Cities & Health

ISSN: 2374-8834 (Print) 2374-8842 (Online) Journal homepage: www.tandfonline.com/journals/rcah20

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To cite this article: Natalia Helou Fazzioni, Elli Sugita, Helen Cole, Marian Fe Theresa Lomboy, Ernesto Gregorio Jr., Justine Bukenya, Kim Hopper, Sarah Combs & Marni Sommer (16 Jul 2026): Beyond one-size-fits-all: reflections from the menstrual-friendly public toilet project across six global cities, Cities & Health, DOI: 10.1080/23748834.2026.2699587

To link to this article: https://doi.org/10.1080/23748834.2026.2699587

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Published online: 16 Jul 2026.

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CITIES & HEALTH
https://doi.org/10.1080/23748834.2026.2699587

REFLECTIVE PRAXIS - THINK-PIECES

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Beyond one-size-fits-all: reflections from the menstrual-friendly public toilet project across six global cities

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ABSTRACT

In this reflexive praxis think-piece, we reflect on experiences conducting the Menstrual Friendly Public Toilet Project in six cities: Barcelona, Kampala, Manila, New York City, Osaka, and Rio de Janeiro. Local teams comprised of researchers and university students completed a desk review, toilet audits, and key informant interviews using a shared methodology to assess menstrual friendliness; however, each city's urban structure, mobility patterns and social contexts provided important considerations for data collection. In this piece, we explore the unique aspects and urban design of each city and highlight the city-specific learnings, offering practical considerations for researchers undertaking place-based research.

ARTICLE HISTORY
Received 24 January 2026
Accepted 1 July 2026

KEYWORDS
Public toilets; menstruation; urban; field audits; qualitative interviews; multi-city research

Introduction

In 2023, we, a team of researchers from multiple academic institutions spanning six economically, socio-culturally, and geographically diverse cities around the world, set out to explore the existence of, and prospects for, 'Menstrual Friendly Public Toilets' (MFPTs) in urban settings (Barcelona, Spain; Kampala, Uganda; Manila, the Philippines; New York City, United States; Osaka, Japan; Rio de Janeiro, Brazil). By MFPT, we referred to 'safe, clean, well-ventilated, adequately equipped and maintained toilets that allow users to comfortably manage menstruation' (Figure 1; Menstrual Friendly Public Toilet (MFPT) Working Group 2024). As more than two billion people globally menstruate every month in an increasingly urbanizing world (United Nations Children's Fund and World Health Organization 2023), we recognize the urgency to examine how cities in varying contexts addressed the needs of those who menstruate.

Cities for this project were selected purposively, building on existing research relationships and networks, while ensuring variation in economic, political, and social dynamics. Each city team, composed of lead researchers and students or research assistants, used a mixed-methods approach including: (1) a desk review to identify 'public toilets' (those subsidized or provided by the government), menstrual-related policies and approaches, and institutions, organizations, or advocates engaged, intentionally or by proxy, in the provision of MFPTs; (2) conducting audits of public toilets in four selected areas of each city (business district, tourist district, residential park/plaza, transit station) to assess their 'menstrual friendliness'; (3) capturing images of public toilets during audits, including menstrual friendly components such as disposal bins, menstrual product dispensers, hooks or shelves within stalls, and mirrors for spotting menstrual stains; and (4) key informant interviews with local stakeholders (e.g. government officials, sanitation practitioners, menstrual health advocates) to explore opportunities and barriers for transforming public toilets to become more menstrual friendly.

The purpose of this reflective praxis paper is to discuss insights gained by the six local research teams during the process of conducting this study including unique aspects or challenges within each city and lessons learned, supported by illustrative images. This paper does not discuss research methods, analysis, or findings from the toilet audits and key informant interviews, as they are published elsewhere (Blake *et al.* 2025; Nguyen *et al.* 2025).

Barcelona

Barcelona is a coastal city in Northern Spain with a population of 1.6 million, with up to 30 million visits from tourists annually (Barcelona City Council n.d.). The city is easily walkable and has a robust metro, bus and tram system. Notably, Barcelona is one of the

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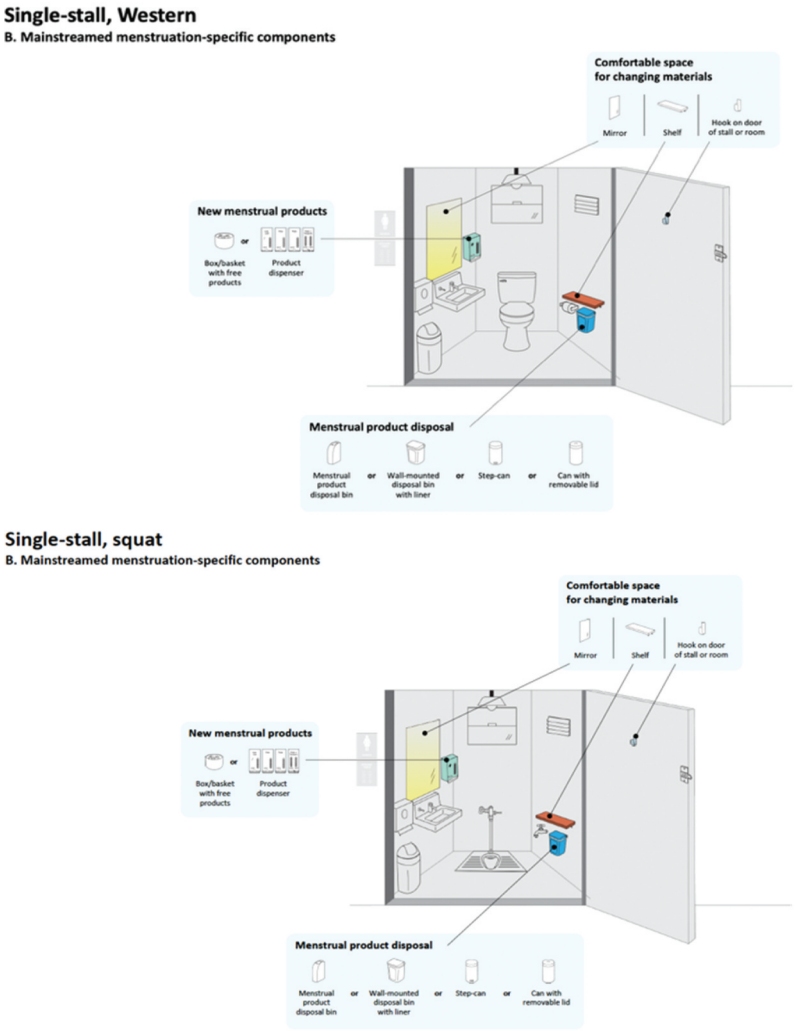

Figure 1. Graphic design of a single-stall, Western and single-stall squat toilet with menstrual friendly components developed by the team.

densest cities in Europe, leaving relatively little green and open public space. Recent interventions have focused on pedestrianizing the city through its 'superilles' (superblocks) and green corridors. Similar to our other cities, the distribution of public toilets identified through the study favored touristic areas, despite seasonal accessibility issues, particularly regarding those on the beachfront (see Figure 2).

Distinguishing between broadly accessible and true publicly built and maintained toilets was challenging for the Barcelona team, particularly as the law dictates public access to private toilets in bars and restaurants, in some cases tied to the right to use public space for seating (e.g. access to toilets must be provided in exchange for the use of public space for seating). Limiting the scope to true public toilets dramatically reduced the auditable toilets. We also faced difficulty in determining accessibility when toilets resided in public buildings with security guards, who themselves did not know the policy governing usage.

Interestingly, the city recently set out to distribute free reusable menstrual products via local pharmacies, providing a coupon to each menstruating person registered through the public healthcare system (Catalan

Figure 2. A beach toilet in Barcelona.

News 2024). We also found isolated instances of public bathrooms (particularly in public universities; see Figure 3) equipped for the easy use of reusable menstrual cups. These advances are indicative of an effort to focus meaningfully on gender as feminist-fueled dialogues become more common in policy debates and everyday conversation.

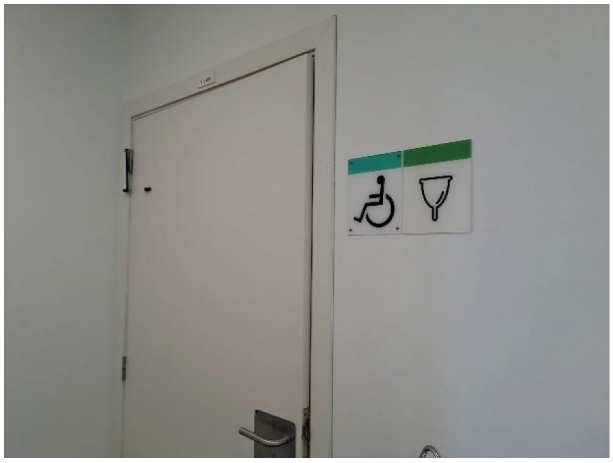

Figure 3. A public university bathroom sign in Barcelona indicating that it has been adapted for menstrual cups.

Despite these promising instances of providing access to toilets in public areas and to progressive but limited instances of providing tools for menstruation hygiene (e.g. toilet adaptations for the use of menstrual caps), interview respondents were generally not familiar with basic menstrual friendliness as it relates to public toilets.

Kampala

Kampala, the capital and largest city in Uganda, has approximately 1.8 million permanent residents and a daytime population of over 2.5 million people, including visitors and commuters (Uganda Bureau of Statistics 2024). Although walking is a common mode of transportation, the city is not considered highly walkable due to its topography, congestion, and limited pedestrian infrastructure. Public transportation is primarily minibus and motorcycle taxis (commonly called 'bodabodas'), which are weakly regulated. Public toilets remain limited, unevenly distributed across the city, and concentrated in markets, transport hubs (see Figure 4), and central commercial areas. Despite these challenges, the government is taking proactive steps to fortify city infrastructure as part of the *Smart City Agenda*, with initiatives underway that aim to improve public toilets, walkability, and public transportation systems (Kampala Capital City Authority 2020, 2024).

We similarly found the concept of 'public toilets' difficult to define in Kampala. Although public toilets are assumed to be free, some facilities required a 'maintenance fee' to access the bathroom. As these toilets were maintained by the Kampala City Authority, we decided to include them in our audit. The fee aspect had implications both for our data collection and, more importantly, for users with limited resources.

Figure 4. Public toilets inside a transportation facility in Kampala.

Figure 5. Hand washing station in a public toilet outside a market in Kampala.

Safety was a major concern during our data collection. Kampala is a cash-based economy, and pickpocketing is a recognized risk, particularly in poorly lit or crowded

areas. To mitigate this challenge, our field team collected data in pairs or small groups and were instructed to carry minimal cash to access the toilet facilities. We also restricted the audits to daytime hours, which limited observation data around nighttime usage.

Lastly, access in general to public toilets was variable, given the relatively small number of public toilets for such a large population (see Figure 5). This often resulted in long lines to access the bathrooms, requiring our data collectors to wait for extended periods of time to conduct the audits. Toilet operating hours were also often irregular and unpredictable, especially for those staffed by an attendant. Thus, our field team frequently encountered challenges of arriving to a closed bathroom, despite posted hours indicating that the facility should be open. One solution they used was to engage with local vendors and traders to determine the best time to return to conduct the audit. This tactic proved successful and highlighted the importance of insider knowledge.

Manila

Conducting the MFPT study in Manila presented both methodological and contextual challenges that shaped our understanding of sanitation governance and menstrual health and hygiene in dense urban settings. Manila, the capital of the Philippines, is home to approximately 1.8 million people within a land area of 24.98 square kilometers (Philippine Statistics Authority 2021).

A recurring issue of the MFPT study across the cities was defining what constituted a 'public toilet' and this was also a challenge for the Manila team. Facilities accessible to the public were often privately managed, such as those in malls and transport terminals, while government-owned toilets served specific areas or institutions. This blurred distinction between publicly 'available' and publicly 'owned' facilities required the audit teams to create an operational definition to ensure consistency in data collection and interpretation, which defined the facilities as toilets located in public spaces and funded by the government.

Through the audits and interviews, we learned that sanitation is not only a technical or infrastructural concern but a matter of equity and dignity. The images we captured – including those highlighting the absence of menstrual hygiene facilities such as disposal bins, washing areas, bag hooks, menstrual products, or toilet paper and other supplies – revealed how the needs of women and girls are often overlooked in sanitation design (see Figures 6 and 7). This omission illustrated how menstrual health remains an unspoken aspect of public health and urban planning, despite its significant impact on comfort, public participation, dignity and well-being.

Figure 6. Toilet cubicle with disposal bin but without toilet paper in Manila.

Figure 7. Toilet cubicle with bidet but without disposal bin in Manila.

Reflecting on these insights, we realized that integrating menstrual health and hygiene into sanitation policies is not a simple add-on, but something

essential to achieving inclusivity. The MFPT study reminded us that visual and participatory tools can help reveal invisible inequalities and prompt deeper reflection on how sanitation systems can uphold both health and human dignity.

New York City

The enormity of New York City and its complex governance structure introduced both methodological challenges and insights for our team. The city has a population of almost eight and a half million spread across five boroughs (U.S. Census Bureau 2024) and is served by a robust and well-used, but decaying, public transit system. There are approximately five million riders daily across 472 subway stations and 333 bus routes (Metropolitan Transportation Authority 2023). This reliance on public transportation, often with long travel times, has implications for the importance of functioning and accessible MFPTs.

Strikingly, personal safety emerged as both a study concern and an issue for city policy. During field testing of the audit tool, one team member was approached by a stranger, wanting to know if she felt safe as she walked into a subway toilet. Although we generally felt comfortable conducting the audits, the encounter led us to consider public user views on the safety of subway toilets, as well as methodological issues around safety when conducting audits (see Figure 8). We would encourage future users of our MFPT toolkit to consider safety concerns when planning a project and to consider exploring users' safety concerns as well during interviews.

Figure 8. Recently renovated park public toilet in New York City.

Figure 9. Disposal bin in New York City.

Identifying whom to interview also posed challenges in New York City, given the diffuse responsibility for public toilets within local government and the diverse groups advocating for public toilets, including those representing people experiencing homelessness and persons with disabilities. We quickly realized that to improve the menstrual friendliness of public toilets, we needed to find common ground with these advocates, such as requiring that toilet menstrual 'disposal units' have enough space for ostomy bags (see Figure 9). This discovery led us to shift our approach to coalition building rather than grievance-specific advocacy, or rather, a lens of allyship rather than strictly focusing on menstruation.

Osaka

Osaka City has a daytime population of 3.5 million and is the second largest economic hub in Japan. With the high demand for tourism, there is a significant density of toilets in tourist districts and transit stations. Department stores, convenience stores and train stations all make toilets available for their customers. A peculiar aspect of Japanese culture is that a clean toilet is considered a symbol of hospitality, and thus part of a business strategy to attract customers.

Figure 10. Toilets at stations in Osaka.

Our methodological challenge in this study was identifying the target toilets. There were very few websites that showed city toilet locations. In addition, defining which toilets should be included as 'public toilets' was a challenge. In addition to the toilets built and managed by the Osaka City local government, we decided to include the toilets in train stations (see Figure 10), as they are partially subsidized by the local and national governments. Even the management of local government was not straightforward, because three different departments within the government were in charge of the three categories of toilets: 'public toilets', 'park toilets', and 'port toilets'.

Reflecting on our MFPT indices, together with our key informant interviews, we realized that there is a lack of awareness of the need for menstrual specific infrastructure. There is no public policy explicitly referring to menstruation, other than requiring product disposal bins. Menstrual product dispensers hardly existed. The only vending machine we found in a railway station toilet was one that was previously used to sell toilet tissue decades ago when it was not freely available in station toilets (see Figure 11). The lack of awareness of menstrual friendliness despite the cultural emphasis on quality toilets as essential to hospitality could provide an opportunity for MFPT advocacy.

Figure 11. Menstrual product vending machine utilizing an old machine in Osaka.

Rio de Janeiro

With approximately 12 million inhabitants in the Metropolitan Region of Rio de Janeiro, including 6.2 million in the capital city, the urban context is marked by deep inequalities (Instituto Brasileiro De Geografia E Estatística 2023). There are no significant public policies regarding public toilets in the city apart from portable units set up during major events like Carnivals. In daily life, residents usually depend on restrooms in restaurants, bars, and shopping centers (see Figure 12).

As was true elsewhere, determining which toilets could be considered publicly accessible was tricky, given the blurred boundaries between public and private management and the presence of multiple access barriers. For this study, we included toilets in high-traffic areas open to the general public and involved some public agency participation. During fieldwork, we noted barriers in these facilities, such as fees and security presence. Access dynamics posed further challenges: our two female students often had to ask for permission when unsure if a toilet was public. Although usually granted entry, this raised questions about how access might vary by race, gender, class, or age. This in turn reveals the situated and relational

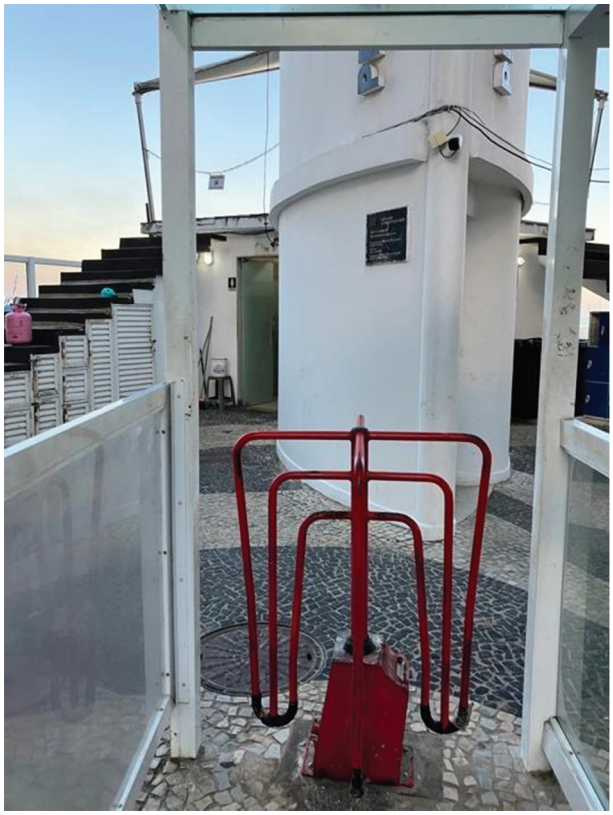

Figure 12. Public toilet at a beach in Rio de Janeiro.

Figure 13. Disposal bin in public toilet in Rio de Janeiro.

nature of public toilet access and complicates any universal definition of 'public'.

The overall MPFT findings revealed features in Rio that described both weaknesses and opportunities. Many toilets require disposing of paper in bins due to our fragile sewage systems (see Figure 13). The latter are often overflowing, exposing cleaning and maintenance issues. Still, Rio performed well on the MFPT Index in terms of providing disposal bins for toilet paper, although not specifically designated for used menstrual products. Significantly, the only toilet we found with a menstrual product dispenser was located in Copacabana Beach, an important tourist area (see Figure 14). This was managed through a public–private partnership. So a clear divide existed between growing commercial interest in meeting menstrual-related needs in high-visibility areas and relative neglect elsewhere.

Conclusion

Conducting the MFPT study in six very diverse contexts enabled us to identify both the variety of public toilet realities for those who menstruate and live in these urban settings, but also the unique cultural and geographic aspects of researching MFPTs in different locales. The diversity of cities and cultures created both challenges and opportunities for our team to fine-tune the audit tool, making it sensitive to other realities and preferences regarding facilities for menstruation in various cities, income levels, and cultures. Ultimately, we saw great potential for impact through our action-oriented, combined research and policy approach. Key

Figure 14. Menstrual product box in public toilet in Rio de Janeiro.

informant interviews in most cities took on an interventional feel: aiming in part to inform the interviewee, usually those in decision-making positions, of the meaning and importance of 'menstrual friendliness' in public toilets. One impactful result was the passage in Spring 2025 of a New York City Council Bill, Introduction 694-A, which aims to add over 1,000 public toilets across New York's five boroughs by 2035 through a multi-agency collaborative effort. Our engagement with MFPTs over multiple studies in New York City provided a critical bridge to supportive City Council members and allowed us to suggest language and a definition of a MFPT for the bill which were ultimately included (New York City Council 2025).

Future efforts could expand upon our approach by conducting MFPT studies in urban contexts around the world, to build a case for the gap in gender equitable public spaces and understand the user experience managing menstruation in urban contexts. In addition, efforts are needed to pilot cost-efficient models for MPFTs, to guide city planners and investors in the effective solutions to make MFPT a global reality.

Acknowledgements

The authors would like to acknowledge the other members of the Menstrual Friendly Public Toilet Working Group and the student researchers who worked on this study enabling these learnings to be shared.
This study was conducted in six cities: Barcelona, Spain; Kampala, Uganda; Manila, the Philippines; New York City, United States; Osaka, Japan; Rio de Janeiro, Brazil.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by The Sid & Helaine Lerner MHM Faculty Support Fund and the Osprey Foundation.

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Biographical note

The authors are part of the Menstrual Friendly Public Toilet Working Group, an international, interdisciplinary collaboration of public health and social science researchers focused on improving how urban public toilets support menstrual health needs. Through a desk review, toilet audits, and key informant interviews, the group developed the Menstrual Friendly Public Toilet Toolkit, a training resource designed for researchers, practitioners, or other professionals conducting audits in new locations. The Working Group now focuses on supporting initiatives using the toolkit and on advocacy efforts to share findings with local stakeholders and legislators who help shape policy change.

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