans and non-binary people who menstruate to discreetly access when needed.

Gender social dynamics in public spaces hinders menstrual management

The social dynamics of public spaces, particularly around or near public toilets, were repeatedly mentioned as a source of anxiety and a significant barrier to menstrual management. Even if the physical environment enabled trans and non-binary participants to comfortably use the toilet, they noted how the wider social environment might also act as a barrier to accessing the resources around them. As one participant wrote, 'Single-user gender-neutral bathrooms are great options. In this case, I felt more uncomfortable using the single-user bathroom because it was positioned right near a security guard.' (WA 2) Interpersonal dynamics with cisgender people also surfaced in relation to toilets within work and recreational environments:

There was a time at work, and I was not interested in starting a conversation why I, presumably a man, was using the women's bathroom. That's not what I wanted to happen there. I was very scared I was going to have a white pants kind of a problem. I did not want to be seen as a man and have a really conspicuous blood stain on my pants. (IDI 7_Age 23)

When I was a butch lesbian in the early 2000s I used to get in trouble for using the women's bathroom all the time as a person who was woman-identified, a person with a uterus. I went to a bar, and I had to genuinely produce my driver's licence to prove that I was allowed to be in the women's bathroom. (IDI 4_Age 29)

These experiences highlight how normative gender is policed in social environments. The cultural understanding of menstruation as a sign of womanhood prompted trans and non-binary participants to avoid any social recognition that they were menstruating, which often meant modifying their behaviour.

I had to be very discreet and, also, I would go back to my dorm and only make sure that I was either in my dorm or the restroom there rather than relying on public restrooms. It was a lot more of like, like seclusion. (IDI 1_Age 22)

A few key informants and trans and non-binary participants described the sense of solidarity cis women share when managing their menstruation. One key informant (a cis woman) noted ‘one of the initial socialisations as someone who was socialised as a woman is learning that I could ask another person who lives life as a woman if they had a tampon.’ (KII 4_Therapist) However, most trans and non-binary participants did not share this sense of solidarity and described the isolating nature of menstruating. As one explained, ‘It’s not like you could just ask another woman for a product if you needed it, so I was always very careful to carry a product with me because I didn’t feel I could ask a stranger.’ (IDI 2_32)

Trans and non-binary participants described feeling self-conscious navigating gender-segregated toilets because they often feel ‘like people are looking for tells,’ (IDI 3_Age 22) where their bodies are policed to ensure their gender matched the gender-segregated toilet signage. Trans and non-binary participants noted that cisgender men and women policed bodies differently. One trans participant (IDI 4_Age 29) explained, ‘you are going to get in more trouble for being a person who looks wrong in the women’s bathroom than who looks wrong in the men’s bathroom.’ Women’s toilets are more likely than men’s rooms to have menstrual products and product disposal bins inside cubicles for discreet disposal of their used products, however hostile social interactions in women’s toilets may be a major barrier to accessing these resources.

While some trans and non-binary participants described men’s toilets as intimidating spaces, several also noted how the unwritten social rules of masculinity facilitated using the toilet more discreetly. Men’s toilets were described as places of deeply ingrained homophobia where heterosexual cisgender men avoid making conversation and eye contact. Two trans participants articulated this dynamic, both in relation to being in a men’s toilet, and the use of menstrual products in such spaces.

It’s sort of this weird reversal of fortune where being around other dudes is dangerous inherently, but it also sort of provides this strange safety net because in my experience men don’t look for or come at other dudes in the men’s bathroom. (IDI 4_Age 29)

Maybe it’s a New Yorker thing but what kind of weirdo is going to be like ‘what’s that thing [menstrual product] in your hand?’ They’re not gonna know what it is. It could be something I’m using to clean out my ear! (IDI 2_Age 32)

Increasing the availability of gender-neutral toilets was described as a practical way of creating a more enabling physical environment for menstrual management; it was also cited as a solution to the challenging social environments of public toilets.

Discussion

In this study we explored the social and structural realities of AFAB trans and non-binary people who menstruate by describing the lived experience of trans and non-binary people in parallel with the perspectives of health care providers who serve them. The harmful health impact of binary constructs of gender have been well documented in the field of transgender health (Agénor et al. 2018; Burgwal et al. 2019; Hart et al. 2019), however it has only begun to be explored in critical menstruation studies (Frank and Dellaria 2020;

Rydström 2020). Our findings begin to fill this gap and contribute to growing scholarship bringing visibility to the heterogeneous menstrual health needs of trans and non-binary people (Bradford and Catalpa 2019; Scandurra et al. 2019). Specifically, narratives from both AFAB trans and non-binary people who menstruate, and their healthcare providers underscore the multi-layered and multilevel challenges facing menstruation equity that are often overshadowed by the gender binary.

Scholarship on transgender health has long documented discriminatory health care practices (Seelman et al. 2017), unsatisfactory provider care (Heng et al. 2018) and failure to meet the unique medical care needs of transgender people (Houssayni and Nilsen 2018). Advancing this literature, this study documents how current health care provider practices may inadvertently invalidate the bodies and gender identities of trans and non-binary people who menstruate. While graduate school curricula have been cited as a barrier to the delivery of quality transgender health care (Dubin et al. 2018), there exists little guidance on how health care providers can discuss menstrual health in a way that is inclusive of diverse genders and embodiments. Our results underscore the need for a paradigm shift in sexual and reproductive health that focuses on gender-affirming care, including respecting pronouns, using clinical language and making gender neutral toilets readily available.

The scarcity of gender-neutral toilets in public and private spaces, as well as other structural issues in toilet/washroom design was described by participants as leading to unsafe situations and restricted their full involvement in work and school. While the lack of menstrual product disposal bins in a toilet stall may seem like a small oversight, this design feature of men's toilets invisibilises the needs of trans bodies. Our findings support Cavanagh's (2010) claim that the cissexist (prioritising cisgender bodies) design of toilets reflects a system of exclusion based on normative gender embodiments. The structural differences between men and women's toilets further reifies the gender binary and perpetuates the socialised understanding of menstruation as a cisgender women's issue.

Similar to Frank (2020), our interviews also revealed how the social dynamic of body policing by cisgender people is a significant obstacle to trans and non-binary people using gender-segregated public toilets. Previous studies have shown that cisgender men exhibit more transphobia than cisgender women (Carroll et al. 2012; Norton and Herek 2013). In contrast, our participants described women's toilets as being more confrontational spaces where participants often received incriminating stares and increased body policing. Here, markers of masculinity are perceived as threatening in a space meant to structurally enable and enforce the performance of femininity. While these reactions could be indicative of a cisgender woman's fear of sexual assault, they may also act as a cultural barometer reflecting a deep-seated mistrust of embodiments presenting outside of the socially constructed and dominantly accepted binary view of gender (Platt and Milam 2018).

Over the last decade, gender segregated public toilets have been a battleground in US politics and highlight how gendered institutions enable public participation for cisgender people while restricting the use for all other identities. In parts of the USA, bathroom bills are state legislation that require individuals to use gender-segregated public toilets based on their assigned sex at birth (Perez-Brumer et al. 2018). Several studies have described

the trans experience of using public toilets, noting verbal harassment, physical assault, and denial of entry as common occurrences (Casey et al. 2019; Patel 2017; Weinhardt et al. 2017). These bills are often framed as an issue of safety for cisgender women; an idea dating back to the 1800s when gender segregated toilets were created to protect women's bodies from male desire (Sanders 2017).

While the public toilet has been the scene of exclusions, it is also becoming the site of new possibilities (Weeks 2016). Policy and city planning can improve the built environment to enable spaces for trans and non-binary people to manage their menstruation. Currently six US states – California, New Hampshire, Georgia, Tennessee, Virginia and New York – require public schools to provide menstrual products in toilets (Cotrochia 2021). New policies to increase access to products in public schools are being introduced in a small number of other states and a growing number of college campuses have begun to provide free products. Despite activist efforts, these policies only reflect normative understandings of gender and ignore the needs of trans and non-binary people who menstruate, as public toilet politics are still a major point of contention for these communities. In an era of political battles over public accommodations legislation, safe bathroom space is a critical point of intervention to advance gender-affirming care outside of the medical domain. This study begins to advance the field of critical menstruation studies beyond individual and clinic-level encounters by foregrounding public space as a key structural barrier to public toilet access and critical component of menstrual equity for trans and non-binary people.

Global and domestic menstruation advocacy and research has been aimed at advancing menstrual equity (Weiss-Wolf 2018), calling attention to the economic and health burden menstruation places on cisgender women. Bobel and Fahs (2020) assert that many of the strategies used in menstrual activism ignore self-determination and must therefore begin to shift their focus towards bodily sovereignty and diverse menstrual subjectivities. Evidenced by this study, the multi-layered needs of trans and non-binary people require more than a one-size fits all approach. Menstrual equity activism has called for tax-free, affordable, safe and easily accessible menstrual products, but other dimensions of equity such as the way social and physical environments impact trans and non-binary people should urgently be addressed. Future research should consider diverse embodiments and menstrual positionality to better identify practical solutions to the menstrual management challenges identified in this study. Health promotion strategies might include fortifying medical-legal partnerships to improve gender-affirming services, enabling the management of menarche through more inclusive puberty education in schools, and advocating for trans and non-binary leadership in menstrual health initiatives.

Limitations

This study was conducted in New York City, a well-resourced, liberal urban environment in the USA with access to many gender affirming services; other more rural, low resourced settings may present challenges not identified in this study. To advance menstrual equity, it is key to attend to the heterogeneity of menstruation experiences. The menstrual management experiences of AFAB trans and non-binary people may vary across cultural and social settings, and we should not assume our findings are applicable and relevant elsewhere.

Given the small sample size in this study and the setting in which it took place, our results may be biased by the experiences of better resourced individuals who may be more inclined to discussing their transgender identity and lived experience managing their menstruation for research purposes. Trans and non-binary people of different backgrounds may experience menstruation differently and have different needs.

Conclusion

Assessing AFAB trans and non-binary people's lived experience with menstruation is critical to pushing against cisnormative understandings of menstruation and advancing menstrual equity. While some US states have begun to pass important legislation related to improving the provision of menstrual products in public settings and liberalising gender restrictions in sex-segregated facilities, current solutions are limited in scope and inadequately support the needs of AFAB trans and non-binary people who menstruate. The results of this study underscore the pervasive and harmful impacts of gendered institutions on transgender health and provide a call to action for the need to incorporate more gender expansive perspective in work to advance menstrual equity.

Funding

This work was supported by the Sid and Helaine Lerner Menstrual Hygiene Management Faculty Support Fund.

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