



Amplifying the voice of adolescent girls to improve school attendance during menstruation

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Abstract

Menstruation is an inevitable but significant process in the life of adolescent girls that requires the support of both school and family for a successful navigation. Around the age of 12 when girls start menstruating, they are preparing to begin secondary education. Unfortunately, research shows a direct link between the onset of menstruation and absenteeism from school. Actions to transform schools into more enabling spaces for menstruating girls are undeniably critical. This qualitative study involved 7 volunteer girls from grade 7 to find out how they could improve their own situation, develop resilience and cope with menstruation. The girls who were willing to participate were chosen from a primary school in Meru County, Kenya, where the first author has an ongoing relationship with the management. The study employed a participatory action research design. Data was generated using art-based methods and transcriptions of group meetings. In cycle 1 participants explored their experiences of menstruation while attending school, and in cycle 2 they generated ideas on how the school could support them to address the negative aspects they identified. They incorporated their recommendations in a policy brief presented to school management to help them take action to ensure a supportive and enabling environment for menstruating girls. The findings will be of interest to other primary schools who wish to improve the support they provide to adolescent girls to keep them at school.

Keywords: Adolescents; menstruation; school attendance; girls; supportive & enabling environment

Background to the study

The beginning of menstruation is a critical stage in the lives of girls as it marks the transition from childhood to adulthood and represents an opportunity to support girls and prepare them for menstruation without shame or fear (UNICEF, 2019). Menstruation usually sets in at the age of 12

(Sommer et al., 2021) when girls are about to enter secondary school. The Kenyan Constitution advocates for the right to basic and quality education for learners, high standards of health, clean environment, access to high standards of hygiene and sanitation as well as safe and adequate water (Government of Kenya, 2020). The availability of a safe water supply to promote

hygiene, social support, and the provision of adequate sanitation facilities in schools is essential to ensure the rights to basic education and well-being of pupils (UNICEF, 2019). For schools to promote the well-being of pupils and reduce absenteeism, water, sanitation and hygiene (WASH) facilities, especially for adolescent girls, should be private, safe, clean, and culturally and gender appropriate in order to promote menstrual hygiene management, self-esteem and a conducive environment for learning (Sommer et al., 2021).

Furthermore, parents and teachers should engage girls in open discussions about the topic to adequately prepare them for menstruation, which normally does not occur due to the secrecy and shame associated with the process (Mchenga et al., 2020). The right to schooling for girls is compromised if they do not have access to adequate facilities and materials to support menstruation (UNICEF & WHO, 2023). Appreciating that menstruation is a normal part of life for adolescent girls and understanding its effective management could increase adolescent girls' level of confidence and school attendance when in their menstrual cycles, which is the focus of this study.

Adolescent girls in schools are likely to be more comfortable when the learning space caters to their specific needs when menstruating (Miiri et al., 2018). However, in underserved or rural areas, schools do not always have running water; toilets are not always conducive to privacy; girls cannot afford sanitary towels and, if they can, disposal is problematic, which affects their self-esteem and leads to absenteeism. Further, girls lack the understanding required to navigate menstrual cycles successfully, particularly their first menstruation, which attracts shame and fear of menstrual material leakage (Vashisht et al., 2018). Girls cannot thrive in an environment where natural processes like menstruation are viewed as taboo subjects. The support of parents and teachers during menstruation has been found to be a crucial approach to reducing anxiety and fear, ensuring that girls have the appropriate knowledge

related to menstrual hygiene (Mahfuz et al., 2021). However, some teachers find it difficult to comprehensively teach sensitive topics like menstruation and others lack the training required for the implementation of menstruation knowledge and awareness sessions in schools. Appreciating that menstruation is a normal part of life for adolescent girls and understanding how to ensure its effective management could boost adolescent girls' level of confidence during menstrual cycles. Menstruation is, however, too often surrounded by fear, shame, and humiliation, suffering in silence, stigma, embarrassment, and unnecessary secrecy (Mukherjee et al., 2020; MacLean et al., 2020). Fear and silence surrounding menstruation could hinder adolescent girls from realising their full potential and sharing their intimacy as humans in society (Smiles et al., 2017). Therefore, it is necessary to find out from girls the menstruation-related discomforts they encounter in schools and how they deal with them as a way to find solutions that can promote comfortable navigation of their monthly cycles.

A holistic understanding of menstruation requires that the voices of the girls be heard, so that the school and parents can better support the girls to navigate their monthly cycles with ease and avoid unnecessary absenteeism. Talking to girls and letting them convey their experiences and related needs on menstruation could be a viable solution to making school a more comfortable place for girls, which was the concern of this study. The study seeks to find out how primary school adolescent girls can improve their own situation and bring about change to ensure they are not deterred from attending school during menstruation. In line with the participatory paradigm (Wood, 2020) which guides this study, solutions to problems should be generated by those most affected by them, but to date little research has focused on the voices of adolescent girls, and this study aims to rectify that by exploring the question "how can primary school girls improve their own situation and bring about change to ensure they are not deterred from attending school during menstruation."

The findings of the study could be significant in informing policies on ensuring an enabling environment for adolescent girls in school and act as a baseline for further research in this regard. The article begins with an explanation of how the social ecological resilience theory informed the study, followed by an overview of the research methodology, before discussing the findings and drawing conclusions.

Theoretical framework

The study was guided by the Social Ecological Resilience Theory postulated by Ungar and Theron (2020), which explores the interconnection between resilience and ecological factors. The theory holds that resilience, or the ability to flourish in spite of adverse circumstances, is a combination of both personal and environmental factors. However, it places emphasis on the responsibility of social ecologies to provide access to and support to navigate helping resources. In this case, these ecologies would consist of parents and school. Resilience increases through minimising risk factors such as inadequate hygiene facilities and increasing protective factors such as the provision of disposal bins for sanitary towels. The theory presents various principles which form the foundation for the interpretation of ecological resilience construct: *cultural relativity* where the cultural norms around menstruation will contribute positively or negatively towards resilience; *complexity* that acknowledges the interaction between various systems impacting on the lives of the girls; *atypicality* where resilience is enhanced by challenging stereotypes and taboos related to menstruation; and *decentrality* which obligates the adults responsible for the girls to provide access to protective resources and minimise risk factors. Ungar's and Theron's (2020) theory provides seven principles which can be used to evaluate resilience enhancing or hindering factors in any environment. These include, access to material resources, a sense of identity, a feeling of belonging (cohesion), positive relationships, cultural adherence, a sense of social justice and a feeling of power and control. This theoretical

framework can guide and help us to make meaning of the data to steer interventions that improve the well-being of people who experience conditions that hinder resilience. Through participatory action research, girls can raise awareness of their social ecologies with respect to the support they need (Wood, 2020; Elderink et al., 2020). Resilience for menstruating girls in schools is therefore influenced by various factors including unmet needs, school environment and attitudes. Fostering resilience and improving the lived experiences of the girls will help improve their well-being and therefore make them less likely to stay away from school (Theron & van Rensburg, 2018).

Methodology

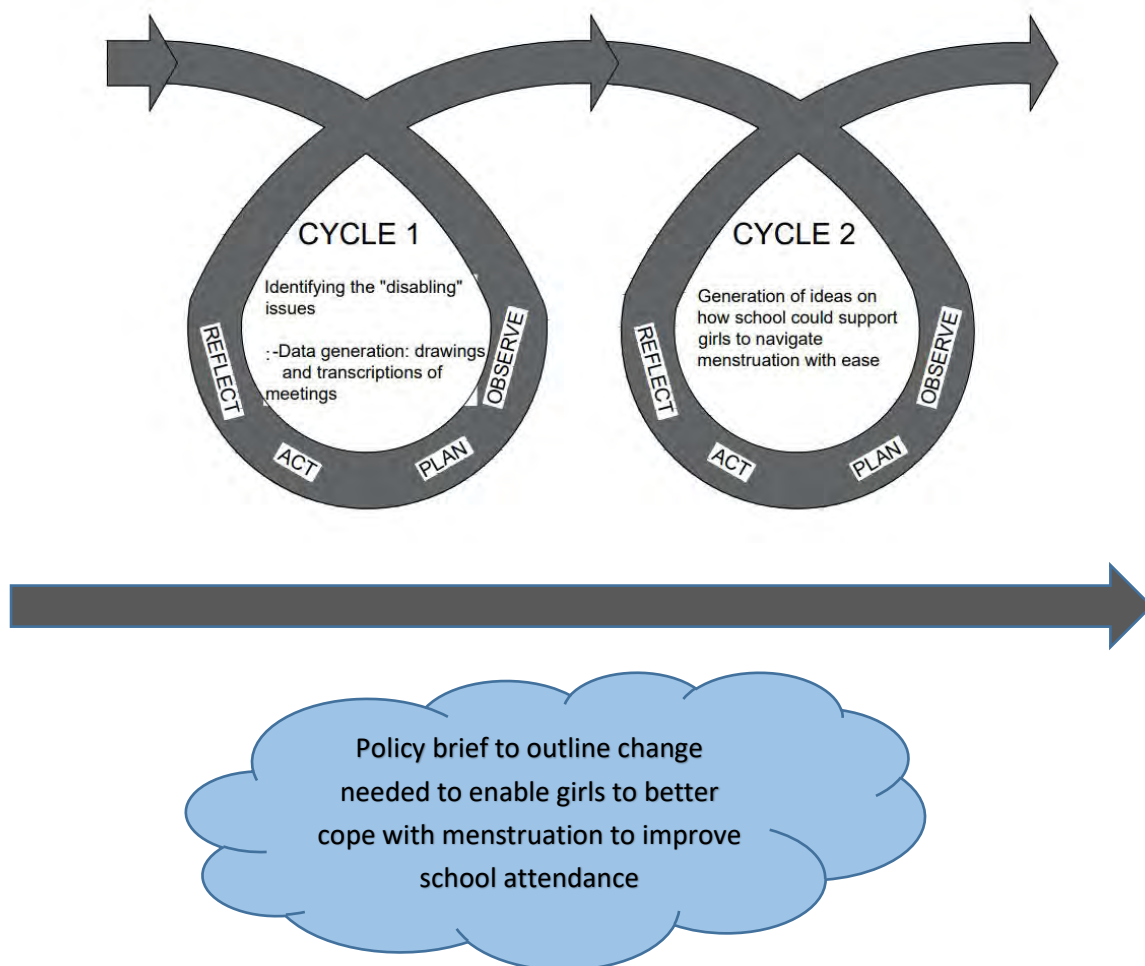
The study developed from a transformative paradigm (Mertens, 2017) that centred the needs and experiences of adolescents and linked the results to actions designed to make school a comfortable environment for menstruating girls. The participatory action research design (Wood & McAteer, 2023) involved creating a space for adolescent girls to voice their needs and experiences around menstruation and co-create ways to improve their situation by influencing change in school policy and practice. The first author selected a school from Meru County, Kenya, where she had a good relationship with the management. She explained to teachers the aim of the study and asked them to explain it in turn to the learners. The teachers helped identify seven girls in grade 7 who volunteered to participate in action research. The aim was to find out from the adolescent girls how they thought their situation could improve to ensure that they remained comfortable at school during menstruation. Data were generated in two cycles facilitated by the first author (see Figure 1) in 2024 through art-based methods such as visual artefacts and transcriptions of the audio recorded research meetings. In cycle one, she used symbolic drawing (Patel et al., 2021) to provoke experiences and promote discussion. She asked the girls to do drawings that represented things, situations or feelings that explained their

experiences about going to school when menstruating. The girls then gave the drawings a caption and wrote short explanations which they presented to the other girls in a group discussion. In cycle two, based on reflections on cycle one, the girls identified actions that they wished their social ecologies to take to help them feel more comfortable in school.

As authors, we thematically analysed the data through our theoretical lens to identify and examine patterns in the various data sets (Mathikithela & Wood, 2021). Process validity of the research data was ensured through

triangulation of various methods and explanation of the research process (Kaman & Othman, 2016). We incorporated the findings in a policy brief which was disseminated to the Board of School Management to inform them on the actions needed to ensure a supportive enabling space for menstruating girls. Ethical approval was sought from Meru University Institutional Research and Ethics Review Committee (MIRERC) Reference number: MU/1/39/28 Vol.3 (038). Permission to collect data from the school was sought from the County Director of Education. Figure 1 shows the research cycles.

Figure 1: Action research cycles



Presentation of Themes

Three themes emerged from the data analysis. Below, we report on the themes identified, supported by verbatim quotations and the visual artefacts generated by participants and relevant literature.

Theme 1: Poor teaching and learning about menstruation in school

In Theme 1, the girls felt that they lacked support to deal with difficulties during menstruation at school and that they did not always understand the information provided by the teachers. The girls reported experiences of pain, heavy bleeding, anxiety or shame during menstruation at school which they had not expected since this was not covered in the content they had been taught in Grade Five. Comprehensive details on the negative aspects of menstruation were not provided by the teacher. The participants reported that the teacher did not explain where the menstrual blood came from or why it was happening, so what they were taught left them anxious and worried about what menstruation would really be like when it started.

I was left wondering where the menstrual blood would come from. Would it be flowing like the way water flows from a tap or will it be in drops? I felt very anxious and wondered when it would come (Participant 3).

I came to clearly understand about menstrual cycle in grade six when I got my first menstruation. I woke up very sick with severe headache and stomach ache and unable to go to school. I had stained my dress in the morning and I thought I was going to die. I started crying, it was my sister who told me what was happening, she gave me a pad and helped me understand everything about menstruation (Participant 2).

The girls said that they did not know what to expect or how to manage the situation. Inadequate comprehension of the menstrual cycle caused anxiety for the girls as they were left confused

about what it entailed in reality and how it would affect them in school. Girls experienced physical discomfort, including cramps, bloating, and headache, which were potential distractions from learning and concentration in class. The experience of anxiety could affect the ability of girls to focus in class and severe pain could lead to missing school during menstruation (Hennegan et al., 2016).

Adolescent girls from poor families appeared to have more disrupted learning days compared to boys, which was associated with poor performance. In an academic year, girls could lose up to 20% of school days in a year due to lack of sanitary towels (Sachedina & Todd, 2020). Cumulatively, it could affect their performance. Anxiety at the start of menstruation depended on the mental preparedness of the girls. Girls who reach menarche adequately prepared could exhibit a more positive attitude towards menstruation (Ngomane & Sebola, 2023). Figure 2 indicates the experience of Participant 1 who experienced her first menstruation while at school. The experience of menstruation for ill-prepared girls affected their self-esteem and robbed them of their dignity, especially when classmates saw the stained dress with the boys in the class bullying and laughing at them. Self-esteem and sense of identity are resilience enhancing factors. Resilience theory by Ungar and Theron (2020) proposes systems and interventions which promote empowerment, knowledge and support which in the context of menstruation can enhance girls' ability to navigate menstruation courageously. For girls who experience periods, inadequate learning of menstruation can discourage resilience-building practices failing to mitigate low self-esteem impacts due to bad experiences from their social networks.

Such experiences increase fear and shame for the girls and girls would prefer to miss school for fear of repeated experience. According to resilience theory (Ungar & Theron, 2020), negative relationships lower self-esteem and reduce sense of identity both of which negatively affect girls' resilience. Girls should feel proud about the physical changes they experience, but instead feel

Figure 2: “I was not prepared; I stained my dress in class”

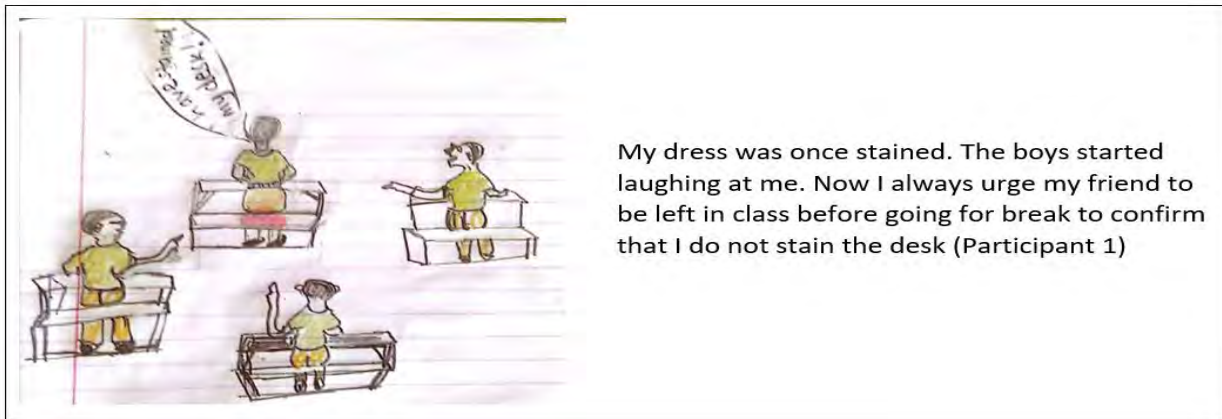


Figure 3: A girl worried about changing pads during the lesson



shame: and lack a sense of power and control over their lives which decreases their ability to cope in school when menstruating:

From the time I stained my dress in class, I get very anxious during menstruation in school. I always tell my friend to remain behind with me in class and check if my dress is stained before we go for break. I really feel stressed because of the intense pain. I hardly concentrate in class during menstruation (Participant 5).

Figure 3 demonstrates the anxiety the girls experience when attending class during menstruation. Girls who had bad experiences during menstruation in school found it difficult to concentrate in class and missed out on learning due to anxiety and panic. Participants reported that experiences of anxiety made them at risk of poor performance in school due to lack of

concentration compared to boys and other classmates who were confident and well prepared for menstruation. These findings concur with results obtained in a study by Bhandari et al. (2024) in Nepal who established significant variation in academic performance and engagement for girls during menstruation. Poor academic performance due to bad experiences can be related to a sense of injustice as girls are being discriminated against because of a natural occurrence, whose support is not provided. Figure 4 demonstrates a girl's concern about performance in school due to menstruation. In addition to these worries, girls felt stripped of their dignity.

Theme 2: School environment does not preserve dignity of the girls

Theme two focused on how participants perceived the school environment with regard to menstrual

Figure 4: Concern about academic performance

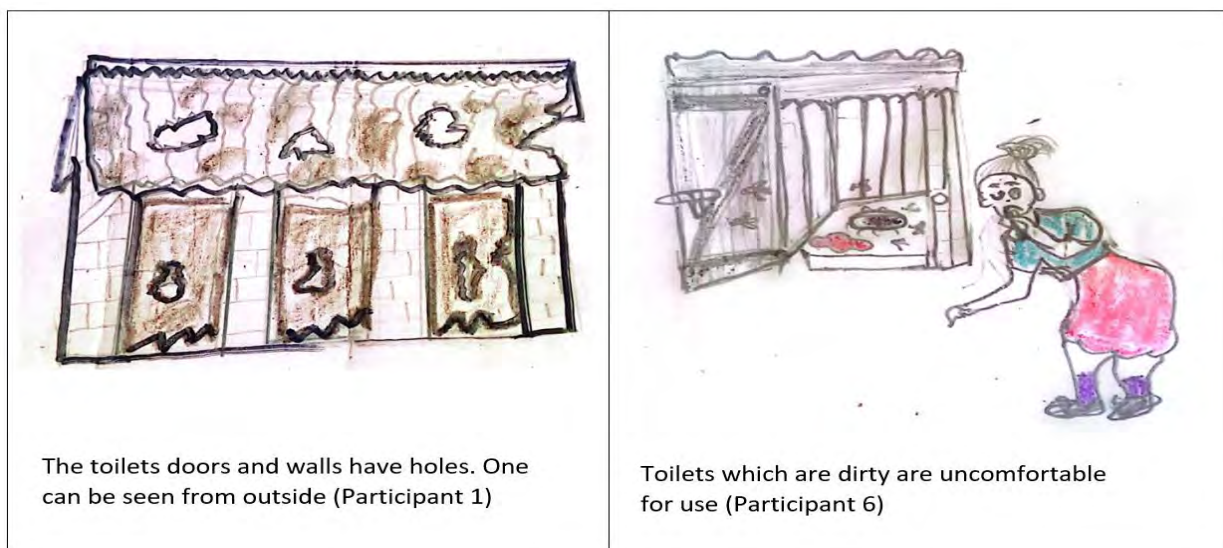


Mine is a monthly worry especially when I do not have a pad. Teacher said I sit for the exam again. I and my other friends wish we could perform better (Participant 4)

management (sanitation/hygiene facilities, comfortability and acceptability). Girls felt that although there were specific toilets provided for them in school, they were unfriendly for changing soiled pads (Figure 5 demonstrates the kind of toilets currently in use in their school). They said that water was not available all the time so they could not clean the toilets in case of accidental staining. The toilets remained dirty and other girls found them uncomfortable for use during menstruation. There were also complaints that toilets did not have bins for disposing of used pads and other sanitary materials and that there were gaps in the toilet walls which compromised privacy of the girls while changing pads. Girls became anxious because they did not know where to put

menstrual materials after changing in school, which aligns with the findings of Sommer et al. (2016). The participants reported that some toilets did not have doors and some of those with doors were not lockable which deprived them the desired privacy. Lack of lockable doors in girls' toilets promoted embarrassing moments when other girls opened the toilet doors as girls struggled to change pads which eroded their self-confidence and made them feel ashamed of mensuration. Low self-esteem and lack of self-care is a hindrance to resilience and so is lack of power over a natural process such as going to toilets which make girls ostracised rather than having a feeling of belonging. Figure 6 shows a girl leaning on an unlockable door as another is using the toilet

Figure 5: Poor condition of toilets in school



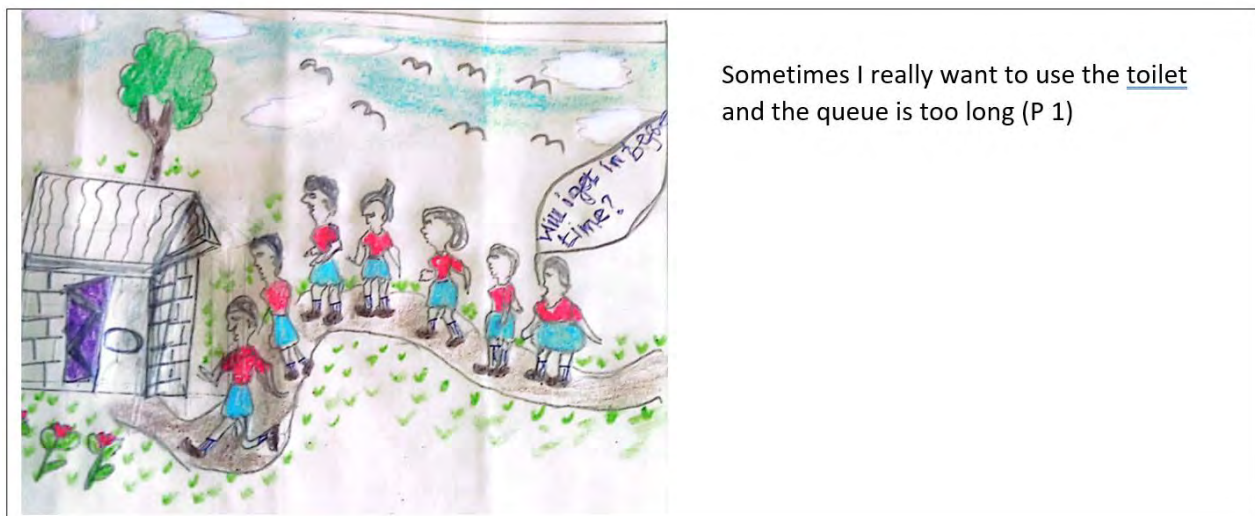
The toilets doors and walls have holes. One can be seen from outside (Participant 1)

Toilets which are dirty are uncomfortable for use (Participant 6)

Figure 6: Toilets rob the girls of their dignity



Figure 7: Girls queueing in the toilet, waiting for their turn



and a toilet without menstrual management bin. The girls said they had to go to toilets in pairs so that one would lean on the unlockable toilet doors as the other one was using the toilet:

Sometimes we have to go to the toilets in twos so that one can act as a guard at the door while the other one is changing pads because the doors have no locks and there

will be a queue of girls who need to use the toilets (Participant 7).

Regarding toilet adequacy, comfort and acceptability, participants reported that a toilet was shared by many pupils especially at break time. The toilet floors became wet and they had a bad smell so girls did not like using them especially during menstruation.

I went to the toilet on a day I had menstruation and stained the toilet with menstrual blood. There was no water to clean, a broom to sweep or sawdust to conceal the stain. Some girls were queuing to use the toilet and were asking me to get out and said I was taking too long in the toilet. It was very embarrassing because I finally got out and the next to get was a small girl who starting screaming that someone had been cut and was going to die because of breeding. The girls reported me to the teacher for spoiling the toilet (Participant 1).

Unsupportive relationships are hindrances to social justice and also affect the sense of belonging for girls. Screaming at girls due to natural process is unjust and affects growth of positive relationships between boys and girls in school.

Figure 7 shows girls using the toilets at break time.

The status of toilets as described by the participants are contrary to the Ministry of Education (MOE) (2018) and WHO (2019) guidelines which guide that school toilets should be shared at a ratio of 1:20 for girls and should have a self-cleansing mechanism for comfort. Access to inadequate sanitation and hygiene infrastructure gave girls limited chances of addressing their menstruation needs, which revealed how the school was failing in its duty to be a center of care for adolescent girls which led to

loss of dignity. According to Ungar and Theron (2020), resilience can be undermined when environmental factors in school such as toilets create discomfort for girls as they negatively impact their ability to manage menstruation with ease and with the dignity they deserve. Such an environment can increase the likelihood of absenteeism among girls and affect their academic performance and overall resilience. The findings suggested that when adults fail to fulfil their obligated responsibilities of providing access to protective resources as provided in government policies, the wellbeing of girls in school is compromised. Addressing such infrastructural challenges is important to foster resilience among schoolgirls and ensure that they navigate menstruation challenges with confidence.

When asked about their feelings when being taught topics on menstruation, shame featured strongly as shown in Figure 8.

Dignity can be compromised when girls experience shame as menstruation-related shame promotes internalised feelings of inadequacy and embarrassment. When social ecologies reinforce the idea or believe that a natural process such as menstruation is something to hide, girls' confidence gets eroded, making them feel compelled to hide their bodily processes.

Figure 8: Feelings of shame and discomfort in Grade 5 menstruation lesson

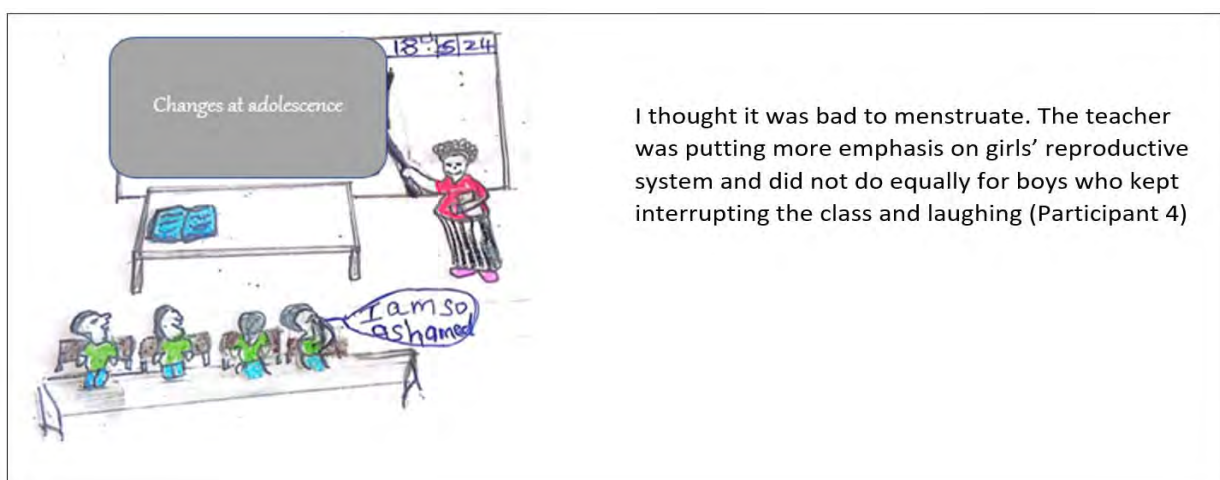


Figure 9: Specific toilet modifications desired by girls in school

We desire a modified toilet with the following features in school: 1- Water storage tank, 2-taps with running water, 3-a mirror, 4- lockable door, 5-tissue paper in a holder, 6-cleaning bucket and a mop, 7-walk path to toilets, 8- clean toilet compound, 9-complete roof and 10-vent pipe (Participants 4, 6 and 7)

Theme 3: Support required to enhance comfort in school during menstruation

The girls reported that they required support to navigate the process of menstruation with ease in school. Supportive ecologies enhance resilience among adolescent girls as they develop coping strategies, adaptability and self-esteem (Wood, 2020; Ungar & Theron, 2020) which promote mitigation of challenges associated with menstruation in schools. Figure 9 demonstrates specific toilets modifications that girls would like to have in school to enhance comfort during menstruation.

The participants suggested the kind of toilets they desired in school to enhance comfort during menstruation. A report by Sommer et al. (2016) acknowledged integration of resources, plans, budgets and monitoring of sanitation in school to better address the menstrual needs for girls. Other issues raised included the need for menstrual materials because they were expensive to buy and the girls' parents could not afford to buy them all the time. The girls said that when the parents did not have money to buy the menstrual materials, they encouraged the girls to stay at home. Participant 7 said that:

I don't miss school because I am on menstruation, I miss school because my mother does have money all the time to buy for me pads. I would rather be at home than

face the discomfort of lacking pads in school and risk being humiliated by the others especially boys (Participant 7).

The girls wished that the pads could be provided at school or affordable pads that could be reusable be introduced and provided bought by parents for reduce cost:

I wish girls could be provided with pads even if they were reusable. Our parents could not be struggling to buy new ones all the time (Participant 2).

The story shared by the participants during the meetings is not unique especially for girls from less privileged families where parents cannot afford to buy menstrual materials for the girls. Inadequate provision of menstrual materials exposed the girls to bullying and promoted low self-esteem (Sommer et al., 2016; Paudel et al., 2024) which could encourage them to miss school during menstruation. Participants reported that they would like schools to have enough emergency pads for use in case of need. The girls reported that although the school sometimes provided emergency pads, they have not been available for in school for the last year. They would therefore be allowed to go home and go to school the following day when parents have provided the pads. All the

participants said that they would not go to school if the parent did not have money to buy at least some form of menstrual material. Participants said,

For me, when I had emergency menstruation in school, I removed my sweater and used it as a pad but the teacher saw me and took me aside and provided a pad. I wish this could be done all the time to avoid embarrassment (Participant 1).

When my mother has no job, and she cannot afford to buy disposable sanitary pads, I use an old cloth, tissue paper or a handkerchief. I would like the school to provide menstrual management material especially when my mother is not able to provide so that I don't miss school (Participant 6).

The findings were similar to those reported in India by Sivakami et al. (2019) where poverty was reported as the leading cause of school absenteeism during menstruation. The study also associated absenteeism with lack of menstruation management items (specifically, access to sanitary pads) and proper physical facilities in school. Such should be provided to make school an environment more supportive for menstruating girls.

Girls, like all other children, spend a lot of time in school where they learn good habits related to safe sanitation and the need for safe learning environment. Sanitation facilities need to be clean, private for use, and have menstrual management options. However, due to economic challenges, budgetary allocation to schools fail to provide adequate toilets as guided by the Ministry of Education (2018) which could make school an uncomfortable learning environment for girls.

I would like the toilet conditions in our school to be clean so that there is no faeces, urine, blood, vomit, flies, maggots, or smell, in the toilet. Such conditions in the toilet make me stay at home during menstruation because it is very uncomfortable to change pads in the school toilets. I would ask the

school to schedule cleaning of toilets every day the way we clean classrooms (Participant 3).

Use of inadequately sanitised menstrual materials can expose the girls to the risk of getting infections, like urinary tract infections. Such materials may not be absorbent enough thus raising the chance of leaking and causing physical discomfort. The participants thus expressed that they would like to be supported with adequate menstrual management materials during menstruation and then they would not have anxiety. Instead, they would concentrate in class and attend all school activities well like other students. Inadequate access to the necessary resources during menstruation promoted unhealthy behaviours and made girls uncomfortable hence unable to cope. One participant said:

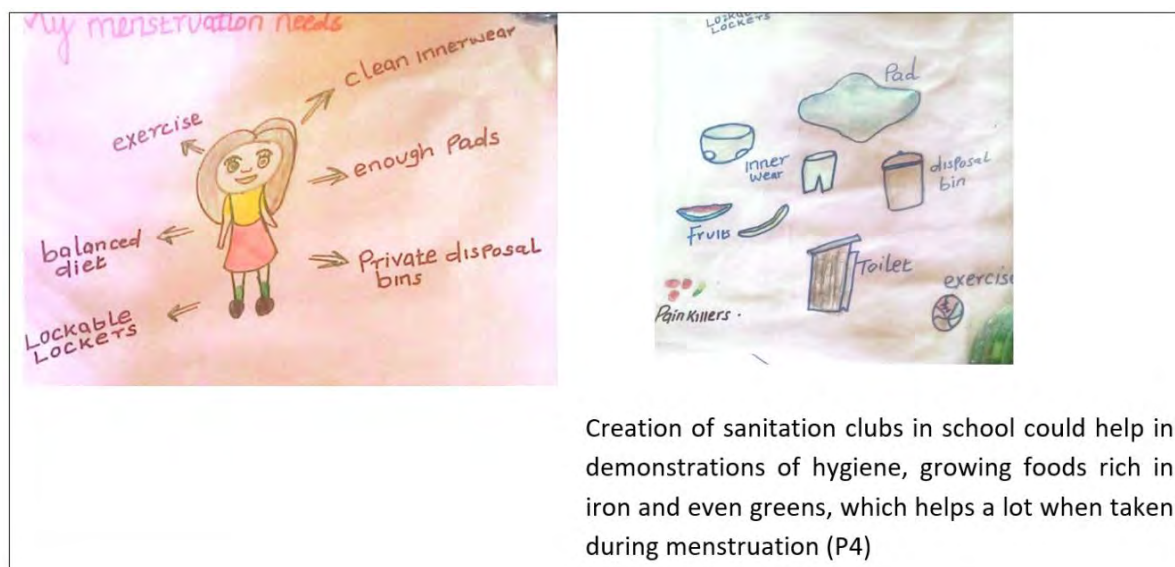
I love P.E and games especially playing the girls football, however, during my menstrual period time, I don't go the field. Last time the teacher removed me from the school team because I feared playing and staining my games kit during the game because I didn't have a disposal pad. If I had the pads, I will attend games all the time (Participant 1).

When girls attend extracurricular activities, they learn to socialise, develop self-discipline and feel better about their bodies, as well as nurture habits that can improve their health in later life. Girls need to draw emotional support and guidance from their immediate social contexts and to enjoy opportunities for development of skills. Resilience theory emphasises the importance of decentrality which when applied in this case would require social ecologies to enable the girls and peers to engage in physical activities and sports (UNICEF,

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Figure 10: Activities to be discussed in the health club for girls' support



2018). Limited engagement in school activities for all learners promotes gender inequality and undermines social justice. Unsupportive relationships can discourage girls from navigating the social challenges related to menstruation confidently. Participants reported that sometimes menstrual pain was so severe that they felt very distracted and cried because of the pain. They wished that school be providing pain killers to relieve pain in such circumstances before they could go to hospital for treatment

When pain is too much, I really feel bad and cry and sometimes the teacher permits me to go home because I cannot concentrate (Participant 2).

Pain during menstruation affect pupils' performance and promotes absenteeism for girls who experience severe cases (Bhandari et al., 2024). The participants raised the need to be supported by school to form health clubs that would enhance discussion and sharing of ideas on menstrual hygiene and management. This showed agency on the part of the girls since enabling their voices helped to increase resilience (Ungar & Theron, 2020). Figure 10 shows activities that girls

suggested could be discussed in the health clubs. The participants were asked how they would like the menstruation syllabus taught to enhance their understanding of menstruation. They reported that by the second term of Grade 5, everything about menstruation needed to be comprehensively taught: what menstruation is, the causes, where it comes through and how, what a girl should do, and how to change and dispose a used pad. The participants said that the teacher should teach the lesson on puberty to both boys and girls so that the boys could stop laughing at them:

We actually became shy while being taught by male teachers; we like the mensuration lesson taught by female teachers. The teacher should mention the private parts or show a film like for the Science class in grade 7 (Participant 4).

When our teacher taught us menstruation in grade 5, she began on the changes that take place in the body of girls before the changes for the boys, the boys laughed the whole lesson and we felt very bad. That day, the boys bullied us in class especially those

who had developed breasts. Next time the teacher should start with boys and end with changes for girls then we all could concentrate and understand and teach in details what really happens in the body (Participant 1).

In cycle 2, the girls compiled their drawings that explained to the school management the support they required to make them comfortable in school when menstruating. The artefacts used to communicate the challenges could trigger discussion on larger platforms to address the challenges to make schools an enabling environment for learning. The participants requested their teacher for permission to present the findings to the school principal for presentation to the members of School Board of Managers. The Principal, the Deputy Principal, the Senior teacher, teacher in charge of School sanitation and cleanliness, the Grade seven class teacher and 3 parents who were representatives of the other parents offered the platform for dissemination of study findings. The good will to listen to the participants was interpreted as genuine concern towards creating an enabling environment for menstruating girls in school. After the presentation, the team was requested to write how they felt about the challenges experienced by girls when on menstruation at school. The team were amazed at how deep rooted the challenges were and how the experiences affected the girls' class attendance as indicated by team member 2, 3,4 and 5 below:

We can't imagine this is how the girls feel in school during menstruation. We are ashamed by the condition of girls' toilets in our school. The Board will take action to address little or non-financial matters like toilet cleaning and simple repairs for toilets as we wait for budget allocation for the complex processes. With the little money available, we shall ensure the toilets are cleaned and the tap near the toilets serviced to provide water for hand washing immediately (Team member 2, 3, 4 and 5).

A parents' representative reported the following:

When we are called upon to discuss matters regarding our school toilets, we shall lobby for all parents to agree to provide resources for improvement of the school toilets and handwashing facilities.

The team agreed to involve more stakeholders to address the issues on school sanitation infrastructure in order to offer more support to girls and create an enabling environment for girls when on menstruation in school.

Conclusion and recommendations

The study findings indicate that if adolescent girls are enabled to voice the challenges they encounter in school during menstruation, this would help to mitigate conditions which ultimately affect girls' resilience. The study shows how using girls to voice their concerns on menstruation encounters could influence actions towards making school an enabling space for learning. The drawings that described what participants desired to be provided in school indicate a 'plea' for help and support from their social ecologies for their situation to change. The act of girls having control over their situation and being able to raise their discomfort over their leaning environment in turn helps to develop more resilience. This is because they learn to coexist by sharing of knowledge, needs, feelings, emotions and resources which boost their coping mechanisms as they grow up in school.

Menarche offers a platform where girls aged 10 to 12 years can be taught positively about developmental issues taking place in their body to enhance positive self-image and self-esteem. The effect of menarche on unprepared school going girls negatively impact education as some, especially for the underprivileged girls, miss classes for at least two days every month due to severe pain and lack of pads when at school. Inadequate sanitary pads was associated with absenteeism due to fear of leakage and shame of ridicule associated with staining their clothes while in class which had a negative impact on their resilience.

The girls would benefit from the offer of free sanitary towels in school especially for emergency use when they are not prepared.

Based on the findings and arguments in this study, the study unleashed the agency of the girls to increase the support their social ecologies should be giving them. The requests and recommendations made by the girls, which is evidence of their growing sense of agency, are outlined in a [policy brief](#). There is a need to adopt what the girls requested in school to make the learning space an enabling environment for menstruating girls. The voice of girls should be amplified on a wide range of platforms available to schools, where various needs can be addressed accordingly.

Disclosure statement

The authors declare no conflict of interest.

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APPENDIX 1: DISCUSSION GUIDE

Amplifying the voice of girls to improve school attendance during menstruation

Phase 1-Cycle One

Discussion session with the girls

1. i) Tell me about teaching and learning of menstrual ovulation cycle in school

ii) Has it helped you to manage any difficulties during menstruation (e.g. pain, heavy bleeding).

iii) Were there any parts of the learning that were difficult to follow? What do you think made them difficult? Who would you like to take you through the menstrual learning programs?

iv) What could be included in the program to make it more informative and effective?

2. i) How does it feel when discussing your menstrual management needs in school?

ii) How can information about menstruation be better communicated to you (the girls) during menstruation?

iii) What initiatives do you think can be adopted to enhance your menstrual awareness and knowledge?

3. i) How do you perceive the current school environment with regard to menstrual management (sanitation/hygiene facilities, comfortability & accessibility)?

ii) Demonstrate through drawing the kind of hygiene facilities that can best describe those in school

iii) Are there specific modifications or improvements you would suggest that would make school a better space for girls when menstruating? Demonstrate through drawing the kind of facilities you would prefer provided

4. i) What challenges or discomforts do you experience when in your menstrual cycles in school? How can the challenges be mitigated to ensure a comfortable period management phase?

ii) Has menstruation ever affected your school attendance or participation in school activities? How? What kind of support do you need to ensure constant school attendance during menstruation?

iii) What support systems are there for you when experiencing challenges or discomforts related to menstruation?

iv) What programs can be of essence to increase parental and teacher support, understanding/sensitivity on menstruating girls?

5. How comfortable were you in participating in this exercise? Why?

Cycle Two

Meeting with teachers and parents

Dissemination of a policy brief on actions suggested by girls to ensure supportive enabling environment in primary schools for menstruating girls to reduce school absenteeism