

Menstrual hygiene practices in African correctional services: a narrative synthesis of barriers

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Abstract

Purpose – *Incarcerated women in African correctional services face substantial menstrual hygiene challenges, highlighting systemic health inequities and human rights issues. The purpose of this study is to explore the barriers to menstrual hygiene practices within African correctional services.*

Design/methodology/approach – *This is a comprehensive narrative review synthesising findings from recent studies and reports obtained through systematic searches of electronic databases such as Google Scholar, ScienceDirect, African Journal (previously SAePublications), EBSCOhost, EBSCO Discovery Service and Scopus.*

Findings – *This review identified three key themes that address the study's purpose, including inadequate access to sanitary products, inadequate water, sanitation and hygiene (WASH) facilities, stigmatisation and lack of institutional support.*

Research limitations/implications – *One limitation of this review is the restriction to literature published between 2016 and 2024. Although this timeframe was chosen to ensure the relevance and contemporaneity of findings, it may have excluded earlier foundational studies that offer historical context. Additionally, limiting the review to peer-reviewed journal articles conducted within African countries ensured methodological rigour and contextual relevance but may have omitted valuable global perspectives. Research from other low- and middle-income regions, such as South Asia or Latin America, could provide transferable insights or innovative frameworks applicable to the African context.*

Practical implications – *The results highlight the urgent need for gender-sensitive reforms in correctional systems, including consistent access to menstrual hygiene materials, improved WASH infrastructure and health-care personnel trained in women's health. The findings also point to the necessity of institutionalising menstrual health education and awareness within correctional systems to combat stigma and empower incarcerated women. From a research standpoint, this review identifies a persistent dearth of empirical studies on menstrual hygiene management and practices in African correctional facilities.*

Social implications – *Cultural and societal stigma surrounding menstrual health in many African communities can lead to underreporting, as incarcerated women may be reluctant to disclose personal hygiene challenges, leading to potential gaps in the data.*

Originality/value – *This study holds significant social value as it brings visibility to the menstrual health challenges faced by incarcerated women, which is an often marginalised and voiceless population.*

Keywords *African, Barriers, Correctional services, Menstrual hygiene, Practices*

Paper type *Literature review*

1. Introduction and background

Menstrual hygiene management (MHM) is a fundamental aspect of human dignity and public health well-being. However, the capacity to manage menstruation with safety and dignity is often hindered by period poverty. Period poverty refers to a scarcity of access to menstrual products, hygiene education or adequate sanitation supplies (Rossouw and Ross, 2021). Period poverty is increasingly acknowledged as a significant public health

issue, yet it remains insufficiently addressed, particularly among women of reproductive age (Odey *et al.*, 2021). According to Babbar *et al.* (2022) and the World Bank (2024), substantial numbers of menstruators worldwide experience challenges in affording sanitary products or accessing appropriate menstrual health education and infrastructure.

These challenges are exacerbated in marginalised and institutional settings such as correctional facilities. Women are one of the fastest-growing incarcerated populations globally, yet the correctional system does not recognise that increasingly, women are entering prison. Historically structured to accommodate male populations (Belknap, 1996), prison health systems largely fail to consider the biological and socio-cultural differences between men and women. The system continues to reflect a male-centric model of care that overlooks the gender-specific experiences of women. Additionally, the correctional systems have not evolved to adequately address women health-care needs (van den Bergh *et al.*, 2011). As a result, the growing number of incarcerated women, many of whom enter correctional facilities at reproductive age or younger than 45 years (Bronson and Carson, 2019), and still menstruating are met with systems ill-equipped to meet their menstrual needs (Sufirin *et al.*, 2015). Period poverty is particularly acute within correctional settings due to structural and systemic limitations. The design and policies of most prisons do not adequately consider the biological and hygienic needs of menstruating individuals. Incarcerated women, who remain a minority in most correctional systems, often face insufficient provision of menstrual products, inadequate water, sanitation and hygiene (WASH) facilities, and a lack of privacy and menstrual health education (Kravitz, 2019). These shortcomings not only are a violation of basic human dignity but also represent a broader neglect of women's health rights (Patel *et al.*, 2022), especially while in custody.

The available literature shows that incarcerated women experience greater levels of period poverty internationally. The study conducted in US prison facilities on period poverty highlights limited distribution of sanitary products and menstrual inequality in corrections as a punitive or degrading practice around menstruation in prison environments to gain control of women through their Biology (Bostock, 2020). Human Rights Watch in Myanmar reports that female detainees have complained the "dehumanising" experience of Myanmar prisons, explaining that they suffered during menstruation because prisons do not provide sanitary napkins, and there are few toilets, to promote proper sanitation especially during menstruation (Maung, 2021). In Columbian prisons, intimate hygiene products such as sanitary towels are not provided for free by the government, but they had to be bought within prisons, or supplied by families (Darivemula *et al.*, 2023).

Despite advocacy efforts increasingly recognising MHM as a basic human right (Patel *et al.*, 2022), the disparities in implementation remain inconsistent and more pronounced in resource-limited regions like Africa. Most African correctional facilities struggle to meet the most basic standards for sanitation and hygiene, let alone gender-sensitive health care (Baffour *et al.*, 2024). Africa confronts formidable structural and socio-economic challenges in providing effective MHM in correctional services (Dixey *et al.*, 2015). A scoping review of prison literature conducted in 37 sub-Saharan African prisons observed that basic needs such as sanitation are not met in prison (Van Hout and Mhlanga-Gunda, 2018). Proper sanitation is essential for the incarcerated women to manage menstrual hygiene. The findings from a Nigerian study revealed that prisons are characterised by inhumane conditions and overcrowding, leading to a deplorable health situation among the incarcerated women (Solomon *et al.*, 2014). In Uganda, incarcerated women rely on makeshift menstrual materials such as rags, newspapers or even mattress stuffing (Nabiryo *et al.*, 2023), which pose serious health risks including infections and reproductive tract complications. It is also noted that female offenders in Zimbabwe prisons use alternatives such as newspapers, tissues and pieces of blanket or prison uniform to manage menstruation (Makarati, 2003). Furthermore, incarcerated women in Malawi and Mozambique have poor access to basic amenities such as sanitation facilities and sanitary

pads (Manaleng, 2014). The South African correctional services context reflects many of these challenges. The infrastructure in many correctional facilities is outdated, overcrowded and poorly maintained, creating a health crisis for women who lack basic sanitation amenities necessary for menstrual hygiene (Mhlanga-Gunda *et al.*, 2020). Earlier study reported lack of prisons system resourcing sanitary products (Van Hout and Mhlanga-Gunda, 2018).

Based on the provided background and literature, it is clear that there is a notable absence of consolidated, peer-reviewed, and up-to-date literature systematically exploring the state of MHM across African correctional systems. Most of the available studies are country-specific, less focus on menstrual health and hygiene, anecdotal or outdated, and there is limited comparative or synthesised evidence to inform policy, advocacy or programmatic interventions. This fragmentation hinders comprehensive understanding and weakens the development of regionally relevant and evidence-based strategies to address period poverty in prisons. Moreover, this review synthesised current literature on the barriers to menstrual hygiene practices in African correctional services. It critically examines how period poverty manifests and is intensified in these environments. The synthesis also contextualises the identified challenges. This comprehensive perspective is essential for informing the development of targeted policies, resource allocation strategies and advocacy efforts aimed at promoting dignity, health and gender equity in correctional settings across Africa.

2. Design and methods

This manuscript used a narrative literature review design and methods to explore and describe the literature on barriers that impede menstrual hygiene practices in African correctional services. The rationale for selecting this approach lies in its flexibility and suitability for emerging or under-researched topics, where empirical literature is limited, fragmented or methodologically diverse. Given the paucity of focused research in African correctional contexts, particularly with regard to women's reproductive health needs, a narrative review offered a rigorous yet adaptable framework to identify key barriers, highlighting gaps and inform future research and policy interventions. The narrative literature review in this study followed the systematic steps proposed by Ferrari (2015). The steps served as a framework for structuring the review, ensuring a methodical and coherent synthesis of existing literature.

2.1 Literature search

According to Ferrari (2015), the second step is literature search. For the current study, databases were searched for literature relating to the barriers of menstrual hygiene practices in African correctional services Google Scholar, African Journal (previously SAePublications), ScienceDirect, EBSCOhost, EBSCO and Scopus. The search included literature published from 2016 through to 2024. This research also considered articles written in English and conducted in Africa. The study excluded newspaper articles, conference reports, theses, and dissertations and other databases not mentioned in this study. The keywords used to search for data were "barriers", "menstrual", "hygiene", "African" and "prison 'OR' correctional services". Additionally, the abstracts were scrutinised to ensure that they address the goals of this research. The initial literature searches were consolidated, duplicates were removed, the remaining articles were screened according to the inclusion criteria, resulting in the exclusion of few more articles. All the authors separately selected and agreed on the articles to be included for synthesis. For more details regarding included articles in this study and how data was extracted from the studies (Table 1).

Table 1 Summary of articles included in the study

Nu	Authors and date	Study title and setting	Study design methods	Population and data collection	Findings and major outcomes
1.	Nabiryo et al. (2023)	Behaviours and practices of incarcerated women towards menstrual hygiene in a large urban prison in Uganda: a phenomenological qualitative study	Quantitative	<ul style="list-style-type: none"> ■ Incarcerated women ■ In-depth interviews 	<ul style="list-style-type: none"> ■ Infrequent change of menstrual pads, Lack of privacy during menstrual hygiene practices, ■ Use of poor-quality menstrual hygiene materials ■ Improper disposal of used sanitary products. ■ Unhygienic sanitary facilities. ■ Unreliable access to clean water, and insufficient sanitary products. ■ Lack of support to incarcerated women during menstruation, ■ Lack existing prison services to support menstrual hygiene management
2.	Mhlanga-Gunda et al. (2020)	Prison conditions and standards of health care for women and their children incarcerated in Zimbabwean prisons	Qualitative	<ul style="list-style-type: none"> ■ Women in prison, ■ Correctional officers, ■ Correctional health professionals ■ Non-governmental organisations around prison conditions ■ Focus group discussions 	<ul style="list-style-type: none"> ■ Access to consistent supply of safe clean water is poor ■ Access to safe, clean water is variable and relies on the main electricity ■ Sanitation systems are substandard, ■ Basic health-care products including soap, water and detergent are insufficient
3.	Gadama et al. (2020)	"Prison facilities were not built with a woman in mind": an exploratory multi-stakeholder study on women's situation in Malawi prisons	Qualitative	<ul style="list-style-type: none"> ■ Senior correctional stakeholders ■ Women in prison ■ In-depth interviews ■ Focus group interviews 	<ul style="list-style-type: none"> ■ Lack of access to clean, safe, running water ■ Water and waste disposal systems are poor and insufficient ■ Basic bathing and health products are unavailable, e.g. soap ■ Sanitary products and clean underwear are not provided
4.	Agboola (2016) .	Memories of the "inside": prison conditions in South African female correctional facilities	Qualitative	<ul style="list-style-type: none"> ■ Former female offenders ■ Interviews 	<ul style="list-style-type: none"> ■ Unhygienic and unsanitary conditions ■ Insufficient supply of toiletries ■ Inadequate supplies of toilet paper ■ Prison officials were reported to demand to see evidence of soiled sanitary towels, before issuing replacements

(continued)

Table 1

<i>Nu</i>	<i>Authors and date</i>	<i>Study title and setting</i>	<i>Study design methods</i>	<i>Population and data collection</i>	<i>Findings and major outcomes</i>
5.	Degefu <i>et al.</i> (2023)	Assessment of menstrual hygiene management practice and associated factors among prisoners in south nation nationalities and peoples region, Ethiopia Menstrual pattern and hygiene among female prisoners in North-Western Nigeria	Quantitative	<ul style="list-style-type: none"> ■ Female offenders ■ Questionnaires 	<ul style="list-style-type: none"> ■ Female toilet without a door is in opposite direction to men's toilets ■ No sanitary pad access ■ No separate room to manage menstruation ■ Inadequate menstrual hygiene knowledge ■ Poor menstrual hygiene management ■ Menstrual hygiene was relatively poor ■ Majority of female offenders took bath once only during the entire period of menses ■ The used absorbents were disposed of in the toilets
6.	Rabiu <i>et al.</i> (2020)		Quantitative	<ul style="list-style-type: none"> ■ Reproductive female offenders ■ Questionnaires 	
7.	Topp <i>et al.</i> (2016)	Health and health-care access among Zambia's female prisoners: a health system analysis	Qualitative	<ul style="list-style-type: none"> ■ Female offenders and officers ■ In-depth interviews 	<ul style="list-style-type: none"> ■ Sanitary products were not supplied by the prison ■ Rely on ad hoc donations of disposable sanitary pads ■ Rely on reusable cloth pads hand-made by themselves from cotton wool and scrap cloth donated by the church. ■ Disposable pads are thrown out in the daily garbage with no special infection control measures ■ Reusable pads had to be washed and dried daily despite the scarcity of laundry soap. ■ Insufficient toilets, broken toilets or lack of access to toilets at night ■ Lack of cleaning products
8.	Nangia and Fontebo (2017)	Treatment of female offenders in prison: the Case of Cameroon	Qualitative	<ul style="list-style-type: none"> ■ Female offenders ■ Focus group 	<ul style="list-style-type: none"> ■ Not provided with sanitary towels in prison and ■ During their menstruation they are forced to improvise
9.	Moodley <i>et al.</i> (2022)	Incarceration, menstruation and COVID-19: a viewpoint of the exacerbated inequalities and health disparities in South African correctional facilities	Viewpoint	<ul style="list-style-type: none"> ■ None 	<ul style="list-style-type: none"> ■ Structural inequalities in various contexts around the MHM. ■ Within the prison context in South Africa, women face multiple layers of discrimination

Source(s): Table by authors

2.2 Identification of themes and coding process

Data synthesis on the barriers to menstrual hygiene practices in African correctional services was systematically conducted through a thematic analysis approach. The process included reading and re-reading selected articles and making sense of them. The process also involved coding concepts from extracted data so that similar data are categorised and grouped together, followed by constructing key themes based on identified barriers. Following the application of exclusion criteria, 09 relevant records were identified and subjected to thematic analysis in alignment with narrative review protocols. A data charting spreadsheet was developed to systematically extract key information, including publication year, author(s), study title, context, methodology, population and key findings. This charting process enabled the identification of patterns, recurring themes and gaps in the literature related to MHM within African correctional settings. All the authors independently charted the necessary information followed by a collaborative consultation to verify alignment with the overarching extraction inclusion criteria. The charting of key findings exercise assisted with identifying a set of predefined coding categories to guide the data coding process.

Data coding was conducted in two iterative rounds. During the first round, initial codes were generated based on recurring concepts across the studies. The coding included cross-comparative analysis to identify variations and context-specific barriers across different correctional service environments, providing a comprehensive overview of the obstacles to effective MHM. In the second round, these codes were refined and grouped into broader, interpretive themes relating to MHM in African correctional services through constant comparison and re-evaluation of the emerged data. This iterative process ensured that both inductive and deductive elements of thematic analysis were incorporated. To enhance the credibility and validity of the findings, all researchers independent reviewed and validated the coding process. The involvement of all authors in this stage assisted in reducing errors throughout the review process, particularly during data extraction. Discrepancies in theme allocation were resolved through discussion and consensus. In the discussion, the authors provided insights aligned with the review's title, interpreting the findings through their perspectives (Ferrari, 2015). Final themes were further refined through cross-comparative analysis, which enabled the identification of context-specific barriers to MHM across various African correctional environments.

3. Results

The review identified a notable paucity of empirical, peer-reviewed scholarly literature focused specifically on menstrual hygiene practices within correctional facilities in Africa. Despite the widespread recognition of menstrual health as a public health and human rights concern, research in this area remains fragmented and underdeveloped, with limited high-quality studies that directly addresses how incarcerated women menstrual hygiene needs are met. The included studies originated from few countries within the African region, such as Uganda, Zimbabwe, Malawi, South Africa, Ethiopia, Nigeria, Zambia and Cameroon (Table 1). This indicates a geographic imbalance in the evidence base and suggesting that there are significant gaps in understanding practices of menstrual hygiene across diverse African correctional settings. This review revealed three key themes that respond to the study purpose, shedding light on the limited yet emerging body of evidence concerning menstrual hygiene practices in African correctional facilities.

3.1 Inadequate access to sanitary products

A recurrent and critical issue identified in nearly all the reviewed studies was the inadequate access to menstrual hygiene products within correctional facilities. Research from various African countries, including Uganda, Malawi, South Africa, Ethiopia, Zambia and Cameroon, highlighted poor-quality menstrual hygiene materials, not supplied or insufficient

supply of sanitary products. In the absence of adequate sanitary products, incarcerated women were often forced to resort to poor-quality menstrual materials, such as makeshift pads fashioned from scrap cloth, or improvised reusable cloth pads. The insufficient supply of sanitary products further compounded the issue, leaving women with limited options and increasing the risk of health complications.

3.2 Inadequate water, sanitation and hygiene facilities

Almost all the studies from Uganda, Zimbabwe, Malawi, South Africa, Ethiopia, Nigeria and Zambia highlighted WASH facilities as a critical barrier to effective practices of menstrual hygiene in correctional settings. The WASH facilities were explained in terms of access to clean, safe, running water, availability of soap, unhygienic disposal facilities, unavailable basic bathing facilities or limited access to bathing facilities. In many correctional facilities, these basic resources were found to be either completely absent or severely limited. Additionally, basic bathing facilities were often unavailable, or where they were present, access was severely restricted, further limiting incarcerated women's ability to maintain menstrual hygiene. In facilities with limited or inconsistent access to bathing facilities, women were forced to manage their menstrual health without the privacy or resources necessary for proper hygiene. In some prisons, unhygienic disposal systems for menstrual products were prevalent, leading to unsafe handling and environmental contamination.

3.3 Stigmatisation and lack of institutional support

In addition to the challenges of inadequate access to sanitary products and substandard WASH facilities, the promotion of effective MHM and practices in African correctional settings is further hindered by stigma and insufficient institutional support. These challenges are particularly evident in countries such as Uganda, South Africa, Ethiopia and Zambia, where systemic barriers continue to undermine the dignity and menstrual well-being of incarcerated women. One of the most pervasive forms of stigma identified across studies is the lack of privacy during menstrual hygiene practices, which not only infringes on the dignity of incarcerated women but also exacerbates feelings of embarrassment and shame. For instance, the requirement that women prove they have used a sanitary product by showing soiled towels before being issued replacements was cited as a degrading and humiliating practice.

Furthermore, studies from Uganda, Ethiopia, South Africa and Zambia, indicate a critical lack of institutional support for menstruating women in correctional facilities. The findings highlight a range of systemic issues, including the absence of structured prison services to support MHM, insufficient menstrual health education, inadequate and or poorly maintained sanitation infrastructures. These include insufficient numbers of toilets, malfunctioning amenities or lacking doors and proper disposal systems, and restricted access to toilets during the night. Additionally, the studies point to broader structural inequalities that compound the challenges women face in managing menstruation with dignity while incarcerated. These inequalities are often rooted in the gender-insensitive design of prison systems, which have historically been structured around the needs of male offenders and fail to consider the specific health and hygiene needs of women. The overall lack of institutional commitment to support MHM practices are directly linked to poor policy development and weak implementation.

Taken together, the evidence illustrates how the intersection of stigma, institutional neglect, inadequate infrastructure and entrenched structural inequalities creates an environment in which menstruation becomes a source of physical discomfort, psychological harm and social indignity for incarcerated women across various African correctional settings. Addressing these issues requires not only material improvements but also a fundamental

shift toward more gender-sensitive and rights-based approaches in prison health policy and practice.

4. Discussion

This review reveals significant challenges affecting menstrual hygiene practices among incarcerated women in African correctional settings. The findings point to a confluence of structural, social and systemic barriers, namely inadequate access to sanitary products, WASH infrastructure and stigmatisation of menstruation coupled with limited institutional support. All these collectively impede the ability of women in prison to manage menstruation with dignity and safety.

4.1 *Inadequate access to sanitary products*

One of the key barriers to MHM and practices in African correctional facilities is the limited access to menstrual hygiene materials. This disparity is a fundamental barrier to ensuring the dignity and health of incarcerated women. [Nangia and Fontebo \(2017\)](#) revealed that female offenders in Cameroon are not provided with any sanitary products, leaving them dependent on donations or unsafe alternatives. Similarly, [Nabiryo et al. \(2023\)](#) in Uganda, and [Agboola \(2016\)](#) in South Africa, highlight a severe shortage of menstrual hygiene products in prisons, forcing incarcerated women to use makeshift items such as pieces of mattress foam, rags or toilet paper. These practices increase the risk of reproductive tract infections, skin irritation and overall psychological distress due to feelings of shame and helplessness.

Both studies emphasise that these shortages stem from systemic neglect of women's specific health needs within correctional services. They argue that prison health policies in many African countries, including South Africa, are not adequately gender-responsive. For example, although South Africa's Correctional Services Act 111 of 1998, as amended, includes general provisions for the care and treatment of offenders, it lacks standardised guidelines for MHM across facilities. In practice, this means that while the Department of Correctional Services acknowledges the need to provide basic hygiene products, the inconsistent availability and quality of menstrual products across different institutions reveal critical implementation gaps ([Van Hout and Mhlanga-Gunda, 2018](#)).

Globally, incarcerated women often face inadequate provision of sanitary products in both quantity and quality ([Sebert Kuhlmann et al., 2020](#)). Available sanitary products are frequently of poor absorbency, cause irritation and are distributed in insufficient quantities to meet the needs of menstruating women ([Foster and Montgomery, 2021](#)) included the offenders, particularly in low-resource settings. Barriers to accessing and providing menstrual hygiene materials such as cost constraints, variable product quality and coercive environments compound the difficulties faced by incarcerated women in managing their menstrual health ([Glazer et al., 2024](#)). The cost of sanitary products is high, and the prison systems require incarcerated individuals to purchase products from commissaries or receive them through personal support from family or community. In low-resource settings, where offenders may lack financial support or family contact, this effectively means going without. Additionally, correctional budgets in many countries do not prioritise MHM, and where such products are considered a privilege rather than a right, their provision becomes inconsistent or dependent on donations.

Additionally, research consistently reveals that access to sanitary products is a critical and unresolved issue in African correctional services, as multiple studies report a significant shortage and inconsistency in supply. For example in Malawi, although the government has adopted some international guidelines for offenders health, implementation remains inconsistent, with menstrual health needs frequently overlooked due to broader resource limitations within the prison system, as it is reported that the sanitary products and clean

underwear are not provided (Gadama, 2020). In Uganda, Nabiryo *et al.* (2023) found that incarcerated women often have to use cloth scraps as substitutes, a practice that increases their risk of infections and psychological distress due to constant discomfort and humiliation. Similarly, in Zambia, Topp *et al.* (2016) highlight that sanitary products are not supplied by the correctional service. This study found that incarcerated women frequently rely on improvised menstrual products due to a lack of government-provided sanitary supplies. The same authors recommend the effects of this reliance on their physical and psychological well-being, as well as the impact of limited facilities on safe disposal and privacy during menstruation to be explored. Recommendations include policy amendments to integrate menstrual hygiene products within prison health budgets. The government need to intervene, because limited budgets allocated for women's health in correctional services result in scarce resources for menstrual hygiene products, further marginalising incarcerated women.

Inadequate menstrual hygiene knowledge among both female offenders and correctional staff contributes to poor MHM, exacerbating challenges in MHM (Degefu, 2023). Inadequate menstrual hygiene knowledge on the other hand, leaves incarcerated women reliant on misinformation and potentially harmful practices. It is argued that without adequate menstrual hygiene knowledge, access to menstrual products alone cannot fully address women's menstrual health needs, as knowledge is essential for their safe and effective use. These findings indicate that while sanitary products are necessary for maintaining basic hygiene, they are often prioritised in correctional service settings, leaving women vulnerable to preventable health issues.

This consensus reflects a broader trend of inequity in health-care access, particularly for vulnerable populations. The health equity framework emphasises equitable distribution of menstrual health and hygiene resources and prioritisation of vulnerable groups. Thus, a health equity approach mandates that sanitary products be treated as essential items. As argued by Rabiou *et al.* (2019) in their study on menstrual pattern and hygiene among female offenders in North-western Nigeria, making sanitary products available aligns with the rights to dignity and adequate health care. Similarly, Gadama *et al.* (2020) emphasise that ensuring access to menstrual hygiene resources in correctional facilities not only upholds the fundamental rights of women but also mitigates the risk of menstrual-related infections and associated health complications, thereby contributing to better overall health outcomes. Thus, policy frameworks across African nations should focus on providing these essential items as part of standard correctional service health-care provisions.

The evidence from African correctional services paints a troubling picture of systemic neglect that violates the principles of health equity. A concerted policy response is essential, advocating for a continuous monitoring of women's health needs within correctional service settings can ensure accountability and guide policy adjustments in line with menstrual health and hygiene management goals. Continuous research and monitoring of menstrual health issues in African correctional services can ensure accountability, policy evaluation and incremental improvements. A study by Moodley *et al.* (2023) shows how lack of systematic research on menstrual health in Sub-Saharan Africa correctional services allows substandard practices to persist without scrutiny. Nabiryo *et al.* (2023) argue that consistent monitoring would provide data to inform policymakers and ensure that resources are allocated where they are most needed. Additionally, regular research on health needs and conditions of incarcerated women in African correctional services can help reveal emerging issues, such as the psychological impacts of menstrual health challenges (Okunlola *et al.*, 2024). The authors of this paper emphasise that consistent monitoring provides actionable insights for policymakers and highlights the urgency for gender-responsive policy reform in correctional service systems.

The current authors contend that the neglect of menstrual hygiene needs in African correctional services clearly highlights gender and health inequities. They emphasise that

sanitary products should be recognised as fundamental necessities rather than luxuries, arguing that withholding access deepens existing health risks for incarcerated women and highlights a systemic failure to uphold their rights. Consequently, the authors assert that governments must ensure a consistent supply of sanitary products in all correctional facilities, treating them as essential health items.

4.2 Inadequate water, sanitation and hygiene facilities

Poor water, sanitation and hygiene facilities in African correctional services are a recurrent theme, with implications for women's menstrual health and overall well-being. Studies consistently report lack of access to clean water and sanitation, complicating hygiene practices and increasing health risks. Incarcerated women in African correctional services face severe WASH challenges, which complicate MHM. In Nigeria, [Rabiu *et al.* \(2020\)](#) reported that used menstrual absorbents are commonly discarded in toilets rather than in designated disposal bins. Similarly, [Agboola \(2016\)](#) found that in South Africa, disposable pads are disposed of in regular household waste without implementing specialised infection control measures. In Zimbabwean correctional services, substandard sanitation systems and irregular access to clean water further undermine the safety and dignity of female offenders, particularly during menstruation ([Mhlanga-Gunda, 2020](#)). Similarly, in Ethiopia, the lack of doors on some correctional service toilets compromises the privacy and security of incarcerated women, exacerbating the challenges they face in managing their menstrual health ([Degefu *et al.*, 2023](#)).

A study conducted in Zambia by [Topp *et al.* \(2016\)](#) revealed that correctional facilities are poorly maintained, with insufficient or malfunctioning toilets, limiting privacy for women to manage their menstruation effectively or making effective MHM nearly impossible. Similarly, conditions in Malawi are equally challenging, as noted by [Gadama *et al.* \(2020\)](#), who report a lack of access to clean and safe running water essential for washing and bathing. Additionally, water and waste disposal systems are inadequate, and basic hygiene products for bathing and health care are largely unavailable. [Degefu *et al.* \(2023\)](#) further highlight that in Ethiopia some correctional settings, women lack private spaces to change sanitary products or wash, exacerbating the risk of infections and contributing to heightened emotional distress. A study conducted in Ugandan prisons emphasises the challenges posed by inadequate MHM, citing the limited access to water and sanitation facilities as a primary barrier ([Nabiryo, 2023](#)).

Both studies align on the critical role of WASH in menstrual health, emphasising that sanitation is foundational to health equity. In line with a health equity perspective, these results suggest that the intersection of sanitation and hygiene, resource scarcity and neglect in African correctional services amplifies women's health risks. These systemic shortcomings or compounded vulnerabilities arising from WASH barriers demonstrate the pressing need for a comprehensive structural and policy reforms to uphold and safeguard the menstrual health and human rights of women in correctional facilities across Africa. The study on sanitation and hygiene in a Nigerian maximum-security prison provides insights into the safety and sanitation services within correctional facilities ([Aluko *et al.*, 2021](#)). The finding highlights the often unsafe and insufficient facilities, which pose severe challenges to maintaining proper menstrual hygiene among female offenders.

The basic sanitation is a non-negotiable human right, and without it, the health of incarcerated women is disproportionately compromised. Lack of adequate WASH facilities constitutes a violation of human rights, stressing the need for policy reform to ensure that all detention facilities provide adequate water and sanitation as a foundational health-care measure.

This calls for comprehensive MHM policies that ensure consistent access to menstrual products, clean water and sanitation, arguing that these are critical components of basic human rights and dignity for incarcerated women

Therefore, improving WASH facilities must be a priority in addressing health disparities, as ensuring basic sanitation rights is central to upholding dignity and reducing preventable health conditions among incarcerated women. Improving WASH facilities in correctional services would not only address immediate hygiene needs but also align with the fundamental principles of health equity by addressing structural disparities in health access. Noting that inadequate hygiene management can lead to reproductive health issues, affecting women's long-term health outcomes. This highlights the critical link between menstrual hygiene and broader health equity.

4.3 Stigmatisation and lack of institutional support

Stigmatisation by correctional service staff and a lack of institutional support are significant barriers to effective MHM in prisons. This stigma is often rooted in systemic neglect, as institutional stigmatisation remains a pervasive obstacle to menstrual health (Moodley *et al.*, 2023). In South Africa, the dismissive attitudes of some correctional staff toward menstruation further reinforce this issue, with instances of women being required to present soiled sanitary products as proof before receiving replacements (Agboola, 2016). Similarly, in Uganda, the absence of structured prison services to support MHM leaves incarcerated women without adequate resources during menstruation (Nabiryo, 2023). In Zambia, limited institutional support forces female offenders to rely on *ad hoc* donations of disposable pads or to create reusable pads from donated materials like cotton wool and scrap cloth, typically provided by church groups (Topp, 2016). These findings reveal that many female offenders face stigma and health risks due to inadequate access to menstrual products and sanitation.

Coercive environments also shape the menstrual hygiene experiences of incarcerated women. Incarcerated individuals often report needing to negotiate or plead with staff to access basic hygiene products. This dynamic can be exploitative, particularly in facilities where staff wield excessive control over daily necessities. In extreme cases, women report being forced to trade favours or endure degrading treatment in exchange for basic menstrual care items. In African correctional services, these challenges are even more acute due to systemic underfunding, overcrowding, and inadequate gender-sensitive policies. Menstrual health is largely neglected in prison policies across the continent. The situation is particularly dire in Malawi and Ethiopia, where incarcerated women are reported to reuse pieces of cloth provided by the prison during menstruation without access to soap or proper washing facilities (Topp *et al.*, 2016; Degefu *et al.*, 2023).

Menstruation remains deeply stigmatised across many cultural, institutional, and policy environments, contributing significantly to the marginalisation of incarcerated women's menstrual health needs. In many African societies, menstruation is shrouded in cultural taboos and misinformation, often perceived as dirty, impure or shameful (Sommer *et al.*, 2015). These cultural stigmas do not dissipate within correctional institutions; instead, they are exacerbated by the structural power dynamics of prisons, where incarcerated women often have limited agency and voice. As a result, menstruation is rarely prioritised in health discourse or prison programming, leaving women to manage their cycles in silence and discomfort (Elledge *et al.*, 2018).

The stigmatisation of menstruation in prison environments is closely intertwined with gendered inequalities in health service provision. Prisons globally are historically and structurally designed for male offenders, often ignoring or inadequately addressing the unique biological and psychological needs of women (Van Hout and Mhlanga-Gunda, 2018). Such practices reflect broader gaps in understanding and empathy, compounding the psychological and physical difficulties faced by incarcerated women in managing their menstrual health in correctional services. The absence of gender-sensitive protocols can

discourage women from seeking help for menstrual-related discomfort or disorders due to fear of mockery, especially in facilities dominated by male staff (Human Rights Watch, 2020). This reflects broader gender-based structural violence, where institutional policies and practices systematically neglect women's needs, perpetuating inequalities under the guise of neutrality. Feminist prison scholarship highlights how the incarceration system reproduces patriarchal norms by rendering women's bodies invisible and pathologised, with menstruation being a prime example (Carlen, 2003). In African correctional systems, this invisibility is compounded by resource constraints, policy gaps, and a lack of political will to implement gender-responsive prison reforms (Penal Reform International, 2022). For instance, while international frameworks such as the Bangkok Rules (2010) and Mandela rules (2015) call for the provision of menstrual hygiene materials and adequate WASH facilities for women in custody, many African states have yet to domesticate or operationalise these standards.

Without targeted policies, women's health will continue to suffer, revealing a stark gap in Africa's approach to women's rights in custodial settings. The foundational *African Charter on Human and Peoples' Rights* (1981) and its *Protocol on the Rights of Women in Africa* (Maputo Protocol, 2003) emphasise gender equity and humane treatment in all environments, including correctional services. These documents call on African Governments to address specific health and dignity requirements for women, including access to MHM. The African Union's Agenda 2063 similarly outlines a vision for a continent prioritising equitable health care and gender-sensitive environments, yet these ambitions are rarely fulfilled within correctional settings.

To effectively ameliorate stigmatisation within correctional facilities, a multi-level and holistic approach. Through a combination of education, policy reform, infrastructure development and advocacy, correctional systems can begin to dismantle menstrual stigma and create an environment that upholds the dignity and rights of all incarcerated women.

5. Conclusion

This narrative review set out to synthesise existing literature on menstrual hygiene practices within correctional facilities, with a particular focus on the African context. The findings consistently revealed that menstruation remains a profoundly neglected area of health and human rights in correctional settings. A growing body of literature from African contexts highlighted inadequate supply of sanitary materials, inadequate WASH facilities, stigmatisation and lack of institutional support. These interrelated barriers collectively erode the dignity, health and well-being of incarcerated women.

The review further establishes that menstruation in correctional settings is not merely a private matter of hygiene but a structural issue with public health and human rights implications. The inadequate provision of menstrual hygiene materials in African correctional facilities, is often compounded by poor WASH facilities. Stigmatisation of menstruation, a cultural norm across many African societies, infiltrates correctional systems where menstruating women are often viewed as burdensome or treated with disdain. This stigma is institutionalised through neglect evident in the absence of gender-responsive prison policies or implementation of global standards such as the Bangkok Rules. The dominance of male-centric correctional design further entrenches gender inequality, as the unique needs of female offenders remain under-prioritised, under-researched and inadequately addressed. This reflects a broader systemic failure in prison health governance and highlights the intersectionality of gender, incarceration and period poverty.

The implications of these findings are significant. They call attention to the urgent need for gender-sensitive reform in correctional policy and practice. This includes the guaranteed provision of adequate and appropriate menstrual hygiene materials upon admission and throughout incarceration, improved WASH infrastructure, and access to health-care

personnel trained to address women's health comprehensively. The findings also point to the necessity of institutionalising menstrual health education and awareness within correctional systems to combat stigma and empower incarcerated women. From a research standpoint, this review identifies a persistent dearth of empirical studies on MHM and practices in African correctional facilities. Most studies are qualitative, localised and exploratory in nature, leaving a gap for longitudinal, comparative and intervention-based research.

There is critical need for the development and implementation of comprehensive, gender-sensitive policies within African correctional facilities to address the distinct menstrual health challenges faced by incarcerated women. Addressing MHM in African correctional services necessitates a multipronged approach that involves legislative reform, enhanced resource allocation, and efforts to dismantle cultural stigmas surrounding menstruation. Current policy frameworks and advocacy efforts, while promising, require stronger enforcement and integration into correctional service health-care systems. Such policies should be designed to encompass access to adequate menstrual products, clean and private sanitation facilities and appropriate waste disposal options.

Additionally, these policies should ensure that menstrual health education is incorporated into correctional health services, enabling incarcerated women to manage their menstrual health with dignity and respect. The integration of gender-sensitive approaches would help mitigate the disproportionate impact of inadequate menstrual health resources on women in correctional facilities, thereby promoting a more equitable and supportive environment for their well-being.

Moving forward, the integration of SDG principles and the implementation of enforceable, gender-sensitive policies across African correctional services could significantly improve menstrual health management for incarcerated women, promoting both their health and dignity as a fundamental human right.

6. Limitations

This study faced several limitations that may affect the comprehensiveness and accuracy of its findings on menstrual hygiene practices in African prisons. One notable limitation of this review is its restriction to literature published between 2016 and 2024. Although this time frame was intentionally selected to ensure the inclusion of recent and contextually relevant findings, it may have unintentionally excluded earlier foundational studies that could offer valuable historical insights into menstrual hygiene management (MHM) in correctional settings. The scarcity of data on MHM in prisons, particularly within African contexts, further constrained the comprehensiveness of the review. This limitation affected the comprehensiveness of the synthesis. Additionally, the inclusion criteria limited the review to peer reviewed journal articles and conducted within African countries. While this criterion was used to ensure methodological rigour and contextual relevance, it may have unintentionally excluded valuable insights from broader global literature that could offer comparative or transferable lessons. Important research on menstrual hygiene in correctional settings from other low- and middle income regions such as South Asia or Latin America might provide relevant theoretical frameworks or innovative practices applicable to African contexts. This review deliberately excluded grey literature such as newspaper articles, conference proceedings, theses, dissertations and unpublished reports. While this was done to prioritise methodological rigour and academic reliability, it may have limited the scope of perspectives, especially given the scarcity of published research in this niche area. Excluding alternative data sources could have led to an underrepresentation of practical and community based knowledge, including first hand accounts from correctional officials, advocacy organisations and formerly incarcerated women. Finally, reliance on selected databases and the omission of others not specified in this study might have further contributed to a smaller pool of eligible studies, potentially narrowing the breadth and diversity of evidence included in this review.

7. Recommendations

Addressing menstrual hygiene within correctional facilities requires further research to develop targeted recommendations. A critical component is the design and implementation of educational programs, in partnership with public health agencies and non-governmental organisations, to provide incarcerated women with knowledge on menstrual cycle awareness, hygiene practices and the use of menstrual products. Additionally, correctional officers should be trained to offer informed guidance and foster a supportive environment, enabling incarcerated women to discuss menstrual health openly. To ensure continuous access to reliable information, distributing pamphlets and posters covering essential menstrual health topics within correctional services is essential. Finally, establishing a monitoring framework to evaluate the effectiveness of these health education programs will help ensure they are tailored to the unique needs of incarcerated women and facilitate ongoing improvement.

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Competing interests

There are no competing interests among the authors.

Authors contributions

Conceptualisation: Melitah Molatelo Rasweswe, Tebogo Maria Mothiba, Mamare Adelaide Bopape; Literature search and screening: Melitah Molatelo Rasweswe, Tebogo Maria Mothiba, Mamare Adelaide Bopape; Data analysis: Melitah Molatelo Rasweswe, Tebogo Maria Mothiba, Mamare Adelaide Bopape; Drafting and finalising of the manuscript: Melitah Molatelo Rasweswe, Tebogo Maria Mothiba, Mamare Adelaide Bopape.

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