

# Education and Skills Building

## Technical Brief



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# Key messages



- Existing evidence points to multiple underlying contributing factors relating to menstrual health and educational attainment, such as lack of menstrual products, lack of school-based water, sanitation and hygiene (WASH) facilities, lack of pain management relief products and factors such as shame and stigma related to menstruation or socio-cultural social norms. Their relative weight may differ across variables such as geographical location, age and socio-economic status.
- Students and pupils who menstruate lack accurate information about menstruation and menstrual health, resulting in feelings of unpreparedness upon reaching menarche. Furthermore, students and pupils who menstruate (especially adolescent girls) rely on multiple sources for information, with schools and teachers being a primary provider of knowledge regarding puberty and menstrual hygiene.
- However, there are still groups of students who remain uninformed about menstrual health. Understanding these specific groups and how to reach them is essential for creating tailored and effective menstrual health interventions, which should target out-of-school youth.
- Stigma related to menstruation can negatively affect women, girls and people who menstruate. Furthermore, it was suggested that fear of bullying and internalized shame, are constraining factors that influence school attendance and educational performance of students who menstruate in education settings, reflecting sometimes deeply rooted and pervasive socio-cultural beliefs or norms centred on menstruation.
- Comprehensive sexuality education (CSE), which includes menstrual health and puberty education, is generally effective for promoting good menstrual health, and should be adapted to local contexts, languages and reflective of local power structures to be effective.

## Introduction and background



Menstruation plays a vital role in the reproductive health of individuals who were assigned female at birth. Despite being a natural and necessary biological process, the relationship between menstrual health and education and skills building is important to understand, as there is evidence to suggest that impediments to good menstrual health can lead to adverse educational consequences such as school absenteeism, reduced in-class participation, as well as stress and anxiety. As articulated by Hennegan et al. (2021), menstrual health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in relation to the menstrual cycle. It includes the ability to manage menstrual hygiene effectively and

access to safe and affordable menstrual products and facilities to dispose of used menstrual materials. Additionally, menstrual health involves access to accurate information and education on menstruation and related topics, as well as the ability to participate fully in all aspects of society, free from the stigma and discrimination associated with menstruation. There is a limited, but growing body of evidence on how menstrual health interventions in schools impact the education, health and psychosocial outcomes of students who menstruate. Acquiring knowledge about how and why certain interventions reach their intended goals is important, as policymakers and researchers are looking to replicate 'what works' and adapt to each unique context.

To explore this and other, interrelated topics with menstrual health, the UNFPA East and Southern Regional Office (ESARO) and the African Coalition for Menstrual Health Management convened menstrual health symposia in May 2021 and May 2023. These symposia have generated a breadth of knowledge about the status of menstrual health in the African context, which have informed the findings and recommendations in this technical brief (UNFPA, 2021; UNFPA, 2023). During the 2023 symposium, a dedicated session was held on 'Holistic Menstrual Health Interventions in the Education Sector: The Journey Towards Institutionalization and Sustainability', which showcased examples from South Africa, Ivory Coast and Kenya of how menstrual health in the education sector is or should be addressed in a collaborative way by multiple stakeholders, emphasizing the need for strong national ownership.

## Purpose and scope

At the 2023 Africa Menstrual Health Symposium, stakeholders came together to make substantial strides in understanding and planning for comprehensive, multi-sectoral menstrual health interventions of the future. This technical brief provides an up-to-date summary of key evidence related to menstrual health with the main aim of presenting available information on menstrual health and education and skills building in Africa. It also gives an overview of how menstrual health, or the lack of menstrual health, impacts education and skills building and how menstrual health in turn is impacted by the physical and emotional settings in which learning happens. Additionally, the brief addresses comprehensive educational interventions that aim to increase knowledge and build skills around menstrual health.

This technical brief also builds upon and serves as an update of key literature on menstrual health focused on the region namely, Siri Tellier and Maria Hyttel's 2018 Menstrual Health Management in East and Southern Africa: Review Paper (Tellier, Hyttel, 2018), the Technical Brief on the Integration of Menstrual

Health into Sexual and Reproductive Health and Rights Policies and Programmes (UNFPA ESARO, 2021) and the 2021 Report of the Africa Symposium on Improving Menstrual Health Management (ACMHM, UNFPA, 2021).

## Methodology

This technical brief presents the findings of a rapid literature review of academic and grey literature using a scoping review methodology, with a focus on the period from 2018 to 2023. To conduct a rapid literature search, search terms were used through relevant websites, databases, or search engines such as PubMed and Google Scholar. Relevant studies and/or programmes conducted in the African region<sup>1</sup> were included in the search and inclusion/exclusion criteria applied. Information extracted from the rapid review was analysed and grouped thematically and key findings are presented below.

While this methodology has limitations, given the general scope and limited resources, it provides an overview of recent literature, gaps in existing evidence, and recommendations for future implementation derived from existing literature. The brief highlights the importance of addressing menstrual health as part of efforts to promote CSE throughout Africa. Furthermore, this brief uses the term 'women, girls, and people who menstruate' or 'pupils/students who menstruate,' to be inclusive of all individuals who do not identify as female, but still experience menstruation.

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<sup>1</sup> Countries of relevance included the 54 African countries covered by UNFPA regional offices at the time of review.



# Overview of the current evidence



## The relationship between menstruation and school absenteeism

Based on the reviewed literature, several studies and reports conducted within the past five years, with a focus on the African context, highlight a significant correlation between menstruation and school absenteeism. Notably, studies such as Alor et al. (2022), Hennegan et al. (2021), Benschaul-Tolonen et al. (2019) and Ivanova et al. (2019) provide relevant insights into this relationship. Among these studies, a cross-sectional study conducted in Ghana found that 27.5 per cent of school absenteeism was attributed to menstruation-related school absenteeism at the surveyed school (Kumbeni et al., 2021). Similarly, a cross-sectional study in Nigeria found a significant association between school absences among girls and their inability to practice menstrual hygiene (Wada et al., 2021). Another mixed-method study in Tanzania discovered that a higher percentage of students from government schools (17.2 per cent) compared to non-government schools (14.6 per cent) missed school during menstruation (UNICEF, 2021). Moreover, in Uganda, menstrual pain and lack of pain management skills or access to effective pain management were identified as considerable factors leading to school absenteeism (Tanton et al., 2021). These findings collectively emphasize the link between menstruation and school attendance, shedding light on the various factors and their impact within the African context.

Additionally, a study conducted by MIET AFRICA identified several key factors contributing to girls' absenteeism from school. These factors include a lack of access to menstrual health products, insufficient WASH facilities, the presence of menstrual-related stigma and experiences of pain and discomfort during menstruation. The study highlights how these factors can significantly impact girls' school attendance. The same study shows absenteeism can often be due to menses-related pain and general feelings of being unwell, as well as fear of leakage of menstrual blood, especially when there is limited access to menstrual products (Beksinksa et al., 2022). This is consistent with the findings from another study that reported,

apart from physical symptoms and product access, girls may also miss school due to embarrassment, secrecy and fear of leakage or teasing (Crankshaw et al., 2020).

While the association between menstruation and absenteeism in educational settings is widely recognized, ongoing empirical research is important to fully understand the extent and impact of these issues. Hennegan et al. (2021) have emphasized the importance of identifying the specific underlying causes of menstrual health-related absenteeism in each country and context. Understanding these causes is essential for informing policy decisions and designing effective programmes that address the unique challenges faced by girls and women in different settings. By pinpointing the contextual factors influencing absenteeism, policymakers and programme implementers can develop targeted interventions that address the root causes and improve educational outcomes for menstruating individuals.

In addition to the aforementioned factors, there are other significant considerations that contribute to absenteeism and menstrual anxiety among women, girls and individuals who menstruate. The literature reviewed also revealed that a comprehensive understanding of the reasons behind school absences during menstruation requires examining factors beyond privacy and WASH infrastructure, as highlighted by recent research. Research has indicated that while the lack of privacy and poor WASH infrastructure in schools are commonly attributed as key factors influencing school attendance during menstruation, they do not provide a complete explanation. A UNICEF mixed-methods study conducted in Tanzania (2021) utilized surveys and qualitative interviews to explore the reasons for missing school during menstruation. The findings revealed that 74 per cent of the surveyed students cited pain and discomfort as a significant factor contributing to their school absences. Additionally, other reasons included the lack of menstrual materials (42 per cent), fear of embarrassment due to visible stains on clothes (34 per cent), absence of changing rooms (34 per cent), and inadequate and unclean toilet facilities (26 per cent).

Moreover, a relationship between material constraints related to managing periods and school absenteeism has been established. For instance, a cross-sectional study in Ghana found a significant association between the use of menstrual absorbents or sanitary pads and school attendance (Kumbeni et al., 2020). Similarly, another study demonstrated that providing sanitary pads can lead to a reduction in absenteeism by 5.4 per cent (Benshaul-Tolonen et al., 2019). These findings underscore the importance of considering the availability and accessibility of menstrual products as a crucial factor in addressing school absences during menstruation. Therefore, while privacy and WASH infrastructure undoubtedly contribute to the challenges faced by menstruating individuals in schools, a comprehensive understanding of the issue necessitates recognizing the significance of menstrual pain, access to menstrual materials, fear of embarrassment and the overall impact of material constraints on attendance. By addressing these multifaceted factors, comprehensive interventions can be developed to mitigate absenteeism and promote a supportive educational environment for menstruating individuals.

### Beyond absenteeism – exploring other menstrual health and education interrelations

Having access to appropriate toilet facilities is a crucial aspect of maintaining good menstrual hygiene and overall menstrual health. In Tanzania, a mixed-method study found that there was one toilet or pit-latrine available for every 62 pupils/students on average, which is much higher than the national guidelines for WASH for schools, which has set the ratio goal to 20 girls per toilet and 25 boys per toilet compartment when a urinal is available. There were considerable variations in the ratios according to different parameters, such as urban versus rural settings and public versus private schools (UNICEF, 2021). This finding has also been found in Ghana, where a mixed-method study found that it was less likely that students who menstruate were practicing good menstrual hygiene management if they were in public schools or in rural areas of the country (Kpodo et al., 2022).

The absence of adequate facilities for practicing menstrual health can contribute to heightened feelings of anxiety. Furthermore, the fear of period teasing and the associated shame can significantly hinder the attendance and active participation of students who menstruate in school activities. In a cross-sectional study conducted in Tanzania, it was found that 33 per cent of the surveyed girls participated less in the classroom during their periods due to feelings of shame, while 16 per cent did so out of fear. Notably, nearly half of the sample had left school early at least once during their last menstrual cycle (Benshaul-Tolonen et al., 2020). Additionally, Tanton et al. (2021) found that lower levels of knowledge about menstruation among Ugandan schoolgirls was related to less reported anxiety related to menstruation. This study also found that there was more anxiety related to menstruation among the menstruating girls that were not living with their mother, and among those that believed menstrual myths related to uncleanness and social taboos.

A study which examined the prevalence of corporal violence within schools among students aged 10 to 20 in a conflict-affected community in South Sudan, and investigated the impact of violence, mental health and perceptions of safety on hope<sup>2</sup>, found that girls had significantly lower level of hope than boys in school (Blackwell et al., 2023). Further, the study found that there was no significant association, statistically or practically, between child hope and gender discrimination or stigma surrounding girls' menstruation. These findings suggest that girls' lower levels of hope may be influenced by a combination of individual, family and community factors that extend beyond the commonly examined indicators of stigma related to menstruation and discrimination by teachers against girls (Blackwell et al., 2023).

Most literature reviewed describes how girls learn about menstruation from multiple sources, but the content of what they learn can in some contexts perpetuate stigma and shame around menstruation. This can lead to the prevalence of socio-cultural anxieties surrounding menstruation. Stoilova et al., (2022) found that schoolgirls in Tanzania receive information about menstruation from an average of 4.5 sources. However, some women, girls and

2 Child hope is used as an indicator for overall child well-being and resilience in this study.

people who menstruate remain uninformed about menstruation and menstrual hygiene management, but the study did not account for whether this subgroup was pre or post menarche when responding.

Although students do have knowledge about menstruation, many studies have reported that students who menstruate have none, some, or little knowledge about menstruation pre-menarche and feel unprepared, shocked and afraid when experiencing their first period (Chinyama et al., 2019; Shah et al., 2019; Mohammed and Larsen-Reindorf, 2020) and experience negative emotions resulting from menstruating in school settings (Aluko et al., 2020). It was further reported that in refugee camps in Uganda, parents and their children do bridge topics of puberty and menstruation (Ivanova et al., 2019). However, in rural Gambia, mothers' express difficulties in talking with their children about menstruation and are reluctant to include boys in such topics (Shah et al., 2019). The same study found that teachers are a main source of information about menstruation, including the biological aspects of menstruation such as the menstrual cycle. However, the information provided by teachers is often focused on physical aspects of managing menstruation and focused on the use of menstrual absorbents. Also, teachers may in some cases perpetuate commonly held beliefs about uncleanliness (Nur Kara et al., 2022). Another study in schools in Taraba State in Nigeria, found that mothers were the primary source of information about menstruation for the surveyed students, and that 76.1 per cent of girls knew about menstruation before reaching menarche (Nnennaya et al., 2021).

In the Ghanaian context, Ghyasi-Ghamera et al. (2022) discovered that urban adolescent girls and young women with primary education levels are more likely to exclude themselves from activities while menstruating compared to other groups of girls with lower educational attainment. Interestingly, this finding contradicts previous studies conducted in different contexts, which have suggested that some level of formal education equips girls with sufficient knowledge about menstruation. As a result, the authors emphasize the need to integrate accurate and factual information about menstruation into school curricula, as well as regular health promotion and educational

programmes in communities. Such initiatives can play a crucial role in educating adolescent girls and young women and raising awareness about menstruation and its hygienic management.

Analysing menstrual health policies in educational settings, including those in Kenya and Senegal, Olson et al. (2022) have highlighted certain shortcomings. While these policies acknowledge the significance of addressing menstrual health and education, they often lack comprehensive measures to tackle stigma effectively. Menstrual education, although incorporated into the policies, tends to primarily focus on hygiene, indicating the necessity for more extensive educational initiatives.

**To combat stigma successfully, menstrual education should go beyond teaching product usage and strive to promote menstrual literacy.**

This approach empowers individuals to make informed choices and eliminates the urge to conceal their menstrual status while attempting to conform with non-menstruating individuals. Furthermore, these policies should address the potential hesitance of teachers to discuss menstruation openly in the classroom (Fennie et al., 2023).



## Educational interventions and menstrual health – what works?

Some research has been conducted on effective menstrual health education initiatives, including interventions that aim to build menstrual health skills. These initiatives range from standalone components or are included in CSE programmes. Schools provide a natural arena in which to ensure that all learners receive access to CSE, including menstrual health education. However, placing too much emphasis on interventions in schools can exclude out-of-school children, and policies and programmes should assess how to reach this group with quality educational interventions about menstrual health. Additionally, there is an unmet need for CSE, including puberty education and learning about menstrual health, as a study of a menstrual health intervention in Zimbabwe revealed (Temboet.al, 2022).

### A menstrual health educational intervention in Zimbabwe demonstrated a high degree of effectiveness, partly due to its adaptation to the local context.

Language and examples provided in written materials were well-suited to the Zimbabwean setting, contributing to the intervention's success (Light et al., 2021), demonstrating the need for localization of materials to contribute to skills building through interventions.

Research from Zambia shows that fear of experiencing period teasing by boys hindered girls in participating in physical activities and attending school (Chinyama et al., 2019). The authors pointed out that boys should be included in interventions aiming at improving girls' experience with menstrual health in schools, to combat period teasing, stigma and anxiety among students who menstruate and to increase boys' knowledge and ability to act as compassionate peers for their fellow students who menstruate (Tanton et al., 2021). Findings by Benshaul-Tolonen et al. (2020) in Tanzania, also show that boys in general receive less interpersonal and formal education about periods than

#### Good practice – multidimensional interventions

A study of a comprehensive menstrual health intervention in Uganda found that a lower proportion of girls reported anxiety about their next period after the implementation of a comprehensive intervention, which included individual and behavioural intervention components, as well as pain management, kits for menstrual hygiene management and improvement in toilet facilities at the school (Kansiime et al., 2020).

girls. As a response to these needs and information gaps, advancing CSE initiatives that target all students, including boys, is needed. These CSE initiatives that incorporate targeted curricula to address the knowledge gaps of boys in relation to menstruation and CSE should be further developed (Tanton et al., 2021). Such sentiments were also echoed during the 2021 and 2023 menstrual health symposiums (UNFPA, 2021; UNFPA 2023).

Many countries have chosen to implement structured approaches to peer-learning to build skills around hand washing and sanitation, for instance by the establishment of national programmes for hand washing and other programmes. In Tanzania, school WASH clubs have been established, among which some incorporate menstrual hygiene management into their efforts (UNICEF, 2021), to build skills around menstrual health and menstrual hygiene. Studies have found that peer-led trainings are sustainable ways of providing menstrual hygiene management trainings in schools (Kansiime et al., 2021; Nalugya et al., 2020), and to build skills of students.

In Zambia, the provision of menstrual health products at a community-based centre which provided peer-led comprehensive sexual and reproductive health services, and access to menstrual health products through an incentive system, showed that adolescent girls felt more comfortable accessing products in a peer-led space than in shops. Girls interviewed also expressed considerable discomfort having to revert to using cloths as the COVID-19 pandemic forced the centre to close (Hensen et al., 2022). This underpins

findings relating to comprehensive menstrual health education which may change expectations among women, girls and people who menstruate. Alhelou et al. (2022) have pointed to how menstrual health interventions and policies tend to centre on girls in school, which in turn can create gaps in said policies and interventions with regards to adult menstruators and out-of-school youth. Within the African context, UNFPA ESARO has published a resource package on CSE for out-of-school young people (2018), to provide a flexible tool that can be implemented in settings outside of schools to build skills on CSE, including menstrual health. The resource package has since been adopted by several countries in the region and adapted the materials to national contexts to provide CSE, including menstrual education, to out-of-school young persons.

### Good practice – targeting boys and men as partners in combatting stigma

Days for Girls has developed a comprehensive curriculum targeting boys and men, aiming to make them 'partners in efforts to shatter the stigma and limitations associated with menstruation and often influence decision making.' The curriculum includes topics such as puberty, reproduction and the menstrual cycle, as well as discussions on power, strength and respecting and supporting menstruators. (Days for Girls, 2023)

## Gaps in the existing evidence



The rapid review of existing evidence revealed the link between periods and school absenteeism has been studied empirically, however a deeper understanding of the various reasons, and the scope of each reason for menstruation related absenteeism requires further exploration. Notably, there is no substantive evidence related to the extent to which menstruation leads to students leaving school early. Furthermore, research that relies heavily on school records could have misleading conclusions, as records do not always reflect actual numbers of absenteeism (Benshaul-Tolonen et.al, 2019). Studies have found that missing entries may correlate with absenteeism, and such attendance records should therefore be cross validated before designing programmes and interventions, to ensure that policy and programme responses are well-designed.

As summarized above, multiple studies have found that many pupils have significant knowledge about menstruation, and that there are multiple sources of information that lead to this knowledge, such as teachers and parents. However, research also highlights that many feel uninformed pre-menarche, and that there are minorities within and outside

of schools that lack accurate information about menstruation and menstrual health. This includes out-of-school young persons, students with disabilities, gender and sexual minorities and students in schools that do not implement CSE curriculums. Therefore, groups should be further identified, and researchers should explore how they can be reached with timely and accurate knowledge.

Menstrual health curriculums should be studied, and the effects of providing different types of menstrual health educational interventions, which range from improving WASH infrastructure in schools, to targeting out-of-school youth with CSE or information, should be further explored and developed (Shannon et al, 2021). Additionally, more evidence is needed to understand aspects such as the effect of biophysical teachings, at which age to engage with students on menstrual health, or the effects of programmes that target bullying, prevailing norms and stigma related to menstruation. This will help in identifying which types of educational interventions on menstrual health prove effective to build skills on menstrual health among students, women girls and people who menstruate.

# Conclusion and recommendations



Although the topic of menstrual health and education and skills building has received more attention than other aspects of menstrual health, there are still gaps in research that need to be addressed. Evidence points to an interrelation between menstruation and academic performance such as absenteeism and concentration, but the underlying causes and their interplay needs further research. As more educational interventions on menstrual health are tried and tested, there is a growing body of evidence on what works, which should be further explored in research. This technical brief and following recommendations build

on previous findings and recommendations made during the 2021 and 2023 Africa menstrual health symposia.

Interventions to improve menstrual health in education-settings, and interventions aimed at providing education about menstrual health, need to be based on evidence that is context-specific and cross-validated. However, the literature points to multiple recommendations that can be utilized in research, policy advancements and to inform educational content and programming/interventions:

- Educational interventions and menstrual health policies should be developed based on context-specific knowledge, including on stigma and socio-cultural beliefs about menstruation (Olson et al., 2022). Researchers, policymakers and education practitioners should be aware of the existing gaps in evidence when designing programmes and policies.
- Learning about and providing tools for pain management should be included as a dimension in menstrual health interventions (Stoilova et al., 2022; Tanton et al., 2021).
- Boys should be included in interventions aiming at improving girls' experience with menstrual health, as period teasing by boys is a contributing factor to absence from education and public life while menstruating (Tanton et al., 2021; Kansiime et al., 2020; Shah et al., 2019).
- Taking multipronged or multisectoral approaches to menstrual health education and skills building interventions is essential for the interventions to be effective and sustainable, and to counteract negative experiences with menstruation or internalization of negative beliefs about menstruation among women, girls and people who menstruate internalize beliefs. That means addressing broader issues related to dimensions of literacy, socio-economic status, stigma, shame and taboos, relations among peers and with parents, in addition to biophysical interventions such as provision of menstrual health products and improving WASH infrastructure (Kansiime et al., 2020; Hennegan et al., 2019; Ivanova et al., 2019; Kemigisha et al., 2020).
- Drama skits, movies/series, written materials and games are all examples of interventions that can be tailored to context and be designed to tackle societal issues and build skills. Additionally, individual counselling or group peer-led counselling sessions can be utilized to explore challenging topics such as bullying, fear of leakage, shame and sexual violence. (Kansiime et al., 2020; Hennegan et al., 2019; Nur Kara et al., 2022).
- More research is needed on the interplay between shame, stigma and fear, and biophysical components of menstrual health in schools. The interrelation between different factors should be further researched.

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