

I Bring Home My Used Menstrual Pad: Water, Sanitation, Hygiene, and Menstrual Hygiene Management in Middle Schools with Limited Sanitation Access

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ABSTRACT

Menstruation is a critical aspect of puberty for adolescent girls, and effective Menstrual Hygiene Management (MHM) is vital for their health and well-being. In many schools in Indonesia, however, limited access to Water, Sanitation, and Hygiene (WASH) facilities creates significant barriers to proper MHM. This study aims to explore the challenges faced by adolescent girls in managing menstrual hygiene in schools with inadequate sanitation. A Participatory Action Research (PAR) approach was employed using the photovoice method, allowing 20 female students from SMPN 3 Selemadeg Timur, a school in Bali, to document their experiences with MHM. Data were collected through interviews, Focus Group Discussions, and thematic analysis of the photographs. The findings revealed that inadequate toilets, lack of privacy, poor water supply, and ineffective waste management systems significantly hindered students' ability to manage menstrual hygiene at school. As a result, many students adopted the practice of taking home used menstrual pads due to the absence of proper disposal facilities. Cultural taboos and fear of bullying further complicated the issue, preventing students from reporting sanitation problems. Barriers to improving these conditions included limited funds, low awareness of cleanliness, and low prioritization of sanitation within the school. These factors led students to normalize taking used pads home or leaving school to change pads as an adaptation to the unsatisfactory sanitation conditions. The study highlights the need for improved sanitation infrastructure, better waste management, and a more supportive school environment for managing menstrual hygiene.

Keywords: Menstrual Hygiene Management, Water Sanitation Hygiene, Photovoice, Schools with limited sanitation access

Introduction

Menstruation is one of the signs of puberty for adolescent girls, typically occurring between ages 11 and 14 (Thomson et al., 2019). Adolescent girls should have access to adequate water, sanitation, and hygiene facilities to practice dignified Menstrual Hygiene Management (MHM) (Sharmin Sultana et al., 2021). However, as of the odd semester of the 2022 academic year, out of 438,387 schools across various levels in Indonesia, only 8% (34,374 schools) had access to basic sanitation. Meanwhile, 52% (228,647 schools) had limited sanitation access, and the remaining 40% (175,366 schools) had no access to sanitation facilities (Kementerian Pendidikan dan Kebudayaan RI, 2022). According to the Dapodik Data's Sanitation Dashboard, Bali ranks third nationwide in terms of schools with the widest coverage of basic sanitation access, with 47% of schools across all education levels. For junior high schools, of the 409 schools in the province, 255 (62%) have access to basic WASH (Water, Sanitation, and Hygiene) services, 152 (37%) have limited WASH services, and 2 schools (1%) lack WASH services altogether (Kementerian Pendidikan dan Kebudayaan Republik Indonesia, 2022). The lack of sanitation access and WASH facilities in schools, including water shortages, inadequate toilets, and menstrual stigma, hampers effective menstrual hygiene management (MHM) for female students. This situation not only leads to absenteeism but also increases the risks of school dropout and health issues, particularly reproductive and urinary infections. Although Ministerial Regulation No. 24/2007 mandates that schools provide adequate sanitation facilities, current conditions often fall short of standards. Additionally, adult women are rarely involved in decision-making related to water, sanitation, and hygiene policies, though their participation could contribute to more gender-sensitive and effective MHM solutions in schools (Dewi et al., 2022; Kementerian Pendidikan dan Kebudayaan RI, 2017; Kennedy et al., 2015; Ocviyanti et al., 2020).

In 2015, the Indonesian government launched the Child-Friendly Schools (SRA) program to uphold children's rights, including school sanitation, by involving students in preparing the School Work and Budget Plans as well as school regulations (Kementerian PPPA, 2015). However, student voices are rarely included in sanitation policies, although youth participation is crucial in creating a child-friendly environment. According to a UNICEF survey involving 1,683 adolescents, only 13% were involved in policy-making forums, with barriers to participation often due to a lack of awareness or invitations (Octarra et al., 2022). Youth participation can empower adolescents, boost their self-esteem, and enable them to create positive change if their voices are

meaningfully heard and supported by the environment (Weybright et al., 2023). In the education sector, addressing WASH issues is essential to achieving the SDGs, particularly goals 3, 4, 5, and 6, and supports the management of school environments (Safitri et al., 2020; United Nation, 2022). However, research on MHM among Indonesian adolescent girls remains limited, hindering a comprehensive understanding of MHM determinants and impacts, which impedes effective program formulation (Hastuti et al., 2018).

To explore adolescent girls' experiences with menstruation and sanitation, participatory studies employing a photovoice approach are needed, utilizing photography as a medium to elicit responses and insights from informants. The photovoice approach can facilitate the expression of opinions or experiences for girls who may find it challenging to discuss issues considered taboo (Bhakta, 2020; MacArthur et al., 2022; Sutton-Brown, 2014). By integrating the photovoice method, this study will provide in-depth insights and ensure that the voices of female students are heard, thereby supporting positive changes in school policies and facilities.

Research Method

This study employs a Participatory Action Research (PAR) approach, specifically utilizing the photovoice method. This qualitative approach involves active participation from the community—in this case, school students and stakeholders—to capture insights into challenges and strategies related to WASH (Water, Sanitation, and Hygiene) and menstrual hygiene management (MHM) in a school setting with limited sanitation facilities.

The research was conducted at SMPN 3 Selemadeg Timur, a junior high school located in Bali, Indonesia, identified through the Ministry of Education and Culture's sanitation dashboard as having limited sanitation access. Participants included 20 female students aged 12-14, selected through purposive sampling, who had experienced menstruation for over six months. Teachers and school administrators also participated in Focus Group Discussions (FGDs) to provide further context and support the students' findings through photovoice.

Data collection consisted of four main phases, each carefully designed to capture comprehensive insights: (1) Preparation Phase, a thorough literature review and secondary data collection were conducted, followed by the development of necessary research materials to support the photovoice method. (2) Training Phase, participants attended a workshop on photovoice, where they learned essential photography techniques and ethical considerations, along

with guidance on selecting themes that aligned with the study's focus on WASH and menstrual hygiene management. (3) Data Collection Phase, participants actively engaged in capturing images over a two-week period, each photo representing their daily experiences with the issues at hand. Each student then selected ten meaningful photos, which were later discussed in-depth in one-on-one interviews and focus group discussions (FGDs). (4) Analysis Phase, the collected data underwent thematic analysis, integrating the photos, participants' narratives, and observations of the school facilities to identify key themes and recommendations.

Result and Discussion

Inadequate WASH and MHM Facilities

Schools with limited sanitation access face significant barriers in providing adequate water, sanitation, and menstrual hygiene management (WASH-MHM) facilities for female students. These inadequate facilities hinder students' daily activities at school, especially concerning hygiene during menstruation. One of the main obstacles is the condition of the toilets, which are often collapsed or damaged. Of the 7 toilets available, 2 are heavily damaged and unusable, while others lack locks or have broken locks, reducing user privacy. The lack of sufficient toilets makes gender-segregated toilets impossible, leading some students to use teachers' toilets. This situation results in overcapacity in the functioning toilets, with a student-to-toilet ratio of 62:1, leading to decreased cleanliness. Female students report frequently encountering plastic waste, sanitary pads, and unclear water conditions, causing discomfort and even reluctance to use the toilets, with some opting to hold their urine until they return home.

Apart from the damaged toilets, the inadequate supply of clean water further hampers WASH and MHM activities in schools. Students have reported that the water supply frequently stops without any apparent reason, likely due to leaking pipes or water pumps that are not consistently operated. In some cases, broken faucets have remained unrepaired for several days, leading to unnecessary waste of clean water. The slow response to these issues emphasizes the need for better maintenance of facilities to support effective WASH-MHM practices in schools.



Figure 1. Inadequate WASH and MHM Facilities. (a) Broken pipe. (b) Severely damaged student toilet. (c) Dirty toilet.

The handwashing facilities at schools are also considered poorly maintained. The sinks lack soap, making it difficult for students to wash their hands after eating, especially when their hands feel dirty or oily. Although soap was once provided, its uncontrolled use led to quick depletion, with soap often being stolen. Teachers have stated that the soap provided is often misused by students for play, causing it to run out quickly. This highlights the need for increased awareness and responsibility among students in maintaining shared facilities.

The waste management issue in schools is also quite serious. Students feel that the available trash bins are insufficient to accommodate the waste produced, resulting in garbage scattered around the school, especially near the parking area. This makes the environment unclean and causes unpleasant odors, particularly as animals often rummage through the waste. Additionally, the biopori holes, which should be used for organic waste, are often mixed with inorganic waste, reflecting a lack of awareness among school residents in waste separation. The biopori holes being used for mixed waste shows the need for further education about the importance of waste segregation to maintain a clean and healthy environment. A major issue that students face is the lack of trash bins in toilets, forcing female students who need to change menstrual pads to dispose of them in the general trash bins outside the toilets.

Negative Experiences with WASH and MHM

Female students attending schools with limited sanitation access experience negative experiences in managing menstrual hygiene (MHM). A common experience is having to take home used menstrual pads or even return home to

change them. Due to the lack of proper disposal facilities, students feel uncomfortable throwing their pads in the school trash bins, especially because they fear they will be rummaged through by animals (such as stray dogs around the school). As a result, students end up taking home used pads in plastic bags, though this practice is often uncomfortable due to the unpleasant smell. Some students even choose to go home, if possible, to change pads in a more private and comfortable environment.

This phenomenon has become a normalized habit among the students, who believe managing menstrual hygiene is a personal responsibility and shouldn't be discussed publicly. However, the discomfort caused by the lack of proper disposal facilities leads them to avoid changing pads at school. Teachers are aware of this situation and sometimes allow students to go home if their skirts are stained with blood, especially for those who live near the school.

In addition to facility issues, some students avoid changing their pads at school due to superstitions. They believe that disposing of pads at school could lead to unwanted events, such as being followed by supernatural beings, if the pads are not disposed of properly. These myths and taboos surrounding menstruation show that menstrual hygiene management is still a sensitive issue that is not openly accepted in schools with limited sanitation access.

Not only are there taboos, but menstruating students also often become targets of verbal bullying. Students report seeing their peers being teased or laughed at when menstruating, though this form of bullying does not escalate to physical violence. Teachers have stated that issues related to menstruation-related bullying have been handled internally, but vigilance is still needed to prevent bullying that may affect the students' self-esteem.

Although the school has attempted to provide access to menstrual pads in the school cooperative, students still feel embarrassed to buy pads at school. Additionally, the availability of pads is limited, as the cooperative staff often only arrive in the afternoon. This makes it difficult for students to rely fully on purchasing pads at school when menstruation occurs unexpectedly.

Challenges in Enacting Change

Efforts to create significant change regarding sanitation conditions in schools with limited access still face various challenges. One of the main challenges is the shame and fear students experience when reporting WASH (Water, Sanitation, and Hygiene) and MHM (Menstrual Hygiene Management) issues. Although many students are able to identify the problems, only 12 female students have attempted to report these issues to teachers or relevant

authorities. Most feel that the responses they received were not adequate, while 8 other students were reluctant to report the problems due to feelings of embarrassment or fear. They worry that their reports might not be considered valid or taken seriously. As a result, these issues are often only discussed among close friends without involving the school.

In addition to shame and fear, other factors hinder change. First, the awareness of school residents about environmental cleanliness is still low. Participants observe many students disposing of trash carelessly, neglected sanitation facilities, and ineffective cleanliness duty teams. This lack of concern impacts waste management and the upkeep of facilities. Second, the limited funds for renovating WASH-MHM facilities pose a significant challenge, especially for small schools with tight budgets. Schools often have to prioritize the most urgent repair projects each year, given the inflexible BOS (School Operational Assistance) funds for quick fixes. Additional support from the school committee is also limited, considering the economic backgrounds of most students' families. Third, the school's attention to sanitation is sometimes diverted by other school activities and events, such as semester break preparations and competitions, which also require the allocation of funds and teachers' time. Students are aware that the limited budget and teachers' busy schedules often delay sanitation improvements. Lastly, although there are regulations related to cleanliness and sanitation, the implementation of these rules is still not fully effective. These obstacles highlight the need for a more inclusive approach from the school to support the reporting of WASH-MHM issues and allocate more resources and attention to sanitation, in order to create a cleaner, more comfortable, and healthier learning environment for all students.

Normalization Brings Back Used Menstrual Pads

This research reveals that the limitations in sanitation facilities at schools with restricted WASH access have led female students to adopt harmful adaptive behaviors, such as bringing home used menstrual pads after use. In a cultural context where menstruation is still considered taboo, female students seem to prefer this socially "safe" option, even though this decision harms them in the long term (Wardana, 2020). These findings provide a new perspective on how students respond to limited sanitation, showing specific behaviors adopted to protect their privacy, and adding a dimension of understanding to a phenomenon that has previously focused on student absenteeism during menstruation without investigating alternative behaviors they adopt to address

this issue (Davis et al., 2018; Kennedy et al., 2015). Moreover, this adaptation indicates a cycle where limited WASH conditions and social norms reinforce each other, encouraging students to choose what is "normal" in their environment, despite actions that hinder their health and educational rights.

In the context of schools examined in this study, this phenomenon is particularly relevant to rural populations in Indonesia, where strong social norms related to menstrual taboos significantly influence the behaviors of female students in managing menstrual hygiene (Wardana, 2020). Considering these behavioral patterns, it is assumed that schools or other communities with similar conditions may experience the same issue. Various studies show that when sanitation facilities are limited and there are negative perceptions of menstruation, female students often choose actions deemed socially safe to protect their privacy, even though these actions harm them in the long term (Royo et al., 2022). Therefore, this study emphasizes that solutions to WASH-MKM issues are not enough through the provision of physical facilities alone; understanding social and cultural factors that also influence students' behavior in this context is essential.

Community empowerment through WASH-MKM activities involving students and schools provides several benefits. With this involvement, awareness about the importance of proper sanitation and hygiene facilities can be raised, especially regarding sanitation issues affecting both female and male students. This empowerment helps reduce menstrual taboos by encouraging collective understanding of sanitation needs within the school environment (Ajzen, 2020). However, a major challenge of this approach is that schools often face budget limitations and low prioritization for improving sanitation facilities, hindering the long-term effectiveness of community empowerment (Wardana, 2020). Additionally, female students' reluctance or fear to report WASH-related issues, particularly menstrual hygiene challenges, remains a significant barrier. Feelings of shame or concern that their reports will not be taken seriously by authorities prevent many students from voicing their needs. This further strengthens the cycle of unresolved WASH issues, normalizing limited facilities that should receive attention (Royo et al., 2022).

Considering these various challenges, it is clear that the success of WASH-MKM programs requires stronger support from both schools and surrounding communities to make adequate WASH facility access a significant priority. This support will have a broader impact on students' health and well-being and help create a more inclusive and equitable educational environment for women, ultimately contributing to gender equality within schools.

Conclusion

The conclusion of this study shows that students attending junior high schools with limited sanitation access experience negative impacts related to WASH and MKM at school. Unclean and insufficient toilets, lack of clean water, absence of dedicated menstrual pad disposal bins, and lack of privacy for changing pads at school present challenges for students in relation to inadequate WASH facilities. Negative experiences faced by students due to these conditions include being forced to bring home used pads or even go home to change pads. Barriers to changing the current conditions stem from feelings of shame and fear among students in reporting these conditions to school stakeholders, low awareness of cleanliness within the school, limited funds for renovating WASH facilities, low school prioritization of sanitation, and inadequate implementation of school regulations regarding WASH-MKM. These barriers lead students to normalize bringing used pads home or going home to change pads as an adaptation to the limited situation at school.

For further research, there are several suggestions that can be considered. First, the research should be conducted in the form of a longitudinal study to observe changes in students' behavior and experiences related to menstrual hygiene management after the improvement of WASH infrastructure in schools. Second, a comparative analysis between schools with different sanitation conditions could provide deeper insights into best practices in menstrual hygiene management. Third, more in-depth research on the effectiveness of education programs on menstrual sanitation and hygiene among students, teachers, and parents can help reduce stigma and increase awareness. In addition, investigating ways in which student participation can be more effectively integrated in decision-making regarding sanitation policies in schools is also important to ensure that their needs and perspectives are heard. Finally, further research exploring the psychological and social impact of the experience of menstruating in schools with inadequate facilities, including the impact of bullying and stigma, may provide a more holistic view. With these suggestions, it is hoped that research can make a greater contribution to understanding and addressing the challenges students face regarding menstrual hygiene management and access to sanitation at school.

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