



WASH in Schools Empowers Girls' Education in Masbate Province and Metro Manila, Philippines

An Assessment of Menstrual
Hygiene Management in Schools



Center for
Global Safe Water



WASH in Schools fosters social inclusion and individual self-respect. By offering an alternative to the stigma and marginalization associated with hygiene issues, it empowers all students – and especially encourages girls and female teachers. In recognition of the positive impact on girls' school attendance and achievement, initiatives around the world are addressing adolescent girls' menstrual hygiene management (MHM) needs through WASH in Schools programming. Such interventions are increasingly implemented in both development and humanitarian emergency contexts.

In 2012, UNICEF and the Center for Global Safe Water at Emory University initiated a programme to support collaborative research focused specifically on exploring the MHM challenges faced by female students in Bolivia, the Philippines, Rwanda and Sierra Leone. The project includes developing or strengthening MHM-related programming in schools in those countries.

Emory University sent research fellows to work with UNICEF and its in-country WASH in Schools partners on the programme. The assessment activities conducted and themes explored were guided by an ecological framework that covers societal, environmental, interpersonal, personal and biological factors. Questions for qualitative data collection were created to investigate and understand the personal challenges and needs girls have during menstruation in the school setting. The results are now published as a series of reports, including 'WASH in Schools Empowers Girls' Education in Masbate Province and Metro Manila, Philippines: An Assessment of Menstrual Hygiene Management in Schools'.

Suggested citation: Haver, Jacquelyn, Bethany A. Caruso, Anna Ellis, Murat Sahin, Jonathan Michael Villasenor, Karen L. Andes and Matthew C. Freeman, 'WASH in Schools Empowers Girls' Education in Masbate Province and Metro Manila, Philippines: An assessment of menstrual hygiene management in schools', United Nations Children's Fund, New York, November 2013.

Front cover photos: © Jacquelyn Haver, 2012

Design by Sanjay Madhani, editing by Catherine Rutgers, for UNICEF New York.



UNICEF
Programme Division/WASH
3 United Nations Plaza
New York, NY 10017 USA
www.unicef.org/wash/schools

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Contents

Acknowledgements	ii
Executive Summary	1
Introduction	2
Assessment background	2
Country context	3
Methods	4
Research setting.....	4
School selection	5
Data collection	6
Findings	9
Challenges girls face during menstruation	10
Determinants of menstruation-related challenges	10
Impacts on and potential risks to education and health	24
Metro Manila case study.....	29
Summary of key findings	33
Recommendations	35
Annex 1. Comprehensive recommendations	37
Annex 2. Specific recommendations, by research participant population	42
Annex 3. Barriers and drivers to toilet use	47
References	49
Abbreviations	50

Acknowledgements

The menstrual hygiene management research programme was conceived by Bethany Caruso and Matthew Freeman, Emory University, and Therese Dooley and Murat Sahin, UNICEF, New York. Data collection and assessment activities were managed by Jacquelyn Haver and Anna Ellis, Emory University. The report was written by Jacquelyn Haver and Bethany Caruso.

Many thanks are due to the people involved in this project and the development of this report. Timothy Grieve and Dr. Michael Gnilo of UNICEF contributed to in-country facilitation of data collection. Edgar Viterbo, Roy Soledad, Jenilyn Rey, Ninez-Arelene Sambajon, Melba Magnifico, Lilibeth Fernandez, Prisco Llesol Jr., Roberto Bonavente and Lyndy Antonio of Plan Philippines provided support to the research in Masbate Province. Seung Lee, Mohini Venkatesh, Dr. Cecilia Francisco, Dr. Amado Parawan, Jonathan Valdez and Reggie Aquino from Save the Children provided support to the research in Metro Manila. Staff at the Masbate Programme Unit, Plan, and at Save the Children's Metro Manila Program Area facilitated school selection and visits.

Maria Amante, Blanche Mayor, Janelyn Capili, Kathreen Yap, Audrey Clores, Patricia Laurista, Jessica Denette-Ramos-Hernandez, Jose Marie Nieva, John Martin Salvador and Justin Jeremy Jose served as research assistants. Their hard work conducting, transcribing and translating interviews and discussions with girls, teachers, boys and mothers made this project possible.

We are grateful to the Department of Education and Undersecretary Yolanda S. Quijano for supporting this project, allowing us to visit schools and providing logistical support for the Metro Manila data collection.

Our appreciation is also extended to the Global Health Institute at Emory University for its support of student involvement in this project.

A special thanks is extended to the girls who gave us their time, energy and confidence to participate in this study and share their experiences.

Executive Summary

Emory University, UNICEF Philippines, Plan Philippines and Save the Children Philippines carried out a qualitative assessment of menstruation-related challenges girls face in school. Girls, boys, teachers and mothers at 10 schools in Masbate Province and the National Capital Region were interviewed for their opinions. This report highlights the challenges girls face in school during menses, describes the determinants of these challenges, and outlines the educational and health impacts of these challenges as voiced by the participants.

Many girls lack the knowledge, support and resources to manage menstruation in school. Few studies have focused on educational impacts such as concentration, class participation, missed class and absenteeism. This assessment aims to understand the scope of educational and health impacts and challenges across settings in order to foster a broad movement towards mitigating challenges presented by menstruation among adolescent girls.

Findings focus on the challenges surrounding menstrual hygiene practices from the participants' perspectives. Major challenges discussed by schoolgirls were linked to MHM impacts and potential risks. They focused on feelings of stress, shame and embarrassment during their menstrual cycle – all of which were associated with girls' inability to discreetly manage menses in school. Girls were particularly worried that peers and teachers would know they were menstruating and were fearful of having bloodstains and odour because this led to teasing from classmates.

Determinants included inadequate WASH facilities in schools; insufficient knowledge; lack of practical guidance and support; and poor access to absorbent materials. Impacts of poor menstrual hygiene management (MHM) included girls' self-exclusion, reduced participation in school, distraction, missing class and absenteeism. Participants also suggested that there were additional education and health risks influenced by the inability to manage menstruation, including health and nutritional challenges and loss of educational attainment.

This report concludes with four key recommendations for improving girls' experiences with menstruation and menstrual hygiene management:

1. Integrate menstruation into reproductive health and hygiene education materials and provide menstruation education that is age appropriate, culturally sensitive and interactive, throughout primary and secondary school.
2. Improve WASH facilities in schools, and develop and enforce systems for WASH facilities maintenance.
3. Establish systems that enable girls to access absorbent materials comfortably, discreetly and when in need.
4. Create support systems to ensure that girls who miss school due to menstruation-related challenges do not miss out on educational opportunities and advancement.

Introduction

Assessment background

The Government of the Philippines has made advancements in girls' education and WASH in Schools, although current education and health policies do not yet specifically address menstrual hygiene. Research from other countries has found that the onset of menstruation presents several challenges for girls in school. Girls report experiencing stress, shame, embarrassment, confusion and fear due to a lack of knowledge, an inability to manage menstrual flow or from being teased by peers [1–3]. These challenges may negatively impact girls' learning experiences and result in absenteeism, distraction, decreased school participation and falling behind in course work [4–6].

Girls may face these challenges as a result of poor menstruation-related knowledge; insufficient access to menstrual hygiene materials; and inadequate school water, sanitation and hygiene (WASH) facilities for girls to wash themselves, change materials in a private space, and discreetly dispose of menstrual hygiene materials [6–9].

The experiences and challenges girls face at school during menstruation in the Philippines have not been systematically assessed. The UNICEF Philippines Country Office invited Emory University to include the Philippines in the multi-country menstrual hygiene management (MHM) in schools research, with the aim of understanding the range of challenges faced by schoolgirls during menstruation, and the determinants of those challenges. The assessment was conducted in 10 schools, selected in collaboration with Plan International and Save the Children using tools developed by Emory University.

This report presents the challenges and determinants identified, the impact that those challenges have on girls' health and education, and a discussion of key programmatic recommendations in light of the assessment findings. Report appendices provide a complete, detailed list of recommendations based on determinants and impact, as well as a tables of recommendations made by participants.



Source: Wikimedia Commons, http://commons.wikimedia.org/wiki/File:Ph_physical_map.png?uselang=fr%3Fuselang%20g%3Dfr.

The Department of Education, Save the Children, Plan and UNICEF may design and implement school-based MHM interventions based on the recommendations from this study and conduct follow-up studies to evaluate the impact of MHM programming on educational outcomes for girls.

Country context

Menstrual hygiene management continues to gain attention in the Philippines, particularly within the Department of Education, as well as UNICEF, non-governmental organizations and the private sector. The Department of Education is currently reviewing and revising the national school curriculum. It has expressed interest in addressing the topic and intention to include MHM content in the curriculum starting at Grade 4.

UNICEF Philippines has a strong focus on WASH in Schools. It has investigated equity of access to water, sanitation and hygiene education in schools, particularly regarding regional disparities and children with disabilities [10]. The MHM assessment conducted with partners in Masbate Province and Metro Manila is part of a continued effort to understand and address barriers to equitable access to basic WASH needs in schools.

Non-governmental organizations are also including menstrual hygiene management as a priority for research and programmes in the Philippines. Plan International is developing a proposal for MHM programming, focused primarily on implementing girl-friendly toilets and providing information on menstrual hygiene management to Plan-sponsored schools in Masbate. Save the Children has contributed to MHM in schools research by conducting baseline research with Muslim and indigenous populations in the organization’s programme areas. The baseline findings will be used to inform Save the Children’s plans to incorporate menstrual hygiene management into its programmes in schools throughout the Philippines.

In the private sector, both Kimberly-Clark and Procter & Gamble have increased their attention to menstruation in schools. Kimberly-Clark, in conjunction with the Department of Education, piloted puberty learning materials in a small sample of schools, although the Department of Education has ceased distribution of these materials due to heavy product promotion within the publications. Procter & Gamble Philippines has expressed interest in pursuing MHM through the WASH sector, though activities are not yet under way. Local corporations that manufacture sanitary pads, including Modess and Whisper, have visited secondary schools to provide hygiene education and promote products such as sanitary pads and deodorants.

Table 1. WASH and education statistics, Philippines

Household access to improved water ^a	92%
Household access to improved sanitation ^a	74%
Primary education net enrolment ratio ^b	1.02
Secondary education gross enrolment ratio ^b	1.19
No. of primary schools nationwide ^c	45,964
No. of secondary schools nationwide ^c	12,950
School access to improved water ^d	62%
School access to improved sanitation (adjusted pupil-to-toilet-bowl ratio) ^d	54:1

a. JMP 2013 [11].

b. UNESCO 2012 [12].

c. Department of Education 2012 [13].

d. Elementary schools, BEIS 2010 [14].

Methods

Research setting

The assessment was conducted from 31 July–15 December 2012 in Masbate Province in Central Philippines and Metro Manila in the National Capital Region.

Masbate is historically one of the poorest provinces in the Philippines, with 44 per cent of families living below the poverty line [15]. Among Masbate's 21 municipalities, 19 are classified as 'waterless', with less than 50 per cent of households having access to water [16]. The province is composed of three major islands, and the economy is dominated by the cattle industry, which is controlled by a handful of landholding and political families. The other primary source of income is fishing, which has degenerated for the majority of small-scale fishers over the years due to depletion of the marine resources in municipal waters.

In terms of education, Masbate Province has one of the country's highest school-leaving rates among primary-level public schools, at 12 per cent, with higher incidence among boys (13 per cent) than girls (10 per cent). This translates to a cohort survival rate that is among the lowest in the country at 54 per cent, with boys also more disadvantaged [17]. These figures indicate a great loss of opportunity for education and self-development for both boys and girls, which, in turn, contribute to the inter-generational poverty in the province.

The National Capital Region is highly urbanized and shares in the relatively greater economic opportunity and access to basic services that are available in Metro Manila. Poverty incidence in Metro Manila is the lowest in the country, at 4 per cent [15]. In terms of education, the school-leaving rate in primary-level public schools is 6 per cent [17], which is much lower than the rate in Masbate but still considered high for the Department of Education's zero drop-out standard. Cohort survival is at 75 per cent, with boys more disadvantaged than girls. In absolute numbers, these indicators translate to a considerable population that is undereducated.



Schools were selected for the MHM assessment in the Philippines to cover both rural and urban areas. Outdoor classrooms in Masbate Province (left) and adolescent girls in Metro Manila are shown above.

Photo credit: © Jacquelyn Haver, 2012

School selection

The assessment was conducted at 10 schools, 9 in Masbate Province and 1 in the National Capital Region. The research team, Plan Philippines and Save the Children Philippines jointly selected schools for inclusion. Schools were selected purposively to ensure that a range of characteristics was represented. The following selection criteria aimed to balance diversity in the sample while maintaining enough consistency to allow comparisons and validate data from each school:

Age and grade – students 11–18 years old were included in order to gather perspectives from girls who just recently started menstruating, as well as those who had been menstruating for several years. Grade levels included primary, intermediate and secondary students.

Type of school – both public schools and private Catholic schools were included in order to assess differences in girls' ability to manage menstruation at each school type.

Access to sanitation and water – schools with a range of available WASH infrastructure were included to assess the effect of WASH conditions on girls' behaviour and practices.

Rural or urban location – schools in rural and urban settings were selected to capture differences in each context, particularly regarding the availability of resources and information.

Details on the location, number and type of schools included in this assessment are shown in table 2.

Table 2. Participating schools, by location, number and type

Location (rural or urban)	No. of schools visited	Type of schools visited
Masbate Province		
Palanas (rural)	3	Public primary school (1) Public secondary school (1) Private Catholic secondary school (1)
Milagros (rural)	1	Public secondary school
Balud (rural)	4	Public primary schools (2) Public secondary school (1) Private Catholic secondary school (1)
Masbate City (peri-urban)	1	Intermediate 7th grade school
Metro Manila		
National Capital Region (urban)	1	Public secondary school

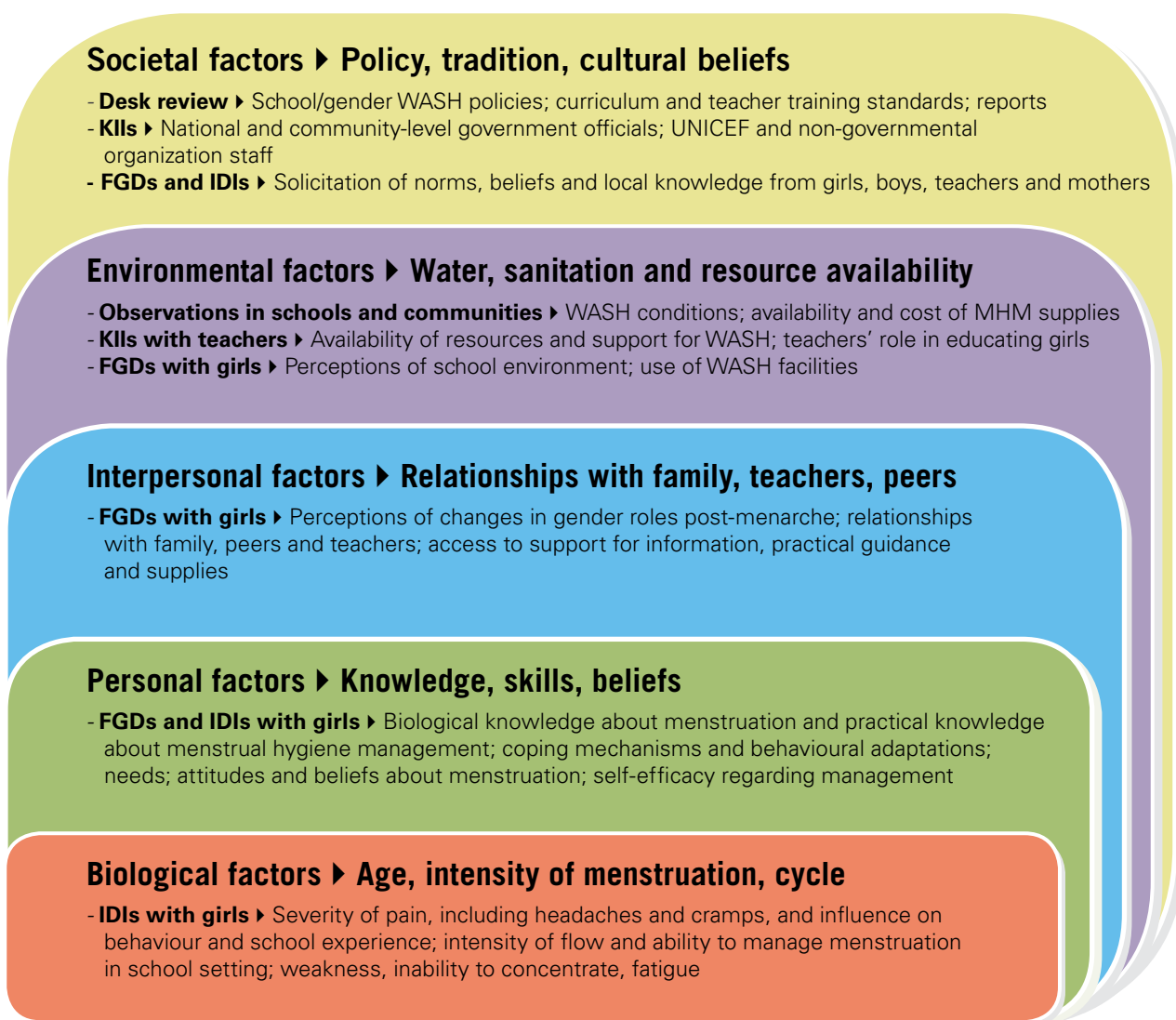
Data collection

Activities

The activities conducted and themes explored were guided by the theoretical ecological framework of factors expected to influence menstrual hygiene management (see figure 1). Questions for qualitative data collection were created to investigate and understand the range of personal challenges and needs girls had during menstruation in schools, from the girls' own perspectives as well as their family members, peers and teachers.

At each school, focus group discussions and individual in-depth interviews were conducted with girls, individual key informant interviews were conducted with principals and teachers, and observations were made of the school environment. In select schools and communities, focus group discussions were also held with boy students and mothers.

Figure 1. Ecological framework for MHM research activities and themes



Focus group discussions (FGDs) – Separate FGDs were conducted with girls, boys and mothers and/or female guardians with up to eight participants in each session. FGDs with girls focused on the typical experiences girls have at school while menstruating, as well as typical practices and beliefs. FGDs with mothers and boys were performed to triangulate and expand on findings from the focus group discussions with girls. Mother and boy FGDs focused on the same themes, while offering researchers varied perspectives on girls’ challenges and experiences.

In-depth interviews (IDIs) – Up to two in-depth interviews were conducted with girls at each school. Girls were asked to discuss their personal experiences with menstruation, specifically what they knew about menstruation and where the information came from. They were asked how they managed menstruation in school and at home. Girls also wrote down the questions they still had about menstruation.

Key informant interviews (KIIs) – These were conducted with teachers, principals and health workers. KIIs with school staff investigated hygiene, sanitation, menstrual hygiene education and girls’ menstruation-related challenges experienced at school. The interview content was influenced by UNICEF’s WASH in Schools Monitoring Package [18].

School observations – A tool for observation of school water, sanitation, and hygiene facilities was adapted directly from the UNICEF WASH in Schools monitoring tool [18]. Additional questions were added as appropriate.

In all activities, participants were invited to make recommendations on how the school, community and local government could improve girls’ experiences at school during menstruation. Local research assistants received training on how to facilitate activities with students and mothers, primarily in Tagalog. Interviews with school staff and health professionals were performed in English by the Emory researcher.

Training

A one-week training workshop was held for research assistants involved in data collection. The workshop provided a broad understanding of WASH and menstruation, methods and techniques for qualitative data collection, and research ethics. Two modules from the UNICEF WASH in Schools online course were presented – ‘Introduction to WASH in Schools’ and ‘Special Topics for Girls’ [19, 20] – with additional information specific to the Philippines. Training on research ethics was adopted from the FHI 360 Research Ethics Training Curriculum [21].

During the training, research assistants adapted tools to the Masbate or Metro Manila context and translated them into Tagalog. All tools were piloted and revised as needed. All interviews and discussions were recorded. Research assistants transcribed all voice recordings verbatim in Tagalog and translated them into English after each school visit. Transcripts were then reviewed prior to the next school visit, and tools were adjusted to improve the quality of subsequent data.

After a preliminary review of data collected, three schools were revisited for follow-up questions.



Training sessions for research assistants and assessment partners provided a chance to share knowledge. Topics included a broad understanding of WASH and menstruation, methods and techniques for qualitative data collection, and research ethics.

Photo credit: © Jacquelyn Haver, 2012

Participant selection

The assessment team worked closely with staff at Plan Philippines and Save the Children Philippines, as well as principals and female teachers at each school, to identify girls, boys and mothers or female guardians who would participate in the focus groups and interviews. A total of 132 participants from 10 schools and their surrounding communities were engaged in research activities, as shown in table 3.

All participants were informed of the objectives of the assessment and that their participation was voluntary. Boys and girls assented and adults consented to participate. Written parental consent was obtained from parents or guardians of all participants under age 18. Protocols were approved by the Emory University Institutional Review Board and the Philippine Department of Education.

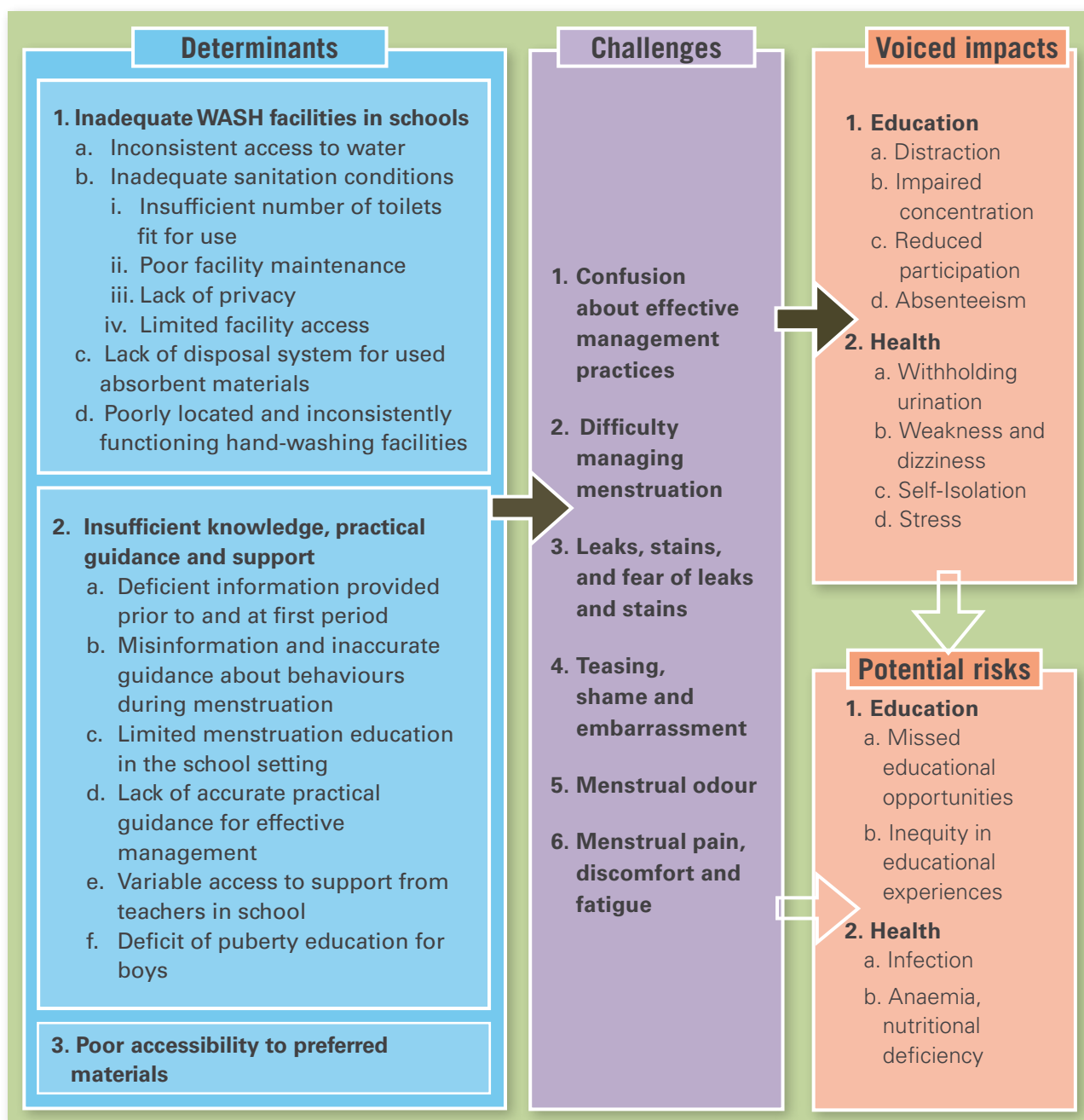
Table 3. Activities completed and participants included in MHM assessment, Philippines

Tool	Population	No. of activities completed	No. of participants
Focus group discussion	Girls in school	9	49
	Boys	5	30
	Mothers	2	11
	Teachers	1	6
In-depth interview	Girls in school	19	19
Key informant interview	Teachers and school administrators	17	17
Observation	Schools	10	–
Totals		63	132

Findings

The findings highlight the challenges girls in Masbate Province face at school when menstruating as described by the girls and other participants. The determinants of those challenges are also described, and the impacts and potential risks of menstrual hygiene challenges are explored. Quotations from the research discussions appear throughout the findings section as a complement to the main text. A case study focusing exclusively on data collected from Metro Manila is included in the findings section.

Figure 2. Schematic of the MHM research findings in the Philippines



Challenges girls face during menstruation

Attending school during menstruation can often be challenging for girls. Challenges have been identified as the experiences girls have at school during menstruation that make this time more difficult than other days at school. Challenges were identified through conversations with research participants. Girls were asked what their experiences were generally like at school during their period and how days at school during menstruation might be different than other days. Other participants were asked about their perceptions of girls' experiences at school during menstruation.

Challenges girls face at schools include:

- Confusion about effective management practices, due to lack of accurate knowledge about MHM practices.
- Difficulty managing menstruation, leading to anxiety if girls did not have the necessary resources and facilities to effectively manage menses at school.
- Leaks, stains, and fear of leaks and stains associated with concern about revealing menstrual status by having a leak, and potentially a more permanent stain, on their school uniform.
- Teasing, shame and embarrassment, which led to not wanting their menstrual status known for fear of being teased. Girls felt embarrassed when teased or when others knew about their menstruation.
- Menstrual odour, which girls reported as a result of following traditional beliefs about restricted bathing. During the first three days of menstruation girls are instructed to only bathe with three dippers of water.
- Menstrual pain, discomfort and fatigue, including headaches and cramps.

What is known by her parents is that she is studying well, but this is not the truth, because of what is happening to her when she has her period at school.

~ Masbate, School 8, FGD, Girl student

Challenges are further articulated in the following section within the context of determinants.

Determinants of menstruation-related challenges

Challenges girls face while attempting to manage menstruation at school are determined by factors that are largely preventable. Determinants are the factors that contribute to girls' challenges at school during menstruation and were identified through conversations with participants. When girls described these challenges, they often explained why they occurred. If specific challenges were noted and not elaborated, follow-up questions were asked by the research team. Crucial determinants of the challenges girls face include:

1. Inadequate WASH facilities in schools
 - a. Inconsistent access to water
 - b. Poor sanitation conditions, including: insufficient number of toilets fit for use; poor facility maintenance; lack of privacy; and limited access to facilities
 - c. Lack of disposal systems for used absorbent materials
 - d. Poorly located and inconsistently functioning hand-washing facilities

2. Insufficient knowledge, practical guidance and support
 - a. Deficient information provided prior to and at first period
 - b. Misinformation and inaccurate guidance about behaviours during menstruation
 - c. Limited menstruation education in the school setting
 - d. Lack of accurate practical guidance for effective management
 - e. Variable access to support from teachers in school
 - f. Deficit of puberty education for boys
3. Poor access to preferred absorbent materials.

Details on each of these determinants are described below.

Determinant 1

Inadequate WASH facilities in schools

Water, sanitation and hygiene facilities are essential to providing a school environment that enables menstrual hygiene management. Without adequate facilities, girls cannot discreetly manage menstruation, contributing to problems with leaks, stains, odour and teasing, and causing anxiety and embarrassment. Schools that lack water, well-maintained and private sanitation facilities, disposal systems and proper hand-washing facilities do not meet girls' needs. To avoid feeling ashamed and to ease the challenges associated with managing menses in school, girls often went home rather than using the school toilets. The lack of facilities led them to miss opportunities to be in class.



The photos above illustrate the frequent maintenance issues, such as lack of water for flushing the toilets, that were observed in schools. While there may be enough toilets in the comfort rooms (CR), their functionality is not guaranteed.

Photo credit: © Jacquelyn Haver, 2012

Inconsistent access to water

Water access in Masbate is inconsistent due to frequent brownouts that impair the electric water pumps. When water is unavailable excrement and menstrual blood cannot be flushed and clean facilities cannot be maintained, thereby increasing strong odours. If girls are unable to use water to flush menstrual residue from the toilet bowl, they unintentionally expose their menstrual status to others.

This issue is heightened in primary schools where boys and girls share toilets. A lack of water can prevent girls from using toilets altogether: "If I'm here in the school, we can't attend the class if we have menstruation, there is no water here and the latrine always has a person inside of it and we can't use it" (Masbate, School 5, IDI, Girl student).

We have water, but it is connected to the electricity. The electric meter was broken, then the [new] electric meter is not yet here. The water can't be fixed because it's run by the electricity.

~ Masbate, School 6, KII, Teacher

I don't go to the CR because there are lots of students using the latrine, also the boys are using it so we can't use the CR. the latrine in school is always busy because it's only one.

~ Masbate, School 5, IDI, Girl student

Poor sanitation conditions

In most schools, toilet conditions were problematic, and schools often struggled with access, cleanliness and privacy. Details on poor sanitation conditions are presented below, including: an insufficient number of toilets fit for use; poor maintenance; lack of privacy; and limited access.

Insufficient number of toilets fit for use – Access to sanitation facilities at school are imperative for all students, yet two of the primary schools and one of the secondary schools visited had no toilets. Further, having toilets did not ensure access: All schools lacked an adequate number of toilets. Girls reported that they had to wait in long lines to use the toilets because there were not enough available. The mean ratio was 325 girls per toilet in primary schools visited and 207 girls per toilet in secondary schools – significantly exceeding the recommendation of 25 girls per school toilet established in the WHO-UNICEF global standards [22].

The number of toilets available for students is reduced when conditions were considered. Many schools had toilets that were not functioning or not clean, therefore decreasing the true number of available toilets and increasing the number of pupils per toilet (see tables 4 and 5, pages 15 and 16). During toilet use, girls were aware that other students were waiting in line and anxious about the amount of time they spent in the toilet. Fear of revealing their menstrual status to the next student to use the toilet led girls to inspect the cleanliness of the bowl when they were done, thus increasing the time they spent in the toilet.

Poor facility maintenance – All schools had sanitation maintenance issues, including the need for simple cleaning as well as more complex repairs. These issues made facilities unusable and reduced the number of functioning toilets available for students. Schools had inconsistent budgets for school maintenance, which impacted the ability to hire someone to make repairs,

employ janitorial staff or purchase cleaning supplies. Teachers said that they purchased cleaning materials and paid for repairs from their own salaries and that they engaged students to monitor and clean toilets. However, not all teachers took on these responsibilities and conditions remained variable at all schools.

If a girl enters the CR and the boys also enter on the other side of the CR, there is a chance that the boys might sneak a look over the heads of the girls' CR.

~ Masbate, School 2, FGD, Girl student

I want to have a CR just for girls, for girls who are menstruating separate from the boys...Because the boys might see a blood stain on the toilet bowl.

~ Masbate, School 6, IDI, Girl student

Lack of privacy – Girls indicated that a lack of privacy prevented them from feeling secure and comfortable managing menstruation at school. Girls felt their privacy was compromised in many toilets that had holes, windows, or broken walls and doors. Boys would often take advantage of gaps in the toilets' structures to peep at girls. Girls feared being exposed while using the toilets, particularly during their menses. Interior locks were often broken or missing, so girls commonly used latrines with a companion to maintain privacy.

Girls' privacy was also compromised by the location of toilets. Girls' and boys' toilets were often on the same blocks and were not gender separated. Girls felt self-conscious using facilities if they had to pass by boys for access and said that when girls' and boys' toilets were close together, boys had more opportunity to peek. In primary schools, toilets are commonly located within the classroom in 'comfort rooms' (CRs), and girls noted that sounds and odours were exposed in the classroom. When making recommendations, girls were specific about wanting facilities that they could use without revealing their menstrual status, particularly to boys.



Because toilets at this school were padlocked, girls could not access them quickly, conveniently or discreetly. This practice drew attention to their need for using the facilities.

Photo credit: © Jacquelyn Haver, 2012



Water supplies for hand-washing stations were sporadic. The girls above, for example, were demonstrating that there actually was no water for hand washing.

Photo credit: © Jacquelyn Haver, 2012

Limited access to facilities – In many schools, facilities were kept locked from the outside, which limited girls’ ability to access them freely. To regulate bathroom use, teachers commonly held the key to the latrines. Students are required to fetch water or ensure water is available for flushing before a key will be handed over and access will be granted. Girls and boys, therefore, were required to make their personal needs known to their teachers. Asking for keys could be a barrier for girls who had to visit facilities frequently for managing menses or had to ask permission from a teacher who they felt was not approachable.

Lack of disposal systems for used absorbent materials

Although toilets can be damaged if there are no disposal systems, schools seldom place waste bins for disposal of used absorbent materials in the stalls. Most toilet stalls were not built to have enough space for waste bins and containers that store water for flushing. Only one primary school had waste bins and these were not available in all girls’ latrines (see table 4). Teachers encourage students to take their trash home. Girls wrap used materials in plastic bags and put them in their bags to carry back home so they could bury or burn them. Boys reported that some girls would dispose of sanitary pads by throwing them behind the latrines.

Teachers also noted that animals could easily access the stalls and would tear apart any used sanitary pads left inside. Mothers’ comments during group discussions confirmed that disposal was an issue for girls: “The parents, teachers and community should be involved and support because it’s really a sanitation problem. The littered absorbent girls’ material affects the cleanliness of the community, that’s why there should be a proper disposal” (Masbate, School 1, FGD, Mothers).

Poorly located and inconsistently functioning hand-washing facilities

Hand washing is an essential component of menstrual hygiene management, but poorly located and inconsistently functioning facilities present a challenge for girls. While most schools had facilities, only two schools visited had water present in at least 50 per cent of their hand-washing facilities; none had soap or ash in at least 50 per cent of their hand-washing facilities. Girls said that when they are menstruating they need private hand-washing facilities close to toilets, with water and soap available to wash privately after toilet use.

Tables 4 and 5 provide a summary of the MHM assessment findings on sanitation, water and hygiene facilities in Masbate schools.

Table 4. Summary of WASH conditions in the 9 participating schools (4 primary, 5 secondary), Masbate Province

	Primary schools (4)	Secondary schools (5)	Total (9)
Sanitation			
No. of schools with latrines	2	4	6
No. of schools with latrines segregated by gender			
All latrines gender-segregated	0	2	2
Some latrines gender-segregated	2	2	4
No latrines gender-segregated	2	1	3
No. of schools with functional locks inside girls' latrines ^a			
All with functional locks	1	1	2
Some with functional locks	1	1	2
None with functional locks	1	3	4
No. of schools with trash bins inside girls' latrines ^a			
All with trash bins inside girls' latrines	0	0	0
Some with trash bins inside girls' latrines	1	0	1
None with trash bins inside girls' latrines	2	6	8
Water and hygiene			
No. of schools with functional water source at time of visit	4	4	8
No. of schools with hand-washing facilities			
No. of schools with water available in at least 50% of hand-washing facilities ^b	0	2	2
No. of schools with soap/ash available in at least 50% of hand-washing facilities ^b	0	0	0
No. of schools with a private place to bathe/wash	2	3	5
No. of schools with private facilities to wash menstrual cloths	1	2	3
No. of schools with sanitary pads available on a daily basis ^c	0	1	1
No. of schools with sanitary pads available for cases of emergency ^c	0	1	1
No. of schools where teachers report providing menstruation education	4	5	9

a. Data on functional locks and trash bins were not collected in one primary school.

b. Data were not collected on availability of water or soap/ash in at least 50% of hand-washing stations in one secondary school.

c. The school that did have sanitary pads available on a monthly basis and that did have pads in cases of emergency made them available to girls for sale at the school canteen.

Table 5. Mean pupil-to-latrine ratios among the 9 participating schools in Masbate Province^a

	Primary schools (4)	Secondary schools (5)	Total (9)
Sanitation			
Mean pupil-to-latrine ratio in participating schools	320:1	202:1	254:1
Girl pupil-to-latrine ratio	325:1	207:1	259:1
Boy pupil-to-latrine ratio	314:1	198:1	250:1
Mean pupil-to-latrine ratio for latrines considered at least partially functional only	484:1	206:1	330:1
Girl pupil-to-latrine ratio	496:1	210:1	337:1
Boy pupil-to-latrine ratio	472:1	202:1	322:1
Mean pupil-to-latrine ratio for latrines considered at least somewhat clean only	690:1	245:1	443:1
Girl pupil-to-latrine ratio	710:1	207:1	430:1
Boy pupil-to-latrine ratio	670:1	254:1	439:1

a. All ratios tabulated by school. Means are the average of each school's pupil-to-latrine ratio. Two primary schools and one secondary school have no latrines and several schools do not have any latrines that qualify as 'at least partially functional' or 'at least somewhat clean'. To calculate ratios for these schools, the total number of latrines has been set to 1 (0.5 for girl-specific and boy-specific calculations).

Note: In tables 4 and 5 (above), latrine functionality and cleanliness have been defined as in the WASH in Schools Monitoring Package [17]:

Functional – the toilet facilities are not physically broken and can be used.

Partially functional – the toilets can be used, but there are at least some problems with the physical infrastructure (e.g., some deterioration in concrete, doors/locks coming loose, roof deteriorating) and some repair is necessary.

Not functional – the toilets exist, but are so badly damaged or deteriorated it is no longer reasonably possible to use them (e.g., squatting plate broken, door missing, roof has holes).

Clean – the toilet facilities are not smelly, there are no visible faeces in or around the facility, there are no flies and there is no litter.

Somewhat clean – there is some smell and/or some sign of faecal matter and/or some flies and/or some litter.

Not clean – there is a strong smell and/or presence of faecal matter and/or a significant fly problem and/or a large amount of litter.

A closer look: Barriers and drivers of school toilet use for girls and boys

Both girls and boys were asked about how they personally decided whether to use toilets at school. For girls, privacy is a main concern. For boys, the main barrier to toilet use is the requirement to fetch water. Both girls and boys reported cleanliness and odour to be major barriers. All participating students reported that the preferred place for urination, defecation or addressing menstruation was a private and safe toilet at home that had access to water and cleansing materials. Barriers to school toilet use include the following:

Inability to access water – Both boys and girls indicated that a lack access to water is a barrier to toilet use. For boys, it is primarily a barrier to toilet use for defecation; for girls, it is a barrier to toilet use for urination, menstruation and defecation. A lack of water has a greater impact on girls because it affects their personal odour and physical cleanliness after urination and defecation and during menstruation. It also may indicate to others that they are menstruating if they are unable to effectively flush the toilet bowl clean.

Difficult access and a lack of privacy – Girls reported long lines for toilets as a barrier to toilet use for defecation and urination during menstruation. Long lines for an occupied toilet mean a lack of anonymity for the user. Girls discussed fear of another person knowing that they used the toilet while they were menstruating. Boys reported a similar concern regarding using a toilet for defecation.

Non sex-separated toilets – At the primary level, boys and girls expressed that sharing bathrooms with the opposite sex was a barrier of toilet use. Boys and girls preferred sex-separated toilets because they felt uncomfortable with a member of the opposite sex waiting for them to use the toilet or entering after their use.

Beliefs that ghosts occupied toilets – It was not uncommon for boys or girls to report that ghosts or monsters inhabited their toilet, and those who believed ghosts were inside did not want to use the toilets. When students were asked if they would use a clean, odour-free toilet with effective locks and lighting if it reportedly had a ghost, students explained that the fear of the ghost or monster would still be a barrier to use. They further explained that removing this barrier would require the toilet area to be blessed by a priest, and they would then use the facility.

A driver of toilet use for girls was the stigma of urinating or defecating outside. For both boys and girls, alternative choices to toilet use for urination and defecation included tall grass, backs of school buildings, going to nearby forested areas, leaving school property to visit a nearby friend's home, and going home. However, there is far more cultural acceptability for boys to openly urinate and defecate than for girls. As a result, the stigma of urinating or defecating outside is a driver of toilet use for girls.

(See annex 3 for a full table of reported barriers and drivers to toilet use.)



Girls learn about menstruation pre-menarche from close female relatives and friends. Support from teachers would help girls and boys understand the biology of menstruation, and could help reduce some of the MHM challenges girls experience in schools.

Photo credit: © Jacquelyn Haver, 2012

Determinant 2

Insufficient knowledge, practical guidance and support

Knowledge of menstruation is directly tied to all educational and health challenges. It dictates and informs girls' understanding of menstruation and their behaviour during menstruation, including menstrual hygiene, dietary restrictions and how they feel about themselves. Overall, the specific context of the Masbate area reflects the underdevelopment that impinges on people's access to knowledge and may explain the persistence of misinformation across generations. Details on this determinant are presented below.

Deficient information provided prior to and at first period

Girls learn about menstruation pre-menarche from close female relatives and friends. Although personal experiences are kept private, menstruation as a general topic is openly discussed. At menarche, girls are told how to manage menstruation and they learn the rituals that they should follow upon "becoming a lady," a transition that entails the responsibility of maintaining a "ladylike" appearance. When girls experienced odour or stains, they expressed the feeling that they have failed at being a lady, which caused shame. A list of cultural traditions for menarche and menstruation in Masbate is presented in table 6.

Table 6. Norms related to menarche and menstruation in Masbate, as described by participants

Upon menarche, girls are instructed to:
Sit on a coconut shell and move around the lodging to ensure uninterrupted menses and regularity.
Jump three stairs, or in the absence of stairs, jump three times to a wooden bed to ensure shortened periods of three days.
Wash face with the first underwear soiled by menstruation for acne prevention.
During menstruation, girls are taught to:
Reduce or cease bathing for the first three days of menstruation to prevent sickness, irregularity and cramping. Girls, boys and mothers reported that bathing during menstruation can also cause insanity.
Layer underwear, shorts or skirts when menstruating to prevent accidents.
Reduce physical movements to prevent accidents or a <i>pasador</i> falling from skirts.
Avoid eating sour foods such as tamarind, green mango or vinegar to prevent dysmenorrhoea (painful menstruation).
Avoid boys during menstruation to prevent increasing the menstrual flow.
Avoid leaving the house to prevent stepping in animal waste; it is believed that stepping in animal waste will cause menstruation to have a foul odour.

Misinformation and inaccurate guidance about behaviours during menstruation

Girls indicated that they can openly ask questions and receive answers, but the answers are often based on local knowledge and practices that are incorrect. As a result, girls still have questions about what is happening in their body and how to effectively manage menstruation, particularly at school. They continue to express concern, fear and embarrassment.

Girls receive guidance from family and friends about how they should behave while menstruating, but this frequently includes misinformation about healthy behaviours. They are taught that not following this guidance can result in such consequences as illness, insanity, interruptions to or increases in menstrual flow, and cramps. Yet, following this advice may actually have negative impacts, as described in table 7.

We also tell them not to take a bath every day when they have their period because it's dangerous...because it can cause insanity.
 ~ Masbate, School 1, FGD, Mothers

My grandmother said that I should not use sanitary pads because she said the blood flow will stop.
 ~ Masbate, School 7, IDI, Girl student

Table 7. Examples of traditional guidance, perceived consequences of non-adherence and experienced impacts of following this guidance

Guidance girls receive	Perceived consequence of not following guidance	Result of following guidance
Do not bathe for the first three days of menstruation	Insanity; sickness; could stop menstrual flow	Poor hygiene, odour, teasing, shame and self-isolation
Do not consume sour foods	Cramps; lapses in menstrual flow; menstrual blood will have increased staining power	Weakness and reduced caloric intake
Reduce physical movement	Cloth may fall; exertion causes increased flow	Isolation and withdrawal from activities such as playing and fetching water for toilet use
Do not interact with boys while menstruating	Increased menstrual flow and pain	Isolation and teasing from boys who are aware of girls' behaviour
Do not carry heavy loads when menstruating	Weakness; increased menstrual flow; lapses in menstruation	Conflicted feelings about fetching water at school for toilet use

Traditional guidance limits girls' ability to practise menstrual management and personal hygiene. For example, girls are told not to lift heavy loads, yet at many schools they need to fetch water in order to gain permission to use bathrooms or just to flush toilets. Without water girls cannot flush or wash their hands, reducing their ability to privately and effectively manage menstruation at school.

All participants discussed local knowledge, practices and traditions about menstruation, though the guidance they received varied slightly. Many participants questioned the local beliefs, and expressed concern and confusion as to whether they were true. But without adequate guidance, girls often resorted to following the norms, in case the consequences of deviating from traditional restrictions were true. Girls who had access to learning materials about puberty, teachers who were properly informed and female guardians who were aware of healthy menstrual hygiene practices were less likely to follow traditional practices.

Limited menstruation education in schools

The Philippine national education policy includes menstruation education as part of the core curriculum, and the topic is presented in various courses (see box at right). Nonetheless, girls continually lacked accurate information as several barriers prevented them from learning about menstruation at school.

Core courses that include menstruation education

- Home Economics and Livelihood Education (EPP)
- Music, Arts, Physical Education, and Health (MAPEH)
- Technology and Livelihood Education (TLE)
- Values
- Science

Learning materials were often outdated and were not always available for girls to access themselves. Students lacked textbooks that would allow them to follow lessons, look up information, and think critically about the traditional information they are receiving.

Teachers noted that the lack of learning materials for students was also a challenge for them, for example, as described during a key informant interview: “There’s only a teacher’s guide. There’s nothing for pupils, most especially if it’s EPP [Home Economics and Livelihood Education]. When the topic is menstruation there’s no supply of books that they could read. It is just [a] teacher’s own effort. When I present this, I just continue ‘cause there is nothing that they could read” (Masbate, School 6, KII, Teacher).

Male teachers were often responsible for presenting the sessions on menstruation, but indicated that they were uncomfortable and reluctant to teach menstruation and menstrual hygiene. Girls also discussed being embarrassed and uneasy about discussing menstruation and menstrual hygiene with male teachers and said that male teachers were not approachable.

What teachers were supposed to teach was often at odds with what was taught in the home and what resources families had available for girls. As a result, teachers had doubts about the value of the lessons they were providing.

At the schools that were visited in Masbate, there were no accountability mechanisms to ensure that teachers were providing the correct information to girls and no enforcement for following the curriculum on puberty. Teachers used their discretion to determine what is taught and how much time is spent on the lessons.

Many teachers reported that they base menstruation lessons on what they are comfortable with discussing. Several teachers said they shared the traditional beliefs that girls learned at home and would simply uphold the same guidance. One teacher indicated that she corrected inaccurate information girls had about bathing, and the information she provided was mostly correct. However, she still made thorough bathing with soap seem inappropriate: “They said that it is not allowed to take a bath if you have a period, but I said don’t believe such things because it’s only a belief. The truth is you must take a bath every day because it can cause a bad smell if you’re not taking a bath. If you’re taking a bath it should be for a moment only, don’t stay long in the water and then don’t wash with soap. You must change underwear day and night” (Masbate, School 5, KII, Teacher).

For me as a male teacher that’s the most difficult. How can you teach that? In our society, it’s difficult to just tell them ‘wash your...’ For me, it’s awkward if a male teacher will tell that. Even for the students. It’s because of our culture, we’re embarrassed, unless if there was professional training for the male teachers. It will turn into laughter.

~ Manila, School 10, KII, Teacher

We’re teaching, but we’re not sure if they’re really learning. They use a cloth because they are poor and from a remote area. We teach them about proper cleaning, but maybe they’re not practicing it in their house.

~ Masbate, School 6, KII, Teacher

Lack of accurate practical guidance for effective menstrual hygiene management

Because girls were often misguided at home and were not assured access to accurate information at school, they frequently lacked practical guidance for effectively and safely managing menses and related physiological symptoms at home and in school. Girls need clear guidance on how to use the absorbent materials that are available to them, when to change and bathe, and how to manage pain, discomfort and fatigue.

Girls' limited knowledge of how to use absorbent materials contributed to odour and stain challenges because they did not change their materials often enough. They repeatedly asked for advice on how to avoid stains. Girls who were instructed to use cloths experienced stains because they could not hold heavy menstrual flow without regular changing. Also, the cloths could fall from their underwear and embarrass them. Girls who used sanitary pads also experienced odour and stain challenges because they reduced changing to limit the number of sanitary pads they used.

Girls mentioned cramps, headaches and fatigue as challenges, and many did not have knowledge of or access to medically approved pain relief. Some physiological symptoms could be reduced or avoided with appropriate knowledge. For example, although active play was avoided, movement can actually help relieve cramps.

Variable access to support from teachers in school

Even though the information and practical guidance provided by teachers varied in each school and could sometimes be inaccurate, girls noted that teachers' support was valuable to them. Support from teachers helped girls and could reduce some of the challenges girls experience. One girl noted that her teacher would provide useful advice, while another student discussed how a teacher would provide her with help if menstruation interfered with her schooling.

Girls also expressed the need for teachers to be understanding of their challenges in school, particularly when they do not have materials they need or when they experience a bloodstain.

Sometimes the teachers would give you good advice about what you are going to do when you are menstruating.

~ Masbate, School 3, FGD, Girl student

I: Do you get help from your teacher if you are absent from the class?

P: She gives me a special exam, and on Saturdays she lets me study the lesson that I missed.

~ Masbate, School 5, IDI, Girl student

Sometimes we tell our teachers if that girl has a leak on her uniform, we suggest that that girl should go home because she has a visitor and our teacher could then understand her undertakings.

~ Masbate, School 8, FGD, Girl student

Deficit of puberty education for boys

Boys learn about menstruation in the home, understand the rituals of menarche and are aware of girls' practices, but they often lack a clear biological understanding of menstruation. Boys reported wanting more information about menstruation so they could support their female peers and could be prepared to support sisters and future daughters: "Time will come that I will have a daughter and she will have her menstruation. I can tell her about it and she will be prepared on what to do, she will have knowledge" (Masbate, School 1, FGD, Boy student).

During adolescence, boys often tease girls who are going through puberty. This teasing could be related to their lack of understanding. Boys said that they did not realize the emotional impacts of their actions, and this could be an important part of education targeted to reach boys.



Lack of privacy was a constant concern for girls. The top photos show ground-level windows that allow boys to peep at girls who are using the toilet. The bottom photo shows the exterior of a toilet that is located inside a classroom, which allows smell and noise to be public.

Photo credit: © Jacquelyn Haver, 2012

Determinant 3

Poor access to preferred absorbent materials

Girls considered sanitary pads to be ideal for managing menstruation because pads are more effective than cloths to capture flow and more stable (less likely to fall out). Girls strategically reserved sanitary pads for their days of heavier menstrual flow, and they often went for long periods of time without changing sanitary pads to conserve the number of pads they used per menstrual cycle. Using pads longer than recommended increased risk of leaks, stains and odour.

The majority of girls placed folded pieces of cloth or old clothing, called *pasadors*, in their underwear to manage menstrual flow. Although *pasadors* are convenient because they can be made from anything, they do not prevent leaks as well as sanitary pads. Girls restricted their movements when they used a *pasador*, for fear of it falling from their underwear.

Girls were uncomfortable using school facilities to change or clean their *pasador* because it requires a private and secure environment with access to water.

In addition to using absorbent materials, girls often layered their underwear, shorts and skirts to prevent menstrual blood from soaking through their clothes. This was also done when girls could not access any absorbent materials.

Girls, mothers and teachers explained that sanitary pads are not available on the school grounds, and are often too expensive for many girls to purchase. Although sanitary pads are available at most community stores, the cost is a barrier to use. Girls requested that canteens sell sanitary pads at school.

If I have my period I want to use a sanitary pad, but if I only use a cloth I don't really want to go to school because I might have a leak if I use it.

~ Masbate, School 3, IDI, Girl student

The sanitary pad is much safer because it has an adhesive, right? So the pad is much safer than the cloth. Because a cloth might fall.

~ Masbate, School 8, FGD, Girl student

My cousin didn't have a sanitary pad to use so she cut some of her shorts and used it as a pasador, then she taught me how to do it.

~ Masbate, School 3, IDI, Girl student

She uses a pasador because if she doesn't have money, she can't buy a pad, and she will only use a cloth.

~ Masbate, School 1, FGD, Girl student

Impacts on and potential risks to education and health

Discussions with participants suggested that as a result of the MHM challenges girls faced at school, they experienced negative education- and health-related impacts and are at risk for additional negative consequences.

Voiced impacts are the impacts that girls, mothers, teachers and boys discussed as negatively influencing girls' health and education in the school setting. Voiced education impacts include distraction, impaired education, reduced participation and absenteeism. Health-related impacts include withholding urination, self-isolation, weakness and dizziness, and stress.

Potential risks to education and health are issues that may arise in the long term as a result of challenges or negative practices or behaviours related to menstrual management. While these were not mentioned as occurring, potential risks were identified through analysis based on the experiences and practices discussed by participants. Potential risks include missed educational opportunities, inequity in educational experiences, infection, and anaemia and nutritional deficiency.

Voiced impacts

Voiced impact 1

Distraction

Girls were preoccupied in class thinking and worrying about being teased for menstruation-related odour and stains. Because they were thinking about their period, girls had difficulty following lessons.

I always move if I have a period to avoid blood leaks on my skirt, that's why sometimes I can't follow the lessons anymore on what page of the book.

~ Masbate, School 3, IDI, Girl student

Voiced impact 2

Impaired concentration

Participants all reported that girls could not focus due to headaches, menstrual pain and feeling unwell. When girls had cramps, headaches, weakness or dizziness, they often withdrew from class. Girls reported that physical pain experienced during menstruation affected their ability to concentrate.

When your teacher is teaching, sometimes you cannot listen carefully because you are always bothered if you will get a leak.

~ Masbate, School 8, FGD, Girl student

Participating boy students also noted that girls have difficulty concentrating in class, indicating that they are aware of this issue for girls and that they do not expect girls to be able to perform as well during their period: "If they have their period they have a headache and they can't concentrate on what the teacher is discussing" (Masbate, School 1, FGD, Boy student).

Sometimes there is pain in the lower abdomen, then it's like you're indisposed to listen to the teacher.

~ Masbate, School 1, IDI, Girl student

Voiced impact 3

Reduced participation

Girls participated less in class when they were menstruating and refrained from answering questions, particularly if that required getting up in front of the class. Girls said that they often put their head down on their desks when experiencing menstrual pain, cramps, headaches, weakness or dizziness.

I: If the teacher will ask you to write on the board and you're only using the cloth, do you still write on the board?

P: I don't raise my hand, cause I might get a stain.

~ Masbate, School 8, IDI, Girl student

She has her period and she has a leak and her teacher called on her. She will not go in front, because she is shy, so her participation will decrease.

~ Masbate, School 8, FGD, Girl student

Voiced impact 4

Absenteeism

Absenteeism due to menses was the norm, accepted by teachers and students. Girls left school while menstruating and usually got permission from their teachers to leave. Common reasons for leaving school included stains, pain and teasing. Girls also expressed discomfort with using facilities at school during menstruation and preferred to go home if they needed to manage menses. Depending on the distance between school and home, girls did not always return to school. Girls and teachers reported that girls are sometimes sent home accompanied by a friend, thereby impacting the friend's attendance as well.

Voiced impact 5

Withholding urination

Girls reported withholding urination during menstruation when water was not available to flush toilets. In addition, they were afraid that students who use the toilet after them would observe menstrual blood in the toilet bowl: "The first time I had my period I had a headache and I couldn't urinate at our CR because maybe there's no water. I was scared that I might see blood on the bowl" (Masbate, School 6, IDI, Girl student).

Girls were aware that withholding urination could increase the risk of urinary tract infections and kidney issues, but the risk of embarrassment was more pressing than the risk of health problems. Withholding urination was especially prominent among girls in primary schools, where facilities are shared with boys and are located in the classroom. These concerns influenced girls to go home to use their own facilities.

Voiced impact 6

Weakness and dizziness

Girls spoke of feeling weak and dizzy during menstruation, resulting in decreased participation in the classroom and absenteeism. Girls in Masbate are taught to follow practices that restrict consuming sour foods during menstruation, including green mangoes, which are a common school snack. Many sour foods are a common part of the regular diet, so restricting their intake may hinder girls' nutrition.

On the day that she has no period, she has a lively body and she seems to be enthusiastic in her activities. While on the day that she has her period, her body is weak and she seems to be disinterested to attend her class.

~ Masbate, School 8, FGD, Girl student

Voiced impact 7

Self-isolation

Girls reported withdrawing from social interactions at school during menses, avoiding male students and interacting only with trusted friends. Girls indicated they even disliked recess, a time intended to allow for release and social contact. Self-isolation served as a coping mechanism to avoid embarrassment and shame from teasing, but it also negatively affects girls' social health.

Because I might get leaks I don't stand, I don't walk around. I don't even like to have recess.

~ Masbate, School 3, IDI, Girl student

Voiced impact 8

Stress

Girls worried about many aspects of managing menstruation, including not knowing when their menses would come each month and their inability to manage their menstrual flow. Additional stress was caused by the contradictions between traditional practices for managing menses and those that may have been taught in school. Girls felt stress as they tried to figure out what to do given the information they had.

Potential risks

Potential risk 1

Missed educational opportunities

While none of the girls reported a decrease in grades, inability to advance in school or reluctance to continue in school due to MHM challenges, they did report absenteeism, distraction, inability to concentrate and reduced participation. If students are unable to learn during class time as intended, educational performance and learning outcomes may be hindered, leading to missed educational opportunities to excel or advance. Further research should investigate the compounded effects of voiced impacts over time.

Potential risk 2

Inequity in educational experiences

Impaired concentration, distraction, reduced participation and absenteeism may not allow girls to take full advantage of schooling. This research did not investigate how boys' education may be compromised in any way, but challenges related to menstruation may put girls at a disadvantage compared with their male counterparts.

Potential risk 3

Infection

Girls are instructed not to bathe during the first three days of menstruation. Mothers who were financially constrained and unable to purchase sanitary pads expressed concern that their daughters may experience an infection due to poor hygiene practices at school. In addition, girls who did not change absorbent materials when needed may put themselves at risk of vaginal infection. Some girls and mothers understand that bathing is important: "The doctors said there are so many superstitious beliefs, like don't take a bath if you're menstruating. But the doctor said it's not right. We could get some infections if we don't take a bath regularly when menstruating. We should clean every day, take a bath every day" (Masbate, School 1, FGD, Mother).

Potential risk 4

Anaemia and nutritional deficiency

All participants said that girls typically experience dizziness and weakness during menstruation, and this may be linked to traditional dietary practices. It is commonly believed that consuming sour foods or drinks during menstruation can prolong or stop the menstrual period. Although green mangoes are a staple snack at school for students, as previously noted, girls are advised not to eat them during menstruation. Such dietary restrictions may result in anaemia, low blood sugar or other types of malnutrition, which would explain girls' weakness and dizziness during menses. Further exploration of the link between dietary restrictions and nutritional deficiency is needed.

'Mikay's' story

This story is based on a compilation of participants' voiced experiences with menstrual hygiene management in Masbate Province.

Mikay is 14 years old and attends high school on the island of Masbate. She lives with her grandmother, 2 miles from school. Mikay grew up hearing her grandmother and ladies in her community talk about menstruation. Her friend's aunt said girls should perform rituals to have a short three-day period and to prevent acne. Another aunty said the rituals prevented lapses in her period. Mikay and her friends were not sure what to think.

When Mikay was 12 years old and visiting the ocean on a family trip, she noticed there was blood in her underpants. She felt scared and shocked. She did not know what to do. Her cousin came over to see what Mikay was doing and knew right away that Mikay was having her first period. Mikay made her cousin promise not to tell anyone because she was embarrassed.

When Mikay arrived home, her grandmother washed her clothes and saw Mikay's soiled panties. She proceeded to scold her for not telling her about her period and not going through the rituals. Mikay's grandmother warned her to not eat green mangoes when menstruating because they caused stains and menstrual cramps. She also told Mikay that she shouldn't leave the house because she might step in chicken poop and make her menses smell like chicken poop.

Mikay was also advised not to mix with boys while menstruating, not to run and play, and to be cautious with her movements. She was told that now she must always act "like a lady." Mikay listened to her grandmother's advice.

One day when she had her period at school, she could not concentrate on what the teacher was saying due to worrying that she might have a stain on her skirt. In an effort to prevent a leak, she tried sitting on one side of the chair and kept moving around in her seat. Mikay needed to use the toilet, but in order to use the school toilet she had to fetch water to flush it. Mikay was told that she should not carry heavy loads when menstruating because she might get sick if she exerted herself. Usually, Mikay went home if she needed to use the toilet during menses, but because she thought she had a leak she asked her friend to go to the school toilet with her.

There was a long line of students waiting to use the one clean and working school toilet. When in line, a group of boys teased Mikay because they knew she had her period. Her friend told Mikay to ignore the boys, but Mikay felt ashamed. She was worried that she smelled bad.

When Mikay went into the toilet stall, her friend waited outside for her in case the lock did not work or the boys tried to peep in the window. Mikay saw a bloodstain and tried to wash it off her skirt, but there was no soap and it was difficult to move around inside the stall because it was such a small and dirty space. Now Mikay did not want to come out of the toilet because her skirt was wet from trying to clean the blood. Mikay's friend found 5 pesos and went to a store across the street to buy a sanitary pad. She discreetly brought it back to Mikay.

Both girls were nervous because they went back to class late. The girls did not tell their teacher about the boys teasing because they felt shy and did not want their male teacher to know Mikay was menstruating. They did not admit to the teacher why they were late, but the teacher already had an idea. Mikay spent the entire class worrying about the stain. She also felt weak because she had not eaten her typical snack of green mangoes during the break; according to common practice, she was not supposed to.

Mikay went home at lunch and did not come back to school that day. She preferred managing her menstruation at home where she had water, a flushing toilet, soap and fresh clothes to change into. At home, no one would make fun of her. When she returned to school the next day, she layered extra panties and used a cloth. She avoided boys and sat quietly in class all day worrying that she would have a stain again. Everyone knew that she had her period.

Metro Manila case study

Challenges, voiced impacts and determinants identified in a single school in the National Capital Region of Metro Manila are described in this case study. The girls who participated in the assessment were 13–16 years old. Findings from this area are not comprehensive because only one school was visited. More work is needed to confirm preliminary findings and for a true comparison with findings from Masbate.

Challenges experienced in Manila

Key challenges to managing menstruation for girls in the Manila school were not unlike the experiences described by girls in Masbate. Leaks, stains, odour or a sanitary pad being noticed can cause embarrassment. Teachers, girls and boys reported that male students tease female students about menstruation.

Voiced impacts reported in Manila

Girls indicated that the challenges of managing menstrual hygiene in school impacted their educational experience by leading to distraction and missed class time. Both girls and boys reported that girls experience difficulties with concentration in class when menstruating. Girls are distracted, worrying about having a leak and experiencing teasing.

I placed the pad in my pocket, so I could go and change, but the restroom was closed so I just went back downstairs. I immediately sat because there's already a teacher in front. Then a male classmate of mine was beside me so he got to see the brand of my pad peeping from my pocket. He then loudly exclaimed, "What's that?!" I just said, "It's nothing." But then he realized what it was and he laughed out so loud and he told our classmates. I was so embarrassed.

~ Manila School, IDI, Girl student

I just told her that she has a stain; she told me not to tease her. I told her that she should just go home, and then she asked permission to go home and didn't come back afterwards.

~ Manila School, FGD, Boy student

Maybe because they don't know what girls are feeling, that's why they tease them, and sometimes because of their smell.

~ Manila School, FGD, Boy student

As described by one girl: “I become totally spaced out. I become like a mere decoration in our classroom because I no longer want to chat with others. I seldom recite too because I don’t want to keep on standing up. I’m afraid I might get a stain on my skirt. It’s pink, so a stain would really be obvious” (Manila School, IDI, Girl student).

Pain and fatigue were also reported as barriers to concentration: “I just rest. If it’s really painful, I just lie down and sleep it off. Sometimes, when I’m in school, and it’s really painful, I just remain seated on my chair and I avoid talking with others because I might just get irritated with them” (Manila School, IDI, Girl student).

Determinants identified in Manila

Determinant 1

Inadequate WASH facilities in schools

Issues for WASH facilities in Metro Manila, as in Masbate, include an insufficient number of toilets that are fit for use; poor facility maintenance; lack of privacy; and lack of hygiene materials available in the toilet stalls. The lack of disposal systems for used absorbent materials was also a major concern.

You know this has been a long-term problem of DepEd [the Department of Education]. They know that the comfort rooms are not enough. Like we have 1,700 students but we only have seven comfort rooms, and just a few toilet bowls. So let’s say our first shift has 498 female students. For that first shift, they can only use three toilet bowls, so that’s not really enough.

~ Manila School, KII, Teacher

Teachers were aware of the lack of toilets, and discussed it as a problem that has been known and unaddressed for a long time. Students reported that uncleanliness and odour are also a barrier to toilet use. And girls were notably concerned about privacy when using school facilities, especially when managing menstruation.

Having a private space that is not visible to anyone else and a door with locks provides girls with the ability to securely manage menstruation. In the school visited, doors were missing and stalls were low and could easily allow others to see over them. Windows were low and allowed the toilets to be seen from outside. Girls reported using the facilities with a companion to protect them from boys who may peep.

Girls also reported that they did not have what they needed in the school toilet stalls to enable them to practise personal hygiene appropriately. They would like water and toilet tissue to be available, as well as trash cans or bins for disposal of used absorbent materials. A trash can with a lid would ensure privacy for disposal, without risking clogged sanitation systems.

Boys and girls report that girls are embarrassed to dispose of sanitary pads. Girls either take materials home or flush them down school toilets: “When girls change their sanitary pads they just throw it in the bowl” (Manila School, FGD, Boy student). Flushing pads can harm toilets and sewer infrastructure. The Manila Water Company, which has more than 144,000 sewer connections spanning 305 kilometres, reported that it receives an average of four reports of blockages daily and that pads and rags are always among the debris pulled from the clogged lines [23].



School toilets in Manila lack privacy for the user. There were no walls or doors, and windows exposed the interior of the toilets. In addition, there were no waste bins for disposal of used materials.

Photo credit: © Kathreen Yap, 2012

Determinant 2

Insufficient knowledge, practical guidance and support

Teachers and students were better informed about menstruation in the Manila school than in the Masbate schools, although some improvements in menstrual education are needed. Despite having a strong understanding of the biological reasons for menstruation, both boys and girls believe that menstrual blood needs to exit the body because it is dirty.

RA: *Yes, what have you learned [about puberty]?*

P: *About personal hygiene, the things to be used, like feminine wash.*

RA: *Who taught you about feminine wash?*

P: *In seminars, like the ones being held by Whisper.*

~ Manila School, IDI, Girl student

The established curriculum is followed more closely in Manila than in Masbate, so girls and boys received information about the female reproductive system and why menstruation occurs during biology class. Additional information about menstruation and menstrual management was offered to students through seminars run by Procter & Gamble and Kimberly-Clark. But programmes initiated by the private sector, or the Department of Education, were not delivered consistently. Misinformation and inaccurate guidance about behaviours during menstruation remained prevalent among the participants.

Girls in Manila discussed 'feminine hygiene' products, such as washes, and felt that they were necessary to maintain personal hygiene. Proctor & Gamble (Whisper) provided sanitary pad and deodorant samples during education sessions and heavily promoted feminine wash products, which were also given to girls. Girls trust these education sessions and believe that these products should be used, despite the fact that they may harm the flora (micro-organisms) needed for sound vaginal health [24]. Vaginal health may be at increased risk if products are used incorrectly. The health effects of these products should be further evaluated before they are promoted to girls, and they should be evaluated with the behaviour of girls aged 13–16 in mind.

The representatives from Kotex came and taught once. They taught about hygiene and gave modules around it. Unfortunately, the kids weren't able to get the learning materials, and I think the DepEd stopped it. I personally think the program was great, if they could continue it. Although Kotex discussed thoroughly about personal hygiene, it was better when we also included this in VALUES subject, but the program stopped.

~ Manila School, KII, Teacher

As in Masbate, girls reported restrictions on bathing. Mothers taught girls that bathing during menstruation was something they should not do. One girl, however, reported that she defied this restriction: "I actually do not believe in one superstition of not being allowed to take a bath when one is menstruating. I still took a bath, and nothing happened. ... I think it would really feel dirty if I don't shower. I didn't worry much about it because it's normal. It's up to you on how you take care of yourself" (Manila School, IDI, Girl student).

Students in Manila had questions and concerns about pregnancy and sex, which was not brought up by girls in Masbate. Students reported that the support they receive for understanding sex and the menstrual cycle was varied. One boy explained that he had questions for his parents about menstruation and sex, but these were not well received. There were girls, on the other hand, who reported receiving support from their families and that this support has a positive effect on their ability to manage menstruation.

My parents, they got angry and asked me if I was already going to get married because I was asking about menstruation. I said no and that I just wanted to know more about it. Things like when a girl is menstruating, whether she cannot perform sexual intercourse. I asked my parents about it because someone already came to school and taught us how to avoid early pregnancy.

~ Manila School, FGD, Boy student

For me, the most important thing is their [parents] understanding because it is really not easy when you have your period. However, I'm not having a hard time regarding that because my family is very understanding of it.

~ Manila School, IDI, Girl student

Determinant 3

Poor accessibility to preferred materials

Sanitary pads are not regularly available at school. Girls must leave school property to get pads, either going home or to a store. Girls reported that they would like a canteen at school where they can purchase sanitary pads without embarrassment.

Whisper once provided sanitary pads to the school, and sanitary pads were distributed as needed through the school clinic. It is not clear, however, how long this support was maintained or how long the supply lasted: “Whisper gave us sanitary pads, and we gave them to students. Some of them were left and our clinician just set them aside. When a student complained of pain in the lower abdomen or had stains, we give them so that they can change” (Manila School, KII, Teacher).

Girls at the Manila school received more financial support from their parents to purchase menstrual management supplies than girls in Masbate. One girl explained that because she had knowledge and financial support from her family, menstruation was less of a challenge: “Instead of using my own money to buy the things I want, I had to spend it to buy the things I need [sanitary pads]. When my parents learned about it, they included sanitary pads in our family budget” (Manila School, IDI, Girl student).

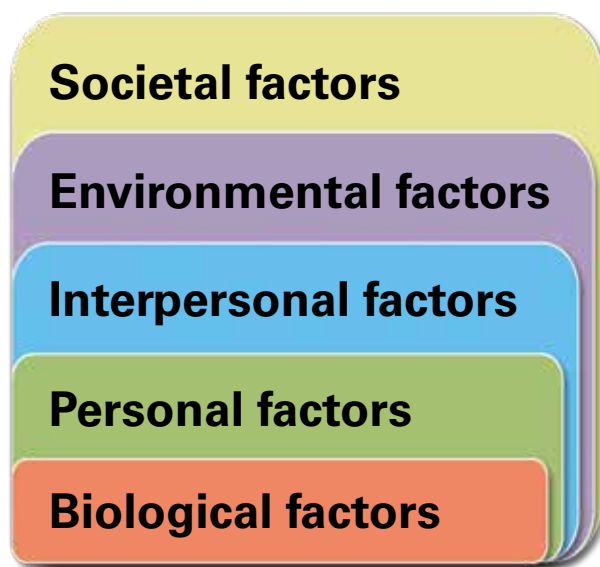
Summary of key findings

Determinants of menstruation-related challenges appear at multiple levels of the social ecology and will require efforts with a wide range of stakeholders to address girls’ challenges, reduce impacts and help prevent potential risks. This summary outlines key research findings for the five factors shown in figure 3.

At the societal level – Interest at the national level for addressing MHM challenges is growing. Government ministries, agencies and non-governmental organizations are beginning to recognize the importance of menstrual hygiene management for advancing girls’ education. However, there are no policies, budgets or standards in place to guide and support MHM initiatives at the school level. In general, menstruation is still avoided as a topic of discussion.

At the environmental level – Most schools are not equipped with the facilities girls need to manage menses effectively and discreetly. When schools do have facilities, they are often too few in number to support all girls in the school population. Girls have limited access to affordable and effective absorbent materials in school and in their community, which impacts their ability to manage menstruation with confidence.

Figure 3. The social-ecological model



At the interpersonal level – Family, friends and teachers share information about menstruation and personal hygiene. The information, however, is not always biologically accurate, contributing to girls experiencing shame and confusion. Interaction with family, teachers or other students is often necessary for girls to access absorbent materials or facilities. In many instances, girls will not attempt to seek what they need if these relationships and interactions are uncomfortable or potentially harmful. Girls tend to be teased during menses and often choose to isolate themselves from others to prevent embarrassment.

At the personal level – Most girls are not equipped with the appropriate knowledge or skills to manage menses effectively, and many have negative attitudes or beliefs about menstruation. Awareness on MHM is relatively higher in Metro Manila, compared to Masbate Province. This may be due to the greater socio-economic opportunities available in urban areas. With only one urban sample school, however, the situation requires further study in order to draw more defined distinctions between Philippine rural and urban settings.

At the biological level – Girls experience menstruation differently and do not understand that differences in cycles, symptoms and pain can be normal. Girls lack strategies to treat pain and track their cycle so they can better prepare for and manage menses.

Recommendations for improving girls' experiences with menstruation and their abilities to successfully manage menstrual hygiene are presented in the following section.

Recommendations

Broad engagement from a wide range of stakeholders – including the Government of the Philippines, non-governmental organizations, schools, teachers and parents – is essential to ameliorate girls' challenges in school during menstruation. This section provides a summary of key recommendations, based on the findings of the MHM assessment.

Key recommendation 1

Integrate menstruation into reproductive health and hygiene education materials –

- a. Menstruation-related components should be an essential element of reproductive health and hygiene education, including:
 - i. The biology of menstruation and practical guidance for menstrual hygiene management.
 - ii. Clear guidance regarding the safety of traditional practices.
 - iii. Respect for students' privacy during toilet use
- b. Menstruation education needs to be age appropriate, culturally sensitive and interactive, and delivered throughout primary and secondary school.
- c. Stakeholders at the national, district and community levels need to strengthen teachers' capacities and provide teachers with the tools they need to offer students in-depth and medically accurate information in a safe learning environment.

Key recommendation 2

Improve WASH facilities in schools –

- a. Implement improvements in WASH facilities that make the following conditions a priority:
 - i. Private, discreet and comfortable use by students.
 - ii. Availability of basic WASH consumables and resources such as soap and water.
- b. Develop and enforce systems for WASH facility maintenance, including:
 - i. Mechanisms to maintain existing WASH infrastructure in schools.
 - ii. Regulations to ensure and monitor privacy of facility use.
 - iii. Means of prioritizing construction and repairs in schools with poor basic WASH facilities.
 - iv. Evaluation of school facilities to ensure equitable distribution of WASH funding to schools.
 - v. Strategies to conserve water that are disseminated and practised.
- c. Incorporate the needs of menstruating girls into the design of WASH infrastructure in schools.

Key recommendation 3

Establish systems that enable girls to access absorbent materials comfortably, discreetly and when in need –

- a. Involve girls in the creation of systems for accessing materials so they are specific to girls' needs and comfort level in each school.

Key recommendation 4

Create support systems to ensure that girls who miss school due to menstruation-related challenges do not miss out on educational opportunities and advancement –

- a. Provide girls with notes from missed classes.
- b. Allow girls to make up missed assignments or class activities.
- c. Ensure that girls who accompany their friends home in order to take care of menstrual hygiene are also able to make up any missed assignments or class activities.

A comprehensive and detailed list of recommended programme components, organized by key determinants, is included in annex 1. This list may be used as a means to evaluate which components individual schools already have in place and to identify the gaps that need to be addressed. Specific recommendations contributed by the participants who were engaged in this research are described in annex 2.

While these recommendations are evidence-based, the evidence comes from a small sample of schools in Masbate Province and Metro Manila. Stakeholders should consider what is feasible and test various strategies for action at a small scale to discern what is most effective.



WASH facilities in schools that enable girls to manage menses effectively and discreetly are a vital element of reducing girls' risk of missing class time and educational opportunities. Broad engagement from a wide range of stakeholders is essential to ameliorate girls' challenges in school during menstruation.

Photo credit: © Jacquelyn Haver, 2012

Annex 1. Comprehensive recommendations

Annex 1 presents a comprehensive and detailed set of recommendations, organized by three topics: (1) menstruation knowledge and education; (2) WASH facilities in schools; and (3) absorbent materials. All data were analysed collectively to identify a wide range of programmatic recommendations to ameliorate the challenges girls face when managing menstruation in school.

Information on the current situation is presented in the introductions for each table. The ‘vision for change’ – what we expect or hope will result from the recommendation – appears at the top left of the tables. Recommendations to enable change, which include the detailed recommendations, appear in the middle column; these recommendations are formatted with checkboxes and may be used as a quick evaluation sheet. Finally, community assets – the programmes, systems, organizations and initiatives that are already in place and are important to get recommendations into motion – are shown in the far-right column of each table.

Menstruation knowledge and education

Girls lack accurate information and resources to understand why menstruation occurs and how to manage it. Inaccurate and missing information on menstrual hygiene management contributes to girls’ challenges in school. The resulting impacts on education and health include odour, embarrassment, distraction, missed class, absenteeism, isolation, shame and stress. Details on recommendations for improving girls’ access to menstruation knowledge and education are presented in table A.

Table A. Recommendations on knowledge and education

Vision for change	Knowledge and education recommendations to enable change	Community assets
<p>Girls understand the biology of menstruation, the normal changes taking place in their bodies, and what indicates infection.</p> <p>Girls possess concrete practical skills that allow them to manage menstruation: (1) safely and effectively; (2) with the WASH facilities available to them in school; and (3) with confidence and ability to think critically about traditional knowledge and advice on menstruation.</p> <p>Students understand and respect the privacy of facility use.</p>	<p>1.0 Reproductive health and hygiene education materials that integrate essential menstruation-related components are developed or updated.</p> <p>1.1 Girls are taught the biology of menstruation, including:</p> <ul style="list-style-type: none"> <input type="checkbox"/> What to expect during the menstrual cycle, including: typical emotional and physical signs of menstruation (quantity of blood flow, pain, discomfort); normal vaginal discharge during the cycle; how to identify a vaginal infection. <input type="checkbox"/> The menstrual cycle as a normal bodily function. <input type="checkbox"/> The relationship between the menstrual cycle, fertility, pregnancy and reproductive health. <input type="checkbox"/> The changes of menses throughout a woman's lifespan. <p>1.2 Girls are provided with practical guidance for menstrual hygiene management that explains:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Which absorbent materials can be used and where they can be obtained. <input type="checkbox"/> How to properly use WASH facilities in schools while managing menses, including toilets and trash cans. <input type="checkbox"/> How to safely wash the vaginal area and to avoid some types of 'feminine cleaning' products. <input type="checkbox"/> How to properly change and dispose of absorbent materials. <input type="checkbox"/> How to prevent and prepare for accidents (keeping spare pads/cloths, toilet paper and underwear on hand). <input type="checkbox"/> How to make effective home-made menstrual cloths and hygienically wash, dry and store cloths. <input type="checkbox"/> How to track menses to better plan for menstruation and pregnancy (fertility awareness methods). <p>1.3 Girls are given clear explanations about which traditional practices and beliefs are safe and which may be harmful, specifically:</p> <ul style="list-style-type: none"> <input type="checkbox"/> That regular personal hygiene to reduce odour and prevent vaginal infections is important, and that bathing during menstruation does not cause harm. <input type="checkbox"/> That girls can perform the same activities and eat the same foods when they are menstruating as when they are not. <input type="checkbox"/> That menstrual blood is not dirty and can not cause self-contamination, cancer or other sicknesses. <input type="checkbox"/> Doctors provide women and girls with information on remedies for pain reduction. <p>2.0 Menstruation education that is age appropriate, culturally sensitive and interactive is delivered on a continuum throughout primary and secondary schooling.</p>	<ul style="list-style-type: none"> ✓ Philippine education curriculum includes health and hygiene education relevant to puberty. ✓ Biology, MAPEH, TLE and Values courses include some material on menstrual health and the reproductive system. ✓ Technology and Livelihood Education already incorporates sewing into current lessons. Boys and teachers suggested including sewing reusable pads as a school project. ✓ Primary school curriculum promotes basic hygiene practices.
<p>Girls learn medically accurate information on menstruation (1) in a safe learning environment; (2) from a person they trust; (3) in a manner that facilitates asking questions; and (4) that is age appropriate for their comprehension.</p> <p>Boy and girl students learn that menstruation is normal and respect themselves and others during menstruation.</p>	<p>2.0 Menstruation education that is age appropriate, culturally sensitive and interactive is delivered on a continuum throughout primary and secondary schooling.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Education is provided to girls in primary school pre-menarche (between ages 9 and 10) and includes: the basic biology of menstruation, physical and emotional changes, and practical guidance on personal hygiene, absorbent materials and WASH facility use. <input type="checkbox"/> Classes and discussions on menstruation are gender-separated. <input type="checkbox"/> The Essential Health Care Package is expanded to include awareness and education on addressing MHM. <input type="checkbox"/> Programmes are developed that empower girls to gain and share MHM knowledge and provide support for each other (peer education, girl groups, educational radio campaigns). <input type="checkbox"/> Learning materials on MHM and puberty are made available and accessible and link to online resources. <input type="checkbox"/> Classes are provided several times a year to ensure all girls receive menstruation education and recognize it as a normal topic for discussion in school. <input type="checkbox"/> The MHM curriculum is coordinated across all courses in which menstruation is taught. <input type="checkbox"/> Lessons to all students emphasize respect for girls who have reached menarche and who are menstruating. <input type="checkbox"/> Lessons integrate dynamic learning activities and mechanisms for girls to ask anonymous questions. <input type="checkbox"/> Learning aids are available to explain complex bodily functions and the organs involved in menstruation. <input type="checkbox"/> Menstruation education is provided by female instructors to female students. <input type="checkbox"/> Secondary school lessons reinforce information learned in primary school and introduce sexual and reproductive health. 	<ul style="list-style-type: none"> ✓ The Department of Education is currently reviewing and updating curriculum. ✓ Plan's 'Because I Am a Girl' campaign focuses on girls' empowerment. ✓ The Essential Health Care Package is a successful model for oral hygiene and daily hand washing in the curriculum. ✓ Important information is delivered to communities and schools by NGOs through Information Education Campaigns. ✓ Personal safety lessons are run through NGOs and Child Protection at Plan that train teachers on anti-bullying and teasing. ✓ Biology, MAPEH, TLE and Values courses include some information on menstrual health and the reproductive system.

Table A continued

<p>Systems exist that provide teachers with the tools to teach menstruation education and create a safe learning environment.</p> <p>Stakeholders are accountable for implementing MHM teacher training.</p>	<p>3.0 Stakeholders at the national, district and community levels create a network that strengthens the capacity of teachers and equips them with tools to provide in-depth and medically accurate information in a safe learning environment.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Create a system for reproductive health and WASH experts to provide training for teachers on how to carry out lessons in their schools, or create systems in which mobile health workers teach reproductive health and WASH directly to students. <input type="checkbox"/> Ensure that a female teacher from each school specializes in menstruation education. <input type="checkbox"/> Provide courses to teachers that introduce strategies for discussing sensitive issues with students. <input type="checkbox"/> Create a work plan to track training sessions provided for each school community and who received the training. <input type="checkbox"/> Develop and provide instruction guides that contain medically accurate MHM content and learning activities. <input type="checkbox"/> Provide capacity building for teachers and school administration on bullying and teasing issues related to MHM. 	<ul style="list-style-type: none"> ✓ Teachers expressed interest and the need for teacher training on MHM. ✓ Personal safety lessons are run through NGOs and Child Protection at Plan that train teachers on anti-bullying and teasing.
<p>Students learn what is set out in the curriculum about puberty and menstrual hygiene education.</p>	<p>4.0 Stakeholders ensure menstrual hygiene education is delivered to students.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Anonymous learning/teacher reviews are incorporated to evaluate students' knowledge on puberty and hygiene. <input type="checkbox"/> An annual registry of learning materials is monitored to make sure the pupil-to learning material ratios are maintained as needed. 	<p style="text-align: center;">-</p>
<p>Girls do not miss out on educational opportunities because of menstruation.</p>	<p>5.0 Systems are created to ensure that girls who miss school due to menstruation-related challenges do not miss out on educational opportunities and advancement.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Buddy systems are in place for girls to copy lessons if school is missed due to menstruation. <input type="checkbox"/> Schools provide opportunities for girls to access learning materials (books, notes, teacher assistance) that were missed. <input type="checkbox"/> Make-up assignments and tests are made available. 	<ul style="list-style-type: none"> ✓ Some teachers already provide homework help and resource support when students miss school.
<p>Parents are involved in MHM education and are given information and practical skills to discuss menstruation accurately and to reduce stigma of the topic.</p> <p>Communities are actively involved in reducing the challenges girls face at school related to menstruation.</p>	<p>6.0 Menstruation education is provided to community members to de-stigmatize the topic and promote education within communities.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Organizations currently providing health workshops to mothers integrate menstruation-related education into activities to provide mothers with skills to share the information with their daughters. <input type="checkbox"/> Parent-teacher associations actively address menstruation challenges girls experience at school. <input type="checkbox"/> Educational symposiums on menstrual health and hygiene are delivered to schools by trained health professionals as a community event on an annual basis. 	<ul style="list-style-type: none"> ✓ Barangay (village-level) health committees support community health learning. ✓ Children know about menstruation at an early age, mothers are open about the topic, and children express curiosity. ✓ Educational symposiums already take place to provide teachers, students and communities with information on special topics.

WASH facilities in schools

Girls lack an enabling environment at school to manage menstruation. Inadequate facilities contribute to absenteeism, missed classes, reduced participation and distraction. Details on recommendations for improving WASH facilities in schools are presented in table B.

Table B. Recommendations on WASH facilities

Vision for change	WASH facility recommendations to enable change	Community assets
<p>National and local government officials have policies and mechanisms that encourage the proper use and facilitate the maintenance of WASH facilities in schools.</p> <p>Schools have water conservation strategies in place to ensure personal hygiene practices and facility cleaning are maintained and water consumption is sustained.</p> <p>All teachers enforce positive WASH habits with students.</p>	<p>1.0 Systems for WASH facility maintenance and use are developed and prioritized.</p> <p>1.1 Mechanisms are developed to maintain existing WASH infrastructure in schools and ensure:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Timely receipt and response to requests for WASH repairs. <input type="checkbox"/> Regular preventive maintenance of WASH facilities and systems. <input type="checkbox"/> Cleanliness and daily maintenance of school latrines. <input type="checkbox"/> Regularity of WASH education on correct facility use, and verification of teacher and student adherence. <input type="checkbox"/> Local access to spare parts and labour for repair. <input type="checkbox"/> Considerations for repair and maintenance are built into school budgets. <input type="checkbox"/> Environmentally friendly trash removal. <input type="checkbox"/> Regular unannounced visits by local authorities and figures are in place. <input type="checkbox"/> Catholic regions engage priests for regular blessings of WASH facilities. <p>1.2 Practical and sustainable water-conservation strategies for schools with unreliable water and electricity are developed and practised.</p> <p>1.3. Privacy of facility use is maintained and monitored through school rules and regulation</p> <ul style="list-style-type: none"> <input type="checkbox"/> Students are penalized for peeking/spying during toilet use. <p>1.4 Construction and repairs in schools with poor basic WASH facilities are prioritized over schools with better facilities.</p> <p>1.5 Stakeholders disburse WASH funding equitably to all schools.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Access to information and resources on receiving funding for facilities is made available to schools <p>2.0 WASH facility conditions in schools are improved.</p> <p>2.1 Facilities are secure and private, allowing for discreet and comfortable use by students. Structures are:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Gender separated for students aged 9 and above, with girls' toilets located at a distance from boys' toilet blocks. <input type="checkbox"/> Constructed with consideration of pupil-to-toilet ratios. <input type="checkbox"/> Constructed with private walls to ensure that activities inside are not seen, heard or smelled. <p>2.2 Basic WASH consumables and resources are provided to schools:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Toilet paper is available in each toilet stall. <input type="checkbox"/> Covered trash cans are present in each toilet stall. <input type="checkbox"/> Soap is present at each hand-washing station. <input type="checkbox"/> Each latrine stall has a functional lock inside and outside, and the door and closes completely. <input type="checkbox"/> Appropriate toilet-cleaning supplies are made available and accessible in all schools. 	<p>✓ The Philippines is dedicating national efforts to improve WASH conditions in schools.</p> <p>✓ Most schools have basic WASH facilities in place.</p> <p>✓ Private Catholic schools have additional support systems in place to repair facilities, and these systems can serve as models for other schools.</p>
<p>Schools have policies, facilities, and resources in place that allow girls to discreetly manage menstruation in school</p>		<p>✓ The Philippines is dedicating national efforts to improve WASH conditions in schools.</p> <p>✓ Many schools have basic WASH facilities in place.</p>

Table B continued

<p>Girls have functional, clean and private WASH facilities that provide the resources to safely manage menstruation in school and practise the MHM skills learned in the classroom.</p> <p>Girls have the facilities to practise personal hygiene at school.</p>	<p>3.0 The needs of menstruating girls are incorporated into future WASH infrastructure designs for schools:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Covered trash receptacles are provided in each toilet stall. <input type="checkbox"/> Toilets are constructed with adequate space for a girl to change absorbent materials or clothes, a trash can for safe absorbent material disposal, and water storage. <input type="checkbox"/> The environmental context, particularly consistent availability of water and electricity, informs design and construction of all WASH infrastructure (e.g., no flush toilets are built in areas that do not have sustainable, year-round access to water on school grounds; electric pumps are not depended on where electricity is sporadically provided). <input type="checkbox"/> Adequate WASH facilities are constructed to accommodate the school population and prevent overuse and breakdown. <input type="checkbox"/> Hand-washing stations are built in or near the bathrooms and are enclosed for privacy. <input type="checkbox"/> There are separate hand-washing stations for boys and girls. <input type="checkbox"/> WASH facilities are constructed to maximize use of natural light and improve ventilation, while still ensuring privacy. <p>4.0 School facilities incorporate a space for girls to rest and recuperate from menstrual pain.</p>	<ul style="list-style-type: none"> ✓ The Philippines is dedicating national efforts to improve WASH conditions in schools.
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Absorbent materials

Girls lack access to affordable and effective absorbent materials at school. A lack of affordability and access to material resources contributes to girls experiencing leaks, stains and odour challenges, impacting their participation, concentration, attendance, relationships and self-worth. Details on recommendations for improving girls' access to absorbent materials are presented in table C.

Table C. Recommendations on absorbent materials

Vision for change	Materials recommendations to enable change	Community assets
<p>Girls have access to absorbent materials to prevent stains and odour and manage accidents, allowing them to participate confidently in school activities and interact normally with classmates.</p> <p>Girls have support from schools to easily access sanitary pads without leaving school.</p>	<p>1.0 Systems are established at the school or in the community that enable girls to access absorbent materials.</p> <p>1.1 Mechanisms are developed to maintain existing WASH infrastructure in schools and ensure:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Sanitary pads are made available to girls in school for purchase. <input type="checkbox"/> Sanitary pads are made available for free to girls in cases of emergency. <input type="checkbox"/> Workshops are offered that teach girls to make safe and effective reusable absorbent materials. <input type="checkbox"/> Parents buy or make safe absorbent materials for their daughters. <input type="checkbox"/> Private sector companies begin to produce an affordable sanitary pad targeted for low-income women and girls. <input type="checkbox"/> School budgets include line items for sanitary pad provision/subsidization. 	<ul style="list-style-type: none"> ✓ School curriculum already integrates sewing infrastructure for introducing production of reusable sanitary pads. ✓ Most schools already have systems to sell school materials or snacks to students through canteens on school property. ✓ Select urban schools are provided with samples of sanitary pads from corporations.

Annex 2. Specific recommendations, by research participant population

Girls, teachers, mothers and boys made recommendations to improve girls' experiences at school during menses. The tables in annex 2 summarize the recommendations that were provided during data collection. These contributions were incorporated into the comprehensive recommendations listed in annex 1.

Table A. Participants' recommendations for school facilities that enable menstrual hygiene management

Recommendation	Determinant/reason for recommendation	Source			
		Girls	Teachers	Mothers	Boys
Comfort rooms are girl friendly					
Trash cans are available in comfort rooms for discreet disposal of sanitary materials	<ul style="list-style-type: none"> Girls are uncomfortable putting sanitary pads in trash cans that are outside the comfort rooms Teachers and boys report that girls would try to discreetly dispose of sanitary pads behind latrines Girls report going home to change materials because there is no discreet disposal method at school 	X	X		
Privacy is considered when building, repairing or constructing toilets and comfort room facilities	<ul style="list-style-type: none"> Girls said the design of toilets causes them to worry about privacy and avoid using toilets for managing menstruation Boys report peeping on girls and other students when using toilets 	X			X
Ensure walls are covered and secure to prevent boys from peeping	<ul style="list-style-type: none"> Students fear using comfort rooms due to a lack of privacy from structural problems with toilet design and the tendency for students to peep on students during toilet use 	X			
Provide a locked place or cabinet inside the comfort room for girls to store absorbent materials	<ul style="list-style-type: none"> Girls fear embarrassment of being seen with absorbent materials for managing menstruation Girls report boys going through their school bags, and as a result do not trust storing absorbent materials in their bags 	X			
Water readily available for use inside toilets, for flushing, washing stains and hand washing	<ul style="list-style-type: none"> Girls are unable to manage menstruation discreetly when water is lacking for flushing toilets or washing hands Girls, boys, teachers and mothers report that girls should not carry heavy loads when menstruating, this includes fetching water 	X	X	X	X

Table A continued

Provide cubicles with individual toilets inside the comfort room to provide privacy for the toilet user	<ul style="list-style-type: none"> Girls and boys refrain from using toilets when anonymity and privacy during toilet use are not provided 	X			X
Toilets to be blessed to remove the fear of spirits or ghosts	<ul style="list-style-type: none"> Students report refraining from toilet use for fear of spirits or ghosts, regardless of ideal cleanliness and functionality 	X			X
Functional locks placed on the inside of toilet doors.	<ul style="list-style-type: none"> Girls avoid toilet use if locks are lacking on the inside of doors. Girls report fearing exposure or a lack of anonymity if a friend is necessary to accompany the user 	X			
Comfort rooms are clean	<ul style="list-style-type: none"> Girls and boys report that they do not like to use toilets at school for urination, defecation, or menstruation when they are unclean and have an odour 	X	X	X	X
Toilets are gender separated	<ul style="list-style-type: none"> Girls refrain from using toilets that are shared with boys if they are menstruating Primary schools often have a gender neutral shared toilet in the classroom and girls refrain from using this type of facility during menstruation 	X	X	X	X
Mirrors are made available inside the comfort rooms	<ul style="list-style-type: none"> Girls requested mirrors to be available inside comfort room facilities so that they can discreetly check to see if they have a stain on their skirt 	X	X		
School space is designated for students to rest					
A 'mini-clinic' or the principal's office is made available for girls to rest at school if feeling weak or having pain	<ul style="list-style-type: none"> Girls often go home to find a place to rest when they have pain related to menses Girls requested the space be private so that they could also use it to change skirts due to stains 	X	X		X

Table B. Participants’ recommendations to address students’ knowledge, participation and school learning experience related to menstruation

Recommendation	Determinant/reason for recommendation	Source			
		Girls	Teachers	Mothers	Boys
Education should be designed to support students’ knowledge and understanding of menstrual health and hygiene					
Girls are able to anonymously ask questions about menstruation, hygiene, and puberty	<ul style="list-style-type: none"> • Girls do not feel comfortable asking questions in front of male students or teachers • Girls feel embarrassed asking questions in front of peers 	X	X		
School support systems are needed to ensure girls who miss school due to menstruation do not fall behind					
Schools should allow girls to make up missed work or tests if away due to menstruation	<ul style="list-style-type: none"> • Girls fear missing out on learning opportunities because of menses • Teachers report providing supplementary lessons to girls who have missed school due to menses 	X	X		
Efforts made to increase the teacher’s role and capacity					
If male teachers are teaching hygiene and puberty education, they should be given extra training on sensitization and information specific to menstruation	<ul style="list-style-type: none"> • Girls are uncomfortable learning from male teachers, and male teachers report being uncomfortable and unknowledgeable on the topic, often skipping teaching menstruation • Male teachers requested more information/guidance on teaching menstrual health within current curriculum 		X		
Teachers are provided updated learning materials for teaching menstruation	<ul style="list-style-type: none"> • Teachers in the study had varied understanding of menstruation • Learning materials were out of date, inconsistent or non-existent • Teachers often taught from personal knowledge and experience of menstruation and incorporated their own views in their teaching 		X		

Table B continued

Hold school district symposiums on menstruation where teachers, students and community members can learn about menstrual health and hygiene	<ul style="list-style-type: none"> • Already trained teachers lack access to learning opportunities • Symposiums are already being used for other topics and are an established way to reach communities and schools 		X		
Students are sensitized and provided information about menstruation to prevent teasing					
Boys should learn more about menstruation at an earlier age in school	<ul style="list-style-type: none"> • Male students lack an understanding of the biology of menstruation, but are aware of local traditions and practices about menstruation and as a result tease girls 	X			X
Boys should be educated about the consequences of teasing/bullying girls about menstruation	<ul style="list-style-type: none"> • Boys report not being aware that their teasing about menstruation negatively impacts girls 		X		X
Boys should be reprimanded for teasing/bullying about menstruation	<ul style="list-style-type: none"> • Boys asked for more structure to be provided by teachers about teasing and bullying 				X

Table C. Participants' recommendations for accessing absorbent materials and other consumables

Recommendation	Determinant/reason for recommendation	Source			
		Girls	Teachers	Mothers	Boys
Sanitary pads are made available at the school for girls, at the canteen or the nurse's station, or with a trusted female teacher	<ul style="list-style-type: none"> • Girls report embarrassment about having to carry sanitary pads with them, and fear that other students may see their supplies • Girls report that sanitary pads are not always affordable to them and asked for school subsidization • Teachers suggested having a supply of sanitary pads at school, though they voiced concern over bearing the cost of provision • Mothers suggested schools could provide sanitary pads in case of an emergency 	X	X	X	X
Spare uniforms/skirts are available for girls who have an accident at school	<ul style="list-style-type: none"> • Girls go home if they experience a leak or stain on their uniform • Boys and girls both suggested that if a uniform were available to change into, girls would not have to go home mid-day 	X			X
Soap is always available at hand-washing stations in the school	<ul style="list-style-type: none"> • Soap is often unavailable for hand washing after toilet use 	X	X	X	X
Sanitary pads are provided by the school for girls	<ul style="list-style-type: none"> • Girls lack affordable access to sanitary pads • Girls and mothers requested that the school subsidizes sanitary pads • Teachers recognized the need for sanitary pads to be available at school for girls • Female teachers reported providing girls in an emergency a sanitary pad they had ready for themselves in case of emergency 	X	X	X	X
Sewing reusable sanitary pads should be integrated into already established sewing curriculum	<ul style="list-style-type: none"> • Girls lack affordable access to commercially produced sanitary pads and effective reusable cloth solutions • Boys suggested that one way they could support menstruating girls is if they learned how to sew reusable sanitary pads 	X	X		X
Pain relievers are provided to girls experiencing menstrual related pain at school	<ul style="list-style-type: none"> • Girls experience headaches and cramps that impact their ability to concentrate and participate during class • Girls requested a solution for pain relief to be available at school 	X	X		X

Annex 3. Barriers and drivers to toilet use

The tables in annex 3 present details on the barriers and drivers to toilet use reported by research participants in Masbate Province.

Table A. Barriers and drivers to toilet use among participating girls

Girls' expressed barriers to toilet use	Girls' expressed drivers to toilet use
Water	
Water not accessible Requirement of fetching water	Easy access to water in toilets Ability to flush toilet
Privacy	
Perception/fear that others are peeping Concern that sight, sound or odour of behaviour will be known Interior locks not effective Friends needed to guard privacy, but they are not always available Boys hanging around near girls' toilet Boys using girls' toilets	Personal sense of privacy Effective interior locks
Use	
Long lines, inadequate number of toilets Stalls occupied Lack of tissue or anal cleansing materials Lack of disposal methods for used materials	Inability to hold urination (urgency)
Design	
Location of toilet too close to boys' toilet Located too far from classroom Exterior locks prevent easy access as needed Insufficient lighting Space too small or too crowded with water basins to change clothing or absorbent materials	Mirrors available to check for leaks, stains
Superstition	
Fear of ghosts, monsters, supernatural beings	Regular blessings of the toilet by a priest
Maintenance	
Facilities broken or clogged Unclean facilities and harbouring strong odour	Clean and odourless
Hand washing	
Lack of water Lack of soap	–

Table B. Barriers and drivers to toilet use among participating boys

Boys' expressed barriers to toilet use	Boys' expressed drivers to toilet use
Water	
Water not accessible Requirement of fetching water	Water easily accessible
Privacy	
Concern that others are peeping Locks lacking or ineffective Sharing toilet with girls	Personal sense of privacy Effective interior locks
Use	
Long lines, inadequate number of toilets Stalls occupied Feeling rushed by the next person in line	Teachers enforcing toilet use with rules
Design	
No doors for personal privacy	Functional doors Mirror available
Superstition	
Fear of ghosts, monsters, supernatural beings Fear that students may be teased for using the toilet (boys reported concern that they would be called 'gay' if they used the toilets)	Regular blessings of the toilet by a priest
Maintenance	
Unclean facilities and harbouring strong odour Clogged toilets	Clean and odourless

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Abbreviations

CR	comfort room (toilet)
DepEd	Department of Education
EPP	Home Economics and Livelihood Education
FGD	focus group discussion
IDI	in-depth interview
KII	key informant interview
MAPEH	Music, Arts, Physical Education and Health
MDG	Millennium Development Goal
MHM	menstrual hygiene management
NGO	non-governmental organization
P	participant
RA	research assistant
TLE	Technology and Livelihood Education
UNICEF	United Nations Children’s Fund
WASH	water, sanitation and hygiene



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Sometimes we tell our teachers if a girl has a leak on her uniform, we suggest that this girl should go home because she has a visitor. Our teacher could then understand her undertakings. – A girl from Masbate

I actually do not believe in one superstition of not being allowed to take a bath when one is menstruating ... I think I would really feel dirty if I didn't shower. I don't worry much about it because it's normal. It's up to you how you take care of yourself. – A girl from Metro Manila

I don't go to the CR [comfort room] because there are lots of students using the latrine, also the boys are using it so we can't. The latrine in school is always busy because it's only one. – A girl from Masbate



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For information about this publication, contact Bethany Caruso, bcaruso@emory.edu, or Murat Sahin, msahin@unicef.org.