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A Review of the Literature on the Causes and Potential Solutions to Period Poverty in Sub-Saharan Africa

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ABSTRACT

Period poverty in sub-Saharan Africa (SSA) limits the ability of women and girls across the region to manage menstruation safely and effectively. This article reviews a sample of recent and significant academic work on the causes and potential interventions for period poverty in SSA. This paper considers the effects of existing WASH infrastructure, government policies, economic barriers, and discrimination and stigma on period poverty in the region. This paper also considers and compares the literature on the effectiveness of a range of interventions both proposed and ongoing, including improvements to WASH facilities, reusable pads, and education initiatives. Across the 33 sources reviewed, which were published between 2011 and 2026, intervention outcomes were mixed. Many studies combined multiple interventions such as educational interventions, product provision, and WASH improvements, limiting the ability to identify causal relationships between outcomes and individual interventions. The existing body of research suggests that improvements to WASH facilities and improved education are promising interventions, but better long-term, comparative studies will be needed to establish clear causal efficacy of these interventions.

INTRODUCTION

The United Nations defines period poverty as "the inability to afford and access menstrual products, sanitation and hygiene facilities and education and awareness to manage menstrual health," and describes it as being "perpetuated by stigma and the lack of information and education" (UN Women, 2025). Therefore, period poverty is especially prevalent in areas where menstrual stigma contributes to a lack of awareness before a girl's first menstrual cycle, while a lack of access to resources for managing menstruation becomes a barrier that makes it difficult to maintain hygiene.

While access to clean water and menstrual hygiene facilities are basic needs, for many women and girls, these necessities are inaccessible, as only 24% of the sub-Saharan African population had access to basic sanitation services in 2024 (Bose et al., 2024). Menstruation begins at a median age of 12.9 to 13.3 years across SSA, meaning that accessibility problems affect young girls and women (Costa et al., 2025). This paper reviews 33 sources published between 2011 and 2026 regarding the causes, including clean water access, economic conditions, and sanitation infrastructure, and potential remedies to period poverty in

SSA. Because literature spans many countries, populations, and research designs, particular attention is paid to the generalizability of claims about the causes and remedies to period poverty in SSA.

METHODS

Literature was collected via searching Google Scholar, PubMed, ScienceDirect, Springer, MDPI, and Google for academic literature about the causes of and interventions for period poverty among women and girls in SSA. Traditional Google searches were used to identify credible sources that would build on information presented in peer-reviewed studies, or these searches would provide evidence of more contemporary, localized, innovative, and/or effective interventions by international organizations like WHO, UNICEF, and the UN.

This literature review contains 33 sources total. The search for new sources was completed once the same searches using similar and new search terms presented sources that had already been reviewed or contained irrelevant information. Although studies differ in design and findings, they were included as long as they evaluated the causes or interventions related to the main themes described below.

Searches were conducted between June 25th and August 27th, 2026. Search terms included "period poverty in sub-Saharan Africa," "menstrual health and WASH," "clean water access women and girls sub-Saharan Africa," "menstrual products affordability sub-Saharan Africa," "WASH infrastructure in sub-Saharan Africa," "government menstrual policy sub-Saharan Africa," "solutions period poverty sub-Saharan Africa," "causes period poverty sub-Saharan Africa," "cost of menstrual products sub-Saharan Africa," and "period poverty interventions sub-Saharan Africa." Country-specific terms were used to research different regions of sub-Saharan Africa.

More than 100 sources were screened. Sources were screened and evaluated through inclusion and exclusion criteria. First, geography, acceptable source types, and publication date range were set as mandatory characteristics. Sources were required to contain findings directly relevant to SSA, sources had to be peer-reviewed or widely cited organizational sources such as the United Nations, and sources were no more than 15 years old. Then, titles and abstracts were screened to decide whether a source's full text should be read through and adhered to one of the predefined themes of this paper, and duplicates were removed. Once papers and articles were read in full, evidence was interpreted and evaluated based on methodological strength. Randomized and quasi-randomized studies were given more weight for causal claims, while cross-sectional studies were primarily used to establish associations and qualitative studies were used to characterize experience.

Below is a table of peer-reviewed studies that have been organized thematically and alphabetically. The thematic groupings of the sources in this table are WASH inequality, effects on schooling, hygiene accessibility, stigma and knowledge, policy barriers, and miscellaneous/contextual sources. Within these groups, sources are organized alphabetically. Groupings of sources are not specific, as there are overlaps

between sources, so this table should be taken as a general guide when looking at sub-headings. Sources within sources have not been included.

Table of Peer-Reviewed Studies:

Study	Country	Target Group	Study Design	Main Findings	Key Limitations
WASH Inequality					
Bose et al. (2024)	Sub-Saharan Africa, South Asia, the Middle East, and island countries	Communities below the poverty line, living in densely populated areas, in war zones, and island countries	Review	SSA has very low sanitation access. Sustainable WASH improvements need proper financing and local participation.	Covers several world regions.
Dvalishvili et al. (2025)	Uganda	1,237 adolescent girls from 47 secondary schools in Southern Uganda	Cross-sectional study using baseline survey data and multilevel logistic regression	Good school WASH infrastructure was associated with a 28.6% decrease in menstruation-related school absenteeism.	Some findings rely on self-reported data, which may introduce recall or reporting bias.
Girod et al. (2017)	Kenya	Schoolgirls in Nairobi informal settlements	Mixed-methods comparative study	Girls in private schools had less access to free pads than girls in public schools. Inadequate sanitation was a barrier to proper menstrual management.	Observational study; no causation can be established.
Kagurusi et al. (2026)	Uganda	Women and girls responsible for household water collection	Qualitative	Menstruation increased water and hygiene needs. Pain and inadequate menstrual products could make water collection more difficult.	Relies on self-reported data.
Victor et al. (2025)	Nigeria	Children under 18	Cross-sectional secondary-data analysis	70% of participants experienced WASH-facility deprivation.	Focuses on children generally, not just menstruating girls.
Effects on Schooling					

Andargie & Tinuola (2025)	Ethiopia	Menstruating schoolgirls in intervention and control schools	Cross-sectional and experimental intervention study	Girls in intervention schools had much better menstrual management and educational participation. 44% of control-school girls avoided changing pads at school compared with only 4.2% in intervention schools.	WASH and MHM education were implemented together; difficult to isolate the effect of individual intervention components.
Austrian et al. (2021)	Kenya	3,489 Grade 7 girls across 140 primary schools in Kilifi County	Cluster randomized controlled trial	Reproductive-health education did not significantly improve attendance, but improved menstrual health attitudes, knowledge, gender norms, and self-efficacy.	School attendance is influenced by many factors beyond menstruation, such as poverty and household instability.
Chidya et al. (2024)	Malawi	100 adolescent learners plus teachers, parents, community members	Mixed-methods intervention evaluation	Menstrual Hygiene Management project improved girls' education and reduced menstruation-related absenteeism and dropout.	Only four purposively selected schools.
Miiro et al. (2018)	Uganda	Secondary-schoo l girls aged approximately 14-17	Mixed-methods feasibility study	Embarrassment, fear of teasing, menstrual pain, and inadequate materials contributed to school absenteeism.	Mainly feasibility research, not an effectiveness trial.
Montgomer y et al. (2016)	Uganda	1,124 schoolgirls across 8 schools	Cluster quasi-randomize d controlled trial	Both pad and education interventions reduced declines in school attendance.	High attrition; follow-up retention rate around 57.5%.
Vågenes & Grevstad (2025)	Tanzania	School-aged girls	Qualitative	Lack of products, inadequate facilities, pain, and stigma contributed to absenteeism.	Relies on participants' reported data.
Hygiene Accessibility					
Beeman et al. (2023)	Uganda	Menstruators in the Bidi Bidi Refugee Settlement	Human-centered design with a 3-month pilot intervention	95% of people who menstruate said that the Cocoon Mini made menstrual health management easier by providing waste bins, solar	Short 3-month follow-up.

				lights, and water sources.	
Harerimana et al. (2025)	11 African countries and Bangladesh	Refugee women and girls	Scoping review of 16 studies	Identified product shortages, inadequate WASH, stigma, and limited education as major MHM barriers.	Limited evidence on long-term effectiveness.
Krause et al. (2025)	Global (meta-study)	Menstruators	Systematic review of 31 studies	Examined associations between menstrual product alternatives and urogenital tract infections, but evidence was inconclusive.	Included many observational studies.
Mehta et al. (2021)	Kenya	436 schoolgirls in Kenya with a median age of 16.9 years	Cross-sectional analysis	Use of cloth to manage menstruation had 1.72-fold increased odds of CST-IV vs. CST-I.	Self-reported data may be inaccurate.
Sanduvac et al. (2017)	Tanzania	Refugee girls attending school in Nduta Camp	Mixed-method assessment	MHM training and dignity kits helped girls prepare for menstruation and improved school attendance.	Cannot establish causation due to lack of control group.
Tshivule et al. (2025)	Nigeria, Ethiopia, South Africa, and Ghana	Adolescent girls in rural African schools	Scoping review	Concluded that menstrual-health challenges are multidimensional, part of which includes product shortages and weak facilities.	Not primary research. Included studies that differ in design and quality.
Wynne (2022)	East Africa	Refugee women and adolescent girls in four East African refugee-camp pilot projects	Comparative narrative analysis of four piloted MHM projects	Basic menstrual health knowledge increased from 15% to 65%, and reported incidents of leaks and stains declined from 59% to 9% after training.	Based only on four pilot projects and secondary project reports.
Stigma and Knowledge					
Gbogbo et al. (2025)	Ghana	Adolescent girls, parents, and teachers	Qualitative study	Menstruation was shaped by strong cultural beliefs and restrictions. Stigma and ideas of impurity affected girls' experiences during menstruation.	Qualitative evidence.

Smiles et al. (2017)	Ethiopia	120 adolescent girls aged 16-19	Qualitative comparative study	Menstruation was associated with fear and embarrassment. Cultural beliefs correlated menstruation with sexual maturity and marriageability.	Small purposively selected sample.
Policy Barriers					
Ochi (2023)	Sub‑Saharan Africa	National populations in low- and middle-income African countries	Longitudinal quantitative panel study	Economic growth alone did not consistently reduce extreme poverty when inequality remained high. Structural inequality can maintain severe poverty despite growth.	Country-level economic data rather than individual women and girls.
Onukansi (2025)	Nigeria	Nigerian girls and women experiencing period poverty	Policy analysis	Reviews interventions involving free products, education, and school programs. Concludes by arguing for an integrated national menstrual-health policy.	Cannot establish causal effectiveness of proposed policies, only correlation.
Contextual Sources					
Costa et al. (2025)	Burkina Faso, Ethiopia, Sudan, Tanzania	2307 female adolescents around ages 10 to 14	Cross-sectional	Estimated median age at menarche was 12.9-13.3 years.	Generalizability is limited to schoolgirls.

CAUSES

This section organizes the causes of period poverty in sub-Saharan Africa into four main themes: economic barriers, inadequate WASH infrastructure, discrimination and stigma, and insufficient government involvement. Each subsection reviews evidence from different literature and populations across the region of SSA to demonstrate how these barriers overlap and work together to perpetuate period poverty.

Economic barriers

There are many causes of period poverty around the globe, but across the studies reviewed, the affordability of menstrual products was repeatedly shown as one of the primary barriers for many women

and girls to achieving adequate hygiene. SSA is a low-income region, home to 60% of the world's extreme poor (Ochi, 2023).

Literature suggests that poverty is highly correlated with menstrual product unaffordability. A review by Tshivule et al. (2025) found that up to 50% of adolescent girls in rural areas could not afford sanitary pads, negatively impacting their menstrual hygiene practices and contributing to school absenteeism (Tshivule et al., 2025). This unaffordability is associated with the use of less suitable materials, such as cloth, biker shorts, leaves, or other improvised materials instead of menstrual hygiene products (Tshivule et al., 2025; Kagurusi et al., 2026).

The downstream health effects, however, are harder to evaluate. While improper use of materials for menstrual products may have negative outcomes on female reproductive health, as it creates an environment for bacteria to grow, heightening the risk of developing bacterial infections, the causal relationship between menstrual product substitution and infections is not clearly established by the literature. A study of secondary school girls in Kenya found that girls who used cloth to manage menses had 1.72 times the odds of CST-IV versus CST-I (Mehta et al., 2021). However, a meta-analysis of 31 studies on the relationship between menstrual products and RUTIs found the relationship inconclusive (Krause et al., 2025).

Existing WASH Infrastructure

WASH (water, sanitation, and hygiene) infrastructure is a core part of academic discussions of period poverty because inadequate WASH infrastructure can make proper management more difficult. For example, in Nigeria, the existing WASH infrastructure, such as water filtration systems, sanitation services, bathrooms with handwashing services, and waste disposal systems, is lacking, especially in rural areas and certain urban communities (Victor et al., 2025). In fact, 28% of Nigerians lack access to basic drinking water, about 75% lack basic sanitation, two-thirds do not live in premises with a handwashing facility comprising soap and water, and 20% practice open defecation (Victor et al., 2025). Even if women had access to period products, using them properly requires basic infrastructure that millions of Nigerians lack (Victor et al., 2025). Girls and women cannot change menstrual materials without basic necessities, such as privacy, running water, and soap. Moreover, they cannot wash reusable cloths or dispose of products safely, which further increases the possibility of health issues (Mehta et al., 2021). Research from Uganda suggests that poor WASH infrastructure may be associated with difficulty for girls to stay in school because it lacks privacy and clean water, which are important for changing products during the day (Miiro et al., 2018).

Schools are an important subset of WASH infrastructure, as inadequate WASH infrastructure can affect girls' management of menstruation in those settings. A study in Kenya found that latrine facilities, which are communal toilets usually dug into the ground, were not distributed equally among private and public schools. There was an extremely high pupil-to-latrine ratio of 88:1 at private schools, while it was slightly better, at 27:1, in public schools (Girod et al., 2017). Still, girls in both types of schools felt rushed using

the facilities, with public school girls feeling slightly "less concerned" than private school girls (Girod et al., 2017). As a result, girls in private school described feeling "rushed to finish changing their pads" and would wait until they could go home, which may correlate with a higher risk of bacterial infections or irritation (Girod et al., 2017). This inequality may be exacerbated by the existence of government programs that only benefit public schools. In fact, "only girls in public schools could expect to receive pads from their teachers when they asked" because public schools were part of the Sanitary Towels Programme funded by the Kenyan government (Girod et al., 2017). Facility caretakers also remain an obstacle. In one case, a janitor refused to clean the toilets because girls threw pads on the floor, which was associated with great fear for the girls, describing how they could "be beaten" (Girod et al., 2017). These cases show how inadequate disposal systems and poor facility management can make existing sanitation facilities less suitable for menstruating students, despite having toilets physically available.

Research from Uganda shows that inadequate WASH infrastructure also interacts with period poverty in a way that increases the domestic burdens of women. In addition to menstrual products, to maintain proper hygiene during menstruation, women needed to bathe frequently, up to 3 times a day, to reduce the risk of staining (Kagurusi et al., 2026). A consistent water supply is also important for cleaning reusable pads (Harerimana et al., 2025). For many girls and women in this context, water becomes a necessity for maintaining proper hygiene. While regular bathing is important for menstrual hygiene, it also leads to a more rapid depletion of limited water supply, resulting in women, the domestic caretakers of the family, needing to collect more water, leading to heavier workloads. The World Health Organization states that one in three people does not have access to safe drinking water, and the burdens created by this disproportionately fall to women, since seven out of ten families push this responsibility onto women and girls aged 15 and older (WHO, 2019; WHO, 2023).

However, findings from Uganda suggest that menstruation could make water collection more difficult (Kagurusi et al., 2026). The main factors which determine whether or not women felt like they could collect water during their period were whether they had enough menstrual products and whether or not they were experiencing pain (Kagurusi et al., 2026). Despite the challenging circumstances, many women and girls did not see menstruation as a burden and needed to ensure the household continued to have enough water while men were off working their jobs (Kagurusi et al., 2026). Even though they did report feeling fatigued or having abdominal pain, this hardly ever stopped them from collecting water, partially because no one else could help (Kagurusi et al., 2026). In some cases of extreme pain, sisters or mothers would help fetch water instead (Kagurusi et al., 2026). A lack of reliable access to water may hinder period management and may lead to associated health risks, such as infections or diseases.

Discrimination and Stigma

A prerequisite to material relief of period poverty will be challenging the stigma around menstruation. Menstruation stigma inhibits many girls' sense of comfort and safety at school, particularly in rural SSA settings, due to frequent harassment, assault, and the threat of rape from boys, classmates, and community members (Girod et al., 2017).

Studies from Ghana and Ethiopia show that menstruating women are seen as taboo from the perspective of men, who practice traditions that they believe will "uphold tradition and ensure spiritual purity within the household" (Gbogbo et al., 2025). Social restrictions in Ghana for menstruating women include not being allowed to cook for men, use common utensils, or live in the same space with men (Gbogbo et al., 2025). Menstruating women were also restricted from handling animals, water, and planted fields (Vågenes & Grevstad, 2025). Similar patterns exist in rural Ethiopia, where girls are expected to stay away from boys during menstruation, as close interactions were believed to result in pregnancy (Smiles et al., 2017). Likewise, women are hindered from seeking resources and talking about problems they experience with menstruation because many consider menstruation to mark a girl's readiness for marriage, or that menstruation only occurs once a girl has experienced sexual intercourse (Smiles et al., 2017). In many traditional households, houses are built with a room for menstruating women to be kept in until menstruation is over (Gbogbo et al., 2025). Girls themselves often described their periods as *adef*, using local slang meaning dirty, reinforcing the belief that girls who menstruate are unclean or impure (Smiles et al., 2017). However, some households choose to simply not enforce these traditions, and some students even question the validity of these customs (Gbogbo et al., 2025). Still, many Ghanaians usually follow these beliefs and traditions, which contributes to preventing women from entering shrines or even fetching water (Gbogbo et al., 2025).

These taboos regarding menstruation also exist between female family members. While a menstruating child's first instinct in many other cultures may be to speak to a trusted female adult, in Nigeria, menstruation "remains taboo to discuss, even between mothers and daughters," meaning that a significant number of young girls received no guidance on how to manage their menstruation properly and seek out the needed resources (Onukansi, 2025). In rural African communities such as Tanzania, menstruation is not often discussed openly. One study found that 66% of the girls surveyed across 5 sub-Saharan African countries were uneducated before their first menstrual cycle, which made it shocking and fearful to many young and unprepared girls, who were unequipped with the proper materials (Vågenes & Grevstad, 2025). Since menstruating women in Ghana are forbidden from using communal water buckets, this limits their access to a direct source of water during menstruation, a period when water is essential for maintaining proper hygiene (Gbogbo et al., 2025). Across the reviewed geographies, these findings support that period poverty is highly correlated with cultural silence surrounding menstruation by limiting women and girls' menstrual knowledge and access to resources.

Inadequate Government Policies

Period poverty continues to persist because of an important inequity, which is the underrepresentation of women in government, whose voices matter a lot when speaking about issues from a personal perspective. As of the 1st of January, 2026, only 27% of legislators in sub-Saharan Africa are women (UN Women, 2026). Furthermore, women are systematically excluded from political discussions on menstrual resource allocation. Ofosu-Anim and Brown (2024) argue that exclusion from the decision-making processes may

be associated with policies that do not consider their unique needs and knowledge (Ofosu-Anim & Brown, 2024).

Governments also tend to begin policy changes or provide funding for issues, but have historically faced immense challenges in terms of consistency. Previous national efforts, such as the Kenyan government's provision of free sanitary pads to schoolgirls since 2011, have made some progress (Tshivule et al., 2025). However, inequalities continue because the government has been unable to provide consistent supply chains and faces funding constraints (Tshivule et al., 2025).

Overall, findings commonly presented interconnected or correlated barriers across SSA. First, menstrual products were consistently inaccessible to women and girls because they cost too much, especially when taking other factors into account, such as living below the poverty line, with household incomes that could barely afford to feed them meals, making menstrual hygiene seem like an unimportant purchase. Second, even when NGO initiatives attempt to solve this economic barrier by distributing pads for free, women noted that they were in an inappropriate environment or lacked the facilities to use these free menstrual products. While reusable menstrual products are more cost-effective and eco-friendly, their long-term usage may be limited by a consistent supply of water to wash the reusable pads, or toilets to change discreetly in communities where menstruation is so highly stigmatized, or even bathrooms for hygiene, so women can bathe themselves to prevent infections. Studies based in Nigeria, Ethiopia, South Africa, Ghana, and Uganda suggest that when women cannot afford safe products, they may resort to unhygienic alternatives like old clothes, rags, or free objects in close proximity, such as leaves, which studies have associated with poorer hygiene.

POTENTIAL SOLUTIONS

Addressing period poverty in less economically developed regions such as sub-Saharan Africa requires a combination of education, affordable menstrual products, improved infrastructure, and a greater number of women being involved in the government.

Education about Menstruation for Women, Girls, and Teachers

Education is frequently presented in studies to address inadequate menstrual knowledge, stigma, and safe menstrual practices. Across different SSA settings, educational interventions generally consist of community-based educators, school instruction, or household outreach. Humanitarian programs use community volunteers to discuss hygiene and disease prevention with refugee families (Mahamat, 2026). A study by Chidya et al. (2024) in Malawi that provided menstrual health management education among teachers, mother groups, girls' councillors, traditional leaders, school and health management committees, parents, and community members reported 64% of parents encouraging their daughters to attend school during menstruation, compared to only 8% at baseline. This study suggests that involving female teachers and mother groups may facilitate conversation among adolescent girls. The involvement of boys also helped the conversation reach issues of stigma and discrimination. Findings from Malawi suggest that

organizational approaches to menstrual education may be more useful or accessible when accompanied by delivery through local women teachers or volunteers who are familiar with local community norms and practices.

Some interventions also emphasize the importance of education in terms of gaining practical skills. For example, Action Contre la Faim, a global humanitarian organization, works with local women's associations to teach menstrual hygiene and how to produce reusable pads themselves (Action Contre la Faim, 2022). This organization also incorporates menstrual hygiene management into school curricula so they can eventually produce their own menstrual hygiene kits and reusable pads for Action Contre la Faim, which distributes them for free (Action Contre la Faim, 2022). The National Movement of Adolescent Girls and Young Women is involved in a similar initiative that intersects menstrual hygiene education with spreading more resources (Jimoh, 2024). However, these programs face implementation barriers, including limited funding, religious differences, language barriers (such as only reaching English-speaking villages), and political conflict (Jimoh, 2024). This indicates that interventions related to education need to be improved and adjusted to local cultural contexts, which may suggest that one solution that works in one area of SSA cannot be applied uniformly across SSA. Additionally, studies of this intervention have found that because of inadequate programs, donations of resources to local communities may be associated with the spread of misinformation, which reverses the intended goal of spreading beneficial information to women and girls that could help manage their menstrual hygiene safely (Harerimana et al., 2025).

While evidence suggests that education was associated with improvement in menstrual knowledge, its effects on school attendance are inconsistent. Harerimana et al. (2025) find that community engagement was associated with reduced stigma and improved menstrual-health knowledge. In Burundi and Uganda, basic menstrual-health knowledge even increased from 15% to 65%, knowledge of average menstruation length increased from 25% to 78%, and reported incidents of leaks and stains declined from 59% to 9% after training (Wynne, 2022). Literature on education as a whole suggests that menstrual education is associated with improved knowledge of menstruation practices, but its effects on attendance appear to depend on other factors such as product access, poverty, and WASH infrastructure.

Increasing Affordability and Accessibility of Menstrual Products for Women and Girls

Across several SSA contexts, high product costs create a common affordability barrier. Studies from Cameroon, Niger, and Nigeria all show how menstrual products like pads are a recurring expense, and children often face trade-offs in low-income households between schooling and household needs, with more than half of Nigerian school-age girls reporting staying at home because they fear staining their uniforms when sanitary products are unaffordable, and the dropout rate being approximately 10 million children (Onukansi, 2025). Providing kits, affordable menstrual products, and reusable menstrual products may become a key solution in alleviating period poverty in SSA.

Programs that have distributed menstrual products across SSA vary in reach. One program distributing dignity kits targeted adolescent girl refugees in a secondary school in Tanzania. Another program that distributed dignity kits in Borno State targeted adolescent girls and reached 120 girls in the year 2022 (Onukansi, 2025). A 2023 campaign funded by Kimberly-Clark and WaterAid Nigeria trained 80 teachers and more than 180 students across 39 Lagos schools (Onukansi, 2025). Studies in school settings reached an even greater number of adolescent girls. One study designed a quasi-randomized trial involving 1,124 girls across eight schools to determine the effect of providing reusable menstrual products and education on education rates in Uganda. Another study that took place in rural primary schools in Malawi involved 100 boys and adolescent girls aged eleven to nineteen, teachers, mother groups, and community leaders from selected schools.

Innovations in reusable pads have some benefits and some costs. Many menstrual product distribution programs across SSA have been used to improve access to affordable menstrual supplies. Studies have shown that providing kits to menstruating women is associated with improvements in menstrual health and hygiene (Harerimana et al., 2025). These “dignity kits” being distributed included reusable pads, which not only provided women with something hygienic, but their reusability could reduce the environmental impact of menstrual waste, making it more of a long-term solution (Harerimana et al., 2025). UNFPA's adolescent girls programme in Borno State delivers dignity kits and school-based sensitization and was associated with greater menstrual product and knowledge accessibility (Onukansi, 2025). Kimberly-Clark and WaterAid Nigeria’s campaign trained teachers and successfully added reusable-pad demonstrations to their curriculum, showing the overlap between education and accessibility in addressing period poverty (Onukansi, 2025). Reusable menstrual pads can potentially address economic barriers because they reduce the need for women and girls to constantly repurchase single-use pads by rewashing them for multiple uses, even lasting up to months or years (Harerimana et al., 2025). However, reusable products generally require the use of water so they can be washed in order to be a sustainable solution, making this intervention dependent on WASH facilities, supported by evidence found in studies with trials involving female refugees (Harerimana et al., 2025).

Increasing the accessibility of menstrual hygiene has also had impacts on school attendance. A study in Uganda compared reusable pads, puberty education, both interventions, and a control group across eight schools. The study found that providing reusable pads and/or education increased school attendance, equivalent to roughly 2.5 additional days of school over the study period compared with controls (Montgomery et al., 2016). Evidence from Malawi suggests that improving access to menstrual products can greatly reduce menstruation-related disruptions to education. A 2024 evaluation of menstrual hygiene interventions in rural schools in Lilongwe found strong uptake of reusable pads and menstrual cups among adolescent girls. Results from this intervention show a decline in absenteeism from 70% to 14% (Chidya et al., 2024). Researchers attributed these improvements to increased access to reusable menstrual products paired with menstrual-health education and community involvement. However, because these studies combined several interventions together, the observed reduction in absenteeism cannot be attributed definitively to increased product accessibility, (Chidya et al., 2024).

Better WASH Facilities and Infrastructure for Menstrual Hygiene

Inadequate WASH infrastructure was identified as a barrier in several reviewed settings that prevents women from maintaining proper hygiene during menstruation. In fact, almost one-third of menstruating women lack clean water, safe sanitation facilities, hygiene infrastructure, and menstrual products (Onukansi, 2025). That was the motive for the Cocoon Mini in Uganda to create a safe and private area for maintaining proper hygiene during menstruation by offering bins, lighting, and water access (Beeman et al., 2023). 95% of the women in the sample reported that this private space facilitated menstrual hygiene maintenance and provided physical and psychological safety by knowing where to manage menstruation privately (Beeman et al., 2023). In Tanzania, improvements to WASH facilities at Hope Secondary School, such as the distribution of MHM kits and training, were associated with improved menstrual health, readiness, and confidence (Sanduvac et al., 2017).

A 2025 study in Ethiopia also found that school-based menstrual hygiene interventions were associated with substantially better educational outcomes. In the control schools, 70.2% of girls reported missing classes because of menstrual hygiene management challenges, compared with only 31.7% of girls in schools receiving menstrual hygiene and WASH interventions (Andargie & Tinuola, 2025). Another study in Ethiopia shows that girls attending intervention schools with improved menstrual hygiene management and WASH services were substantially more likely to attend class during menstruation. 68.3% of girls in intervention schools attended class while menstruating, compared with only 29.8% in control schools (Andargie & Tinuola, 2025). A 2025 study of 1,237 girls across 47 secondary schools found that having good school WASH infrastructure was associated with a 28.6% decrease in menstruation-related school absenteeism (Dvalishvili et al., 2025).

Government Support, Collaboration, Funding, and Improving the Inclusion of the Voices of Women

Literature reviewed suggests that governments may be important in supporting long-lasting and widespread change through the creation of effective policies and funding for various organizations. In history, policy change has been "a vital lever for eliminating period poverty, as demonstrated by successful global reforms" (Onukansi, 2025). For instance, Scotland's 2020 Period Products Act (Free Provision) made it the first country in the world to provide free products for those in need (Onukansi, 2025). This "ground-breaking policy" may act as a model for countries like Nigeria, where "period poverty is widespread and systemic" (Onukansi, 2025).

Some studies have suggested more effective government-focused policy and collaborative approaches. In Nigeria, Onukansi (2025) suggests that the government should prioritize the development and enactment of a comprehensive National Menstrual Health Policy that integrates education, health, WASH, and gender equality frameworks (Onukansi, 2025). Additionally, they could build on existing VAT exemptions, subsidize or provide free access to menstrual products for schoolgirls, internally displaced persons, and low-income women, supported by tax incentives for local manufacturers (Onukansi, 2025).

Governments can also work with grassroots organizations that may help in offering community-driven solutions that would help develop long-lasting policies. Nigeria could take example from Germany, which "lowered VAT on menstrual products from 17% to 7% in 2020, reclassifying these items as essential goods rather than luxury items," yet in Nigeria doing this has resulted in "its impact was muted due to broader supply chain inefficiencies and the absence of input duty waivers or import relief," showing how changes should be adapted to local differences (Onukansi, 2025).

The impact of women should be more widely recognized in terms of their impact on making interventions more personalized and useful for women and girls across SSA. Women and girls should be directly involved in menstrual-health decision-making because many policies often overlook their specific needs. One study in East Africa concluded that older women often preferred reusable pads, but adolescent girls did not agree, as they found washing and drying reusable pads a difficult task (Wynne, 2022). Increasing women's representation in decision-making could potentially help governments and organizations develop more appropriate menstrual-product and WASH policies.

DISCUSSION

Evaluation of Interventions

Interventions that aimed to address period poverty by improving WASH infrastructure seem plausible. Beeman et al. (2023) demonstrated that 95% of participants reported feeling safer in Cocoon Mini's private spaces that included essential resources during menstruation such as water, disposal bins, and privacy, considering the large amounts of stigma that exist across several regions in SSA. Interventions in school settings that measured attendance have shown mixed results. Some promising cases reviewed include Montgomery et al. (2016), who reported that reusable pads and menstrual education reduced absenteeism by 2.5 school days, and Chidya et al. (2024) demonstrated a decline in absenteeism as well through a combination of different interventions, including improved WASH facilities, education, and product distribution. Still, these studies have downsides, and there is not enough research that has been done to prove direct causation. In particular, Montgomery et al. (2016) only involved eight schools and had high attrition, making the data unstable. Chidya et al (2024) review all the interventions as a whole, giving no definitive answer either. Still, Dvalishvili et al. (2025)'s study found that good school WASH infrastructure was associated with a 28.6% decrease in menstruation-related absenteeism, but they could not establish a clear causal relationship between WASH infrastructure and reduced absenteeism. Austrian et al. (2021) performed a cluster randomized controlled trial situated in Kenya, which evaluated 3,489 girls, and did not find that menstrual product distribution improved absenteeism, nor did education. Studies from Ethiopia also reported unclear findings, as studies were conducted using a combination of WASH and menstrual health education interventions. Harerimana et al.'s (2025) scoping review of various studies on this topic also emphasizes the inconsistent interventions and limited evidence on the long-term sustainability of the proposed solutions. Interventions that were unsustainable and incomplete include reusable pads that were distributed without enough resources like water, soap, underwear, privacy, and training; inconsistent reusable pad distribution; education programs with low retention rates (23% still

lacked MHM knowledge after intervention); and programs that failed to consult women and girls and therefore could not target important problems.

Further Suggested Research

There is a lot of further research that could be crucial in advancing our understanding of period poverty and how to solve it. First, more research is needed on WASH improvements. Studies could include testing to see if training local volunteers is possible in countries where people must work long hours daily, yet cannot afford necessities. Studies could also be conducted in a more longitudinal manner on improving WASH and comparing results from before its implementation and after. In particular, many studies were multi-component studies that tested for multiple interventions, so controlled longitudinal studies testing just one intervention could be effective in identifying which intervention would be most productive. Second, more studies are needed to investigate the effect on household incomes and water collection in comparison with the rate of bacterial infections (e.g. UTIs) among women and girls in sub-Saharan Africa. Studies could focus on households that lack piped water, making manual water collection a prerequisite. The research should focus on any changes in household income due to lost labour from women and daily water collection volumes through a longitudinal, approximately 6-month-long study. Third, social barriers including language and internet access could be further researched. Studies could test interventions related to overcoming these barriers. The AGYW could only reach English-speaking villages in Cameroon because of language barriers in French-speaking regions, so more research should be conducted about how NGOs can be organized to bypass linguistic barriers and help girls and women in SSA with menstruation stigma, education, or the provision of resources.

CONCLUSION

This literature review on period poverty in sub-Saharan Africa examined the interconnected barriers, such as financial constraints, inadequate WASH infrastructure, stigma, and insufficient government support. In the settings reviewed, widespread poverty has been consistently associated with the unaffordability of menstrual products for many girls and women. Studies also demonstrated an association between financial constraints and use of improvised products to manage menstruation, along with possible health effects. Lack of bathrooms, water filtration systems, sanitation services, and waste disposal systems continues to exacerbate period poverty across the region, as this infrastructure is essential for managing and maintaining proper menstrual hygiene. This lack of proper facilities for menstruating girls is visible in schools as well, where studies highly associate that absenteeism may be especially high during menstruation. Discrimination against women and girls is correlated with stigma about period poverty, which has been presented in cases that physically isolate women from men and important tasks due to a cultural perception of menstruation as dirty. Stigmatized treatment of women and girls has been observed to hinder their ability to seek the needed help and resources during menstruation.

Interventions to address period poverty in SSA have yielded mixed results. Educational interventions have been associated with promising results for improving menstrual health knowledge, but their effectiveness has been shown to vary across cultural and linguistic conditions. Further research should examine whether the inclusion of local educators, such as female teachers and mother groups, can consistently yield improvements in rates of menstrual knowledge to determine the effectiveness of educational interventions in other regions of sub-Saharan Africa. Research by Chidya et al. (2024) combined multiple interventions, so reductions in absenteeism could not be definitively attributed to increased product accessibility. Further research could be more explicit in ensuring that interventions either do or do not depend on other factors, such as improving WASH infrastructure, to establish definitive, causal conclusions as to what combination or singular intervention is most effective. This study contributes to the growing literature on period poverty in sub-Saharan Africa by providing a synthesis of the causes and potential solutions of this issue, and by comparing and contrasting studies to examine current gaps in interventions, and suggesting key further research.

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