

Solomon Islands

**Case Study of Menstrual Hygiene Management in Schools
in Honiara and Guadalcanal Province**

MAIN REPORT

**Ministry of Health and Medical Services
Ministry of Education and Human Resources Development
United Nations Children's Fund**

Table of Contents

<u>ACKNOWLEDGEMENTS</u>	<u>3</u>
<u>EXECUTIVE SUMMARY</u>	<u>4</u>
<u>INTRODUCTION</u>	<u>5</u>
COUNTRY CONTEXT	5
CASE STUDY BACKGROUND	6
<u>METHODS</u>	<u>8</u>
SCHOOL SELECTION	8
DATA COLLECTION	8
<u>FINDINGS</u>	<u>10</u>
CHALLENGES FACED BY GIRLS DURING MENSTRUATION	10
DETERMINANTS OF MENSTRUATION-RELATED CHALLENGES	11
SOCIAL FACTORS	12
ENVIRONMENTAL FACTORS	12
INTERPERSONAL FACTORS	15
PERSONAL FACTORS	16
<u>RECOMMENDATIONS</u>	<u>18</u>
AREAS FOR FUTURE WORK	21
<u>ANNEX I. REFERENCES</u>	<u>22</u>
<u>ANNEX II. STUDY TEAM</u>	<u>23</u>
<u>ANNEX III. PARTNERS CONSULTED AND ATTENDING DEBRIEFING MEETING ON 15 AUGUST 2014</u>	<u>24</u>

This report has two companion reports:

- Case Study of Menstrual Hygiene Management in Schools in Honiara and Guadalcanal Province: SCHOOL REPORT
- Guidance Note on MHM in Schools

Acknowledgements

This study was requested by the Ministry of Health and Medical Services Director of Environmental Health, Tom Nanau. Without his leadership, and the support of the Rural WASH Advisers Piter Visser and Bryce McGowan, it would not have been possible to address this taboo subject at the national level with WASH and education stakeholders. Survey design, training, and data collection were managed by Brooke Yamakoshi, UNICEF Office for Pacific Island Countries, who also wrote the reports and guidance note. Very useful review and feedback was provided by Sue Cavill and Murat Sahin at UNICEF; Adam Elliott and Emma Grogan at Caritas; Ann-Maree Nobelius at the International Women's Development Agency; and Julian Tung at Save the Children.

Many thanks are due to the entire study team, particularly Nancy Pego, Jennimer Ngoli, and Elsie Taloafiri for coordinating the involvement of their respective divisions within MHMS. Frances Revo at the Ministry of Education and Human Resources Development led the engagement of the education sector, and helped to provide overall direction and support to the study.

This study was made possible by the Ministry of Education and Human Resources Development and the participating schools, who allowed the study team to visit their schools and shared their own observations. Most of all, we are grateful to the girls participating in the study, who candidly shared their experiences with the study team and each other, in the spirit of improving the educational environment for other girls in the Solomon Islands.

Lastly, thanks to UNICEF Pacific for supporting this study.

Executive Summary

In 2013, the Ministry of Health and Medical Services (MHMS) and the Ministry of Education and Human Resources Development (MEHRD), with support from UNICEF, worked with partners to establish technical design standards for school WASH infrastructure for the Solomon Islands. The resulting draft guidelines, “*Water Supply, Sanitation & Hygiene for Education Facilities in the Solomon Islands: Technical requirements for school WASH projects (2014)*,” represent the infrastructure requirements for WASH facilities to be jointly adopted by the MEHRD and the MHMS.

During the preparation of the guidelines, menstrual hygiene management (MHM) was recognized to be a key gap in knowledge and programming guidance by sector stakeholders. In consultations in 2013, WASH and health partners confirmed that MHM is often left out in health and hygiene sessions in schools, despite the existence of sexual health curriculum in years 4 to 9. Barriers anecdotally reported included out-of-date curriculum, lack of specific materials on MHM, and lack of confidence by teachers to deliver MHM curriculum. With menstruation being a ‘taboo’ subject, the extent of this problem was not known.

To fill this knowledge gap and inform the draft *Technical Requirements*, MHMS, MEHRD, and UNICEF conducted a study in four schools in Honiara and Guadalcanal Province during the week of 11-15 August 2014. MEHRD selected the schools to balance urban, rural, boarding, and day schools, and to survey both schools with “good” and “poor” WASH facilities. All schools had secondary school students. Data were collected through focus group discussions with students and teachers, individual interviews with students, and structured observations of school WASH facilities.

The study showed that girls face multiple challenges from menstruation in a school setting, including lack of water and adequate ablution facilities; barriers to accessing absorbent materials; inaccurate information on menstruation and menstrual hygiene; and cultural barriers. The impacts of these challenges were absenteeism, feelings of shame or embarrassment, and lack of concentration and reduced participation in class.

The determinants of these menstruation-related challenges in schools that were identified by girls and their teachers were (i) quality of school WASH facilities; (ii) availability of hygiene materials; (iii) access to accurate information about menstruation; and (iv) support from school managers and teachers.

Based on biggest barriers identified during the study, the key recommendations were:

1. Improve school policies, facilities, and resources available for girls to manage menstruation at schools.
2. Give girls knowledge and skills to maintain their menstrual hygiene safely and effectively at school.
3. Improve national policies and monitoring of MHM in schools.

At the request of the MHMS, a guidance note on practical steps that schools can take to improve menstrual hygiene management in schools in Honiara and Guadalcanal Province is included as a companion to this report. Individual findings from each of the schools visited are also available in a compiled school report.

Introduction

Country context

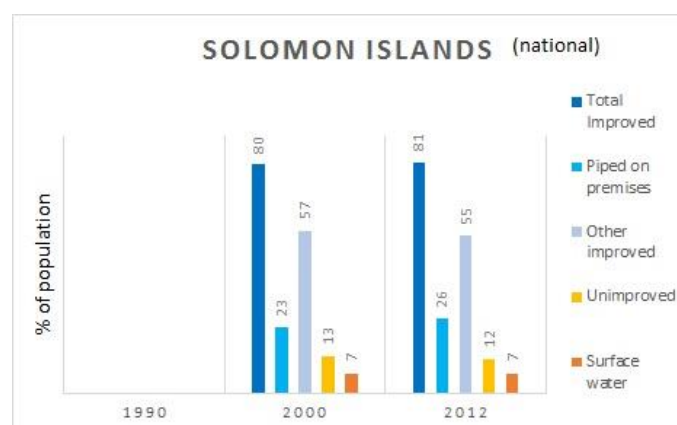
The Solomon Islands is comprised of over 990 islands stretching over 1,300 square kilometres of ocean, and rich with cultural, linguistic, and ethnic diversity. It is also one of the least developed countries in the Pacific, with an HDI ranking of 157 out of 185 countries in 2013 (UNDP, 2013). Eighty percent of the population lives in rural areas, engaging in subsistence agriculture, fishery, forestry, and others.

The Solomon Islands, with its many scattered islands, remote communities, and a fast growing population, is facing considerable challenges providing services such as water supply, sanitation, and adequate education facilities for children and communities.

It is unlikely that the Solomon Islands will achieve Target 7c of the Millennium Development Goals (MDGs) of “halving, by 2015, the proportion of people without sustainable access to safe water and basic sanitation.” There is national agreement on the need for urgent action on water and sanitation. Increasing coverage of both water supply and sanitation is critical to reducing the prevalence of diarrhoeal disease, skin and eye infections, and malnutrition in the Solomon Islands, in turn improving health and child survival.

Little progress has been made towards extending access to improved water supply to rural Solomon Islanders over the past two decades. While the UNICEF / WHO Joint Monitoring Programme, 2014 Update, estimated national improved water supply coverage at 80.5 per cent in 2012, most sector professionals agree that up to half of installed systems in rural areas may operate at less than design capacity or may be totally inoperative, putting effective

Solomon Islands WASH & Education Statistics	
Population	515,870 264,455 Males 251,415 Females (SIG, 2009)
Population growth rate	2.1% (SIG, 2009)
Household access to improved water	80.5% (UNICEF/WHO 2014)
Urban	93.2%
Rural	77.2%
Household access to improved sanitation	28.8% (UNICEF/WHO 2014)
Urban	81.8%
Rural	15.0%
Households practicing open defecation	55.4% UNICEF/WHO 2014)
Urban	9.5%
Rural	66.4%
Net enrolment ratio in primary education	82% (Devinfo 2007)
Gender Parity Index in secondary level enrolment	0.84 (Devinfo 2007)
Number of ECE centers nationwide	524 (MEHRD, 2011)
Number of primary schools nationwide	532 (MEHRD, 2011)
Number of secondary schools nationwide	203 (MEHRD, 2011)
School access to water supply	43% (MEHRD, 2011)
Average school toilet-to-student ratio	1:63 (MEHRD, 2011)



coverage between 35-40 per cent (MHMS, 2014). No rural water quality standards exist, and the quality of water provided through rural water supply facilities is not tested.

According to the UNICEF/WHO (2014), progress towards eliminating open defecation has been almost stagnant between 2000 and 2012. Two-thirds of rural Solomon Islanders defecate in the open, while only 15 percent of rural households use improved sanitation facilities. The Solomon Islands hosts the highest number of open defecators in the Pacific sub-region, outside of Papua New Guinea.



Beyond the health impacts of open defecation, the practice exposes women and children to increased risk of abuse and indignity. Gender-based violence is widespread in the Solomon Islands, with a 2011 survey reporting 64 per cent of women aged 15-49 having experienced violence from an intimate partner within the previous 12 months (UNICEF, 2011). A 2011 study by Amnesty International found that women in Honiara's poorest communities face particularly high risks of physical and sexual violence, especially when collecting water, bathing, or using toilets at night.

Many schools in the Solomon Islands lack adequate water supplies and most do not have any hygiene facilities, such as spaces for hand washing. The lack of access adversely affects children's general wellbeing, development and education.

In 2011, the Ministry of Education and Human Resources Development (MEHRD) reported that only 43 percent of schools had water supply facilities. These data were self-reported by schools through the Solomon Islands Education Management Information System; it is likely that the actual number of students, teachers, and school staff with access to safe water is even lower, as quality of services is not captured.

The national average toilet-to-student ratio for all schools was 1:63 in 2011. Of greatest concern to WASH sector stakeholders has been the low ratios of 1:94 for community high schools and 1:77 for primary schools, as these 735 schools serve the greatest population of children in Solomon Islands. Within the reported ratios, experience has shown that many toilet facilities are inappropriate, poorly constructed, not maintained, or ultimately abandoned.

The MEHRD recognizes the challenge of providing all students and staff with sufficient WASH facilities. In April 2009, the MEHRD prepared draft "*Infrastructure Minimum Standards*" for education facilities in the Solomon Islands. In November 2011, a "*Policy Statement and Guidelines for School Infrastructure in Solomon Islands*" was approved, signifying a significant step towards improving infrastructure in schools.

Case Study Background

The Ministry of Health and Medical Services (MHMS) has over the past 4 years been working to establish a set of regulations for the rural water supply, sanitation, and hygiene

(RWASH) sector. Although the MEHRD is responsible for all school infrastructure, RWASH Program of MHMS and its sector implementing partners have been constructing RWASH facilities at school throughout the country.

In 2013 the MHMS RWASH Program and its sector partners worked with the Asset Management Division of the MEHRD to establish technical design standards for school WASH infrastructure for the Solomon Islands. The resulting draft guidelines, *“Water Supply, Sanitation & Hygiene for Education Facilities in the Solomon Islands: Technical requirements for school WASH projects,”* represent the infrastructure requirements for WASH facilities to be jointly adopted by the MEHRD and the MHMS.

The benefits of good menstrual hygiene in school (available sanitary protection materials; clean and safe toilets, bathing or changing facilities with locks on the inside of doors; discrete disposal facilities; understanding and supportive staff; information on menstrual hygiene) are considered to include, although not yet well documented:

- More time spent in school (female teachers and schoolgirls).
- Increased concentration.
- Higher self-confidence.
- Increased comfort, good hygiene, less irritation from sanitary materials and less risk of related infections.
- Greater participation.
- More confidence to stand up to answer questions and ask to leave the classroom to use the latrine.

Source: House, S., T. Mahon and S. Cavill (2012) p 116

During the preparation of the guidelines, menstrual hygiene management (MHM) was recognized to be a key gap in knowledge and programming guidance by sector stakeholders. In consultations in 2013, WASH and health partners confirmed that MHM is often left out in health and hygiene sessions in schools, despite the existence of sexual health curriculum in years 4 to 9. Barriers anecdotally reported included out-of-date curriculum, lack of specific materials on MHM, and lack of confidence by teachers to deliver MHM curriculum. Many schools lack adequate sanitation and waste disposal facilities, but even when they are present, lack of knowledge on their use can cause problems. With menstruation being a ‘taboo’ subject, girls reported skipping school when menstruating.

For the purposes of this study and report, MHM is defined as “women and adolescent girls use a clean material to absorb or collect menstrual blood, and this material can be changed in privacy as often as

necessary for the duration of menstruation. MHM also includes using soap and water for washing the body as required, and having access to facilities to dispose of used menstrual management materials” (UNICEF/ WHO, 2012).

According to Sommer and Sahin (2013), acceptable MHM facilities should:

- Provide privacy for changing materials and for washing the body with soap and water.
- Provide access to water and soap in a place that provides an adequate level of privacy for washing stains from clothes and reusable menstrual materials.
- Provide access to disposal facilities for used menstrual materials (from collection point to final disposal).

Methods

This case study relied on data collection from four schools in Honiara and Guadalcanal Province. Due to the limited representation possible in the study period, further research is needed.

School Selection

The study was conducted in Honiara and Guadalcanal Province during the week of 11-15 August 2014. Six schools were selected by the MEHRD balance urban, rural, boarding, and day schools. The MEHRD identified the schools to survey both schools with “good” and “poor” WASH facilities. All schools had secondary school students, while some also had primary and ECE students. Due to time and logistical constraints, only four schools were visited during the week of the survey. The other schools were not possible to visit.

Honiara City Council, Guadalcanal Provincial Government, and the Church of Melanesia Education Authorities arranged the visits with school management as the responsible administrating authorities.

School	Location	Management	Characteristics
Vura Community High School	Honiara	Honiara City Council Education Authority	Urban Day school Poor facilities
St. Nicholas School	Honiara	Church of Melanesia Education Authority	Urban Day school Good facilities
Selwyn College	Guadalcanal Province	Church of Melanesia Education Authority	Rural Boarding Good facilities
Ruavatu	Guadalcanal Province	Guadalcanal Province Education Authority	Rural Boarding Poor facilities
<i>White River Community High School</i>	<i>Honiara</i>	<i>Honiara City Council Education Authority</i>	<i>Urban Day school Poor facilities</i>
<i>SWIM Centre Special School</i>	<i>Guadalcanal</i>	<i>SWIM Centre</i>	<i>Rural Day school Poor facilities</i>

Though some schools were initially believed to have ‘good’ WASH facilities, on the times and dates visited, none of the schools had facilities that would have meet *Technical Requirements* and all had one or more major problems (e.g., lack of water supply, locked toilets).

Data collection

The methods used for data collection included: in-depth interviews with in-school girls; focus group discussions with in-school girls and teachers; and school observations.

Tool	Population	Number of Activities	Number of participants
In-Depth Interviews	In-school girls	12	12

Focus Group Discussions	In-school girls	4	44
	Teachers	4	33
Observation	Schools	4	

Fourteen women living in Honiara were trained as data collectors in this study (see [Annex II](#)). Most women had previous experience in conducting similar studies, and all women were affiliated with either Ministry of an Education Authority and came from a health, education, social welfare, or WASH background. The study team assisted with the design of the data collection instruments, including translations into Pijin and cultural aspects. The team was trained on 11 August 2014 in ethics and survey methods, and was given guidance on how to respond to any reported abuse during interviews or discussions.

The study team conducted in-depth interviews with three girls at each school for a total of 12 interviews. The average age of the interviewees was 17 years old, ranging from 14 to 21. During the interviews, girls were asked about their knowledge, attitudes, and personal experiences about menstruation, and how they managed menstruation at school. The interviewers asked the girls to discuss specific challenges they face in managing their menstruation at school, and asked them to describe their ideal spaces to manage menstruation at school including recommendations for their own school. The interviews were held in private. At the end of each interview, the interviewer asked the girl if she had any questions, and reviewed a booklet on menstrual hygiene management to give the girl additional information.



Figure 1 Interviews were held privately on school grounds in places where girls felt comfortable sharing their views.

The study team conducted four FGDs with between 4 and 19 girls, depending on the school context and what was deemed appropriate and feasible by the facilitators. The average age of girls participating in the focus group was 14.7 years, ranging from 12 to 17. Girls were prompted to work together to draw their ideal school toilet, and to imagine the life of a typical Solomon Islands girl as she began menstruating at school. These two activities were based on guidance from the Emory University / UNICEF synthesis programme guidance on “Tools for Assessing MHM in Schools,” published in November 2013. During the FGDs, girls discussed their feelings, challenges, and societal beliefs regarding menstruation and MHM at school. They made recommendations to their schools and families on ways to address the challenges that they face.

Only one of the student FGDs was recorded due to lack of available recording devices and upon request of the girls at other schools. To ensure accurate transcription of discussions, FGD facilitators were assisted by co-facilitators who took notes on the session.

School administrators and teachers selected the participating girls in advance of the day of the school visit by the study team. All girls assented to their participation and, where deemed appropriate by school administrators, had parental consent to participate. At the beginning of all focus groups and interviews, all students were informed of their right to not participate or to end their participation at any point in time.

At all four schools, the study team learned about the knowledge and opinions of male and



Figure 2 Girls draw their ideal latrines during a student focus group discussion.

female teachers in Teachers' FGDs. These FGDs provided a forum for discussion on school curriculum, including what male and female students were taught about health, puberty and menstruation; facilities; and cultural factors. The FGDs also focused on how male and female teachers felt about discussing menstruation, and what teachers believed to be the challenges facing menstruating girls at their schools. Both secondary and primary teachers participated in focus group discussions, depending on the school. All teachers gave informed consent prior to the beginning of the focus groups. Interviews and focus

groups were conducted in Solomon Islands Pijin and recorded in both Pijin and English by the study team.

No formal key informant interviews were conducted in August 2014; the study team, however, was comprised of experts from education, reproductive and adolescent health, WASH, and disability, including former nurses, midwives, and teachers. Their experience and knowledge served as a starting point for the study and informed the design of survey.

School observations were conducted at each of the eight schools to determine the number, quality, and functionality of toilet and handwashing facilities available to students and teachers.

This study was conducted in Honiara and Guadalcanal Province only, which limits the applicability of some of the findings. Girls in rural areas in the provinces may, for example, have more limited access to absorbent materials or stronger cultural taboos related to menstruation.

Findings

Challenges faced by girls during menstruation

When girls cannot manage their menstruation at school, they reported physical and emotional challenges that prevented them from learning and participating fully at school. Girls reported feeling embarrassed or angry if they could not attend normal activities because of their period. Girls reported feeling ashamed in class, and fear and shame around staining school uniforms with menstrual blood. Girls said that they are sometimes teased by boys, called dirty, or not included in the activities of their classmates.

Girls said that menstruation led to them missing classes or entire days of school. When asking to be excused from class to visit the toilet, girls were too ashamed to explain their situation to male teachers. As a result, girls said that they are sometimes punished for absenteeism, but

said that they “must cope with this situation” as there is no way around it. Teachers confirmed this and expressed frustration that they were unable to better support girls.

Girls told the study team that, during menstruation, they often become distracted in school, less interested in class, and “sit quietly” rather than participating. During class, a girl may lack concentration because she is distracted by the possibility of a stain or in physical pain. A menstruating girl may be feeling “disturbed” and is busy with cleaning herself, frequently visiting the ablution block. She may participate less because she feels “lazy,” tired, and inactive. She may not be able to socialize normally or play sports. She may have poor interaction in class, with teachers, and with friends.

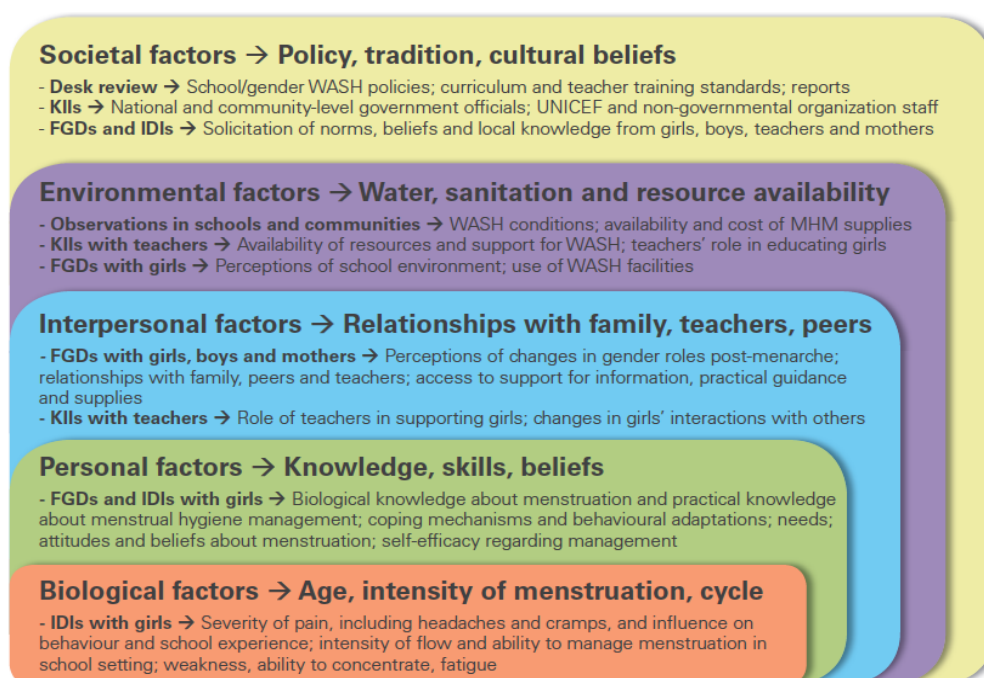
Girls cited weakness, belly pain, fever, and white or dry eyes as physical impacts of menstruation. Girls said that menstruation limits their ability to move freely because they are worried about stains on their clothes, and this prevents them from playing sports and socializing normally. Girls sometimes find it difficult to dispose of used pads at school.

Determinants of menstruation-related challenges

The most significant determinants of menstruation-related challenges in schools that were identified by girls and their teachers were:

1. Social factors inhibiting open discussion of menstruation-related challenges
2. Poor quality of school WASH facilities
3. Limited availability of hygiene materials
4. Limited access to accurate information about menstruation
5. Variable support from school managers and teachers

This study relied on the same theoretical framework as previous UNICEF and Emory University research on MHM in Schools. The levels of influence that were explored through surveys included social, environmental, interpersonal, personal and biological, as below in the “ecological framework for MHM research activities and themes” (Long et al, 2013).



Unlike the previous UNICEF and Emory-supported research, this short study did not conduct FGDs with out of school girls, mothers, or boys, so the influences from these groups were not thoroughly explored. These are areas for future work in the sector.

Social factors

The social factors that determine a girls' ability to manage her menstruation in a school setting relate to culture, tradition, and national and school policies. As in many cultures, in the Solomon Islands menstruation is seen as a "women's problem" and not an issue for discussion with or around men, limiting the resources available for girls who are menstruating.

Cultural practices have prevented women from performing certain behaviours and activities, such as preparing food and walking in front of men, while menstruating. In Malaita, women are traditionally isolated in special leaf huts for menstruating women and women giving birth. For the minority Micronesian population, on the other hand, menstruation can be celebrated as a special event marking womanhood in some cultures. Women observed that the ethnic diversity in Honiara and impacts of urban life is moving the discourse from that of taboos and towards more open dialogue about menstruation, though this sometimes leads to inter-generational conflict.

One girl reported that she was not initially aware that men were not supposed to know about menstruation. One day, she needed money to buy pads. She asked her father for money in front of her maternal grandmother. The father asked his daughter why she wanted money, and she openly told him that she needed to buy sanitary pads. Upon hearing this, the grandmother got very upset and called the girl in private to scold her. The grandmother told the girl that she was not supposed to talk to men about menstruation and that she should have asked her (the grandmother) instead. It was then that the girl realized that menstruation is a taboo subject, which she did not previously know due to her urban upbringing and lack of connection to her culture.

Source: In-depth interview with girl age 17, as recorded by the interviewer

Mothers often may not discuss menstruation with their daughters as it can be seen as encouraging girls to engage in sexual experimentation. Some women reported that may be considered a grandmother's responsibility to discuss reproductive health issues with granddaughters.

At the national level, policies are supportive of improving the environment for MHM in schools, but this has not yet translated into changes at schools themselves. Implementing agencies have not traditionally focused on this area, partially because WinS programmes are frequently implemented at the primary level, though delayed school entry results in many adolescent girls in primary schools. Within schools, cultural taboos can prevent the discussion of sexual and reproductive health, and girls' specific challenges.

Environmental factors

Girls cited their biggest barrier to managing menstruation at school as the lack of adequate WASH facilities. None of the urban or rural schools visited had a consistent supply of water. Rubbish disposal facilities were either unavailable or did not provide enough privacy, leading girls to carry their used disposable pads back home with them in their school bags.

Quality of school WASH facilities

All schools visited had WASH infrastructure in place, but failed to meet basic service standards due to lack of water and maintenance. Facilities at one school were locked due to lack of water. Waste management was insufficient for sanitary materials at day schools.

Lack of water was the biggest challenge cited by all girls and teachers surveyed. All schools visited did not have water available in bathrooms at the time of the visit, and one school had locked their bathrooms as a result. At other schools, girls had to carry water from tanks or rivers far away from the bathrooms for bathing or flushing. This prevented body and handwashing, facility cleaning, and toilet flushing. Many schools in Honiara and Guadalcanal have flush or pour-flush toilets but inconsistent water supply; to avoid this, the draft *Technical Requirements* for WASH in schools facilities recommends waterless toilets at schools without a minimum reliable water supply.

Lack of maintenance led to very poor conditions at all schools visited. School managers and teachers cited inactive school committees or unenforced roster systems as partially responsible. Lack of water prevented regular cleaning. Filthy or overflowing toilets were observed at all schools, creating an unhygienic environment. Toilet stalls were frequently full of rubbish due to lack of rubbish bins. Broken louvres, missing or broken doors, and missing locks compromised privacy. As a result, girls at day schools were allowed or even encouraged to go home to manage menstruation. At boarding schools, open defecation may be practiced and girls sometimes bathe in nearby rivers. Taps were left open and drainage was blocked in some cases, resulting in standing water.

Girls cited problems with the design of school ablution blocks that prevented them from managing their menstruation hygienically and with dignity. At all schools, girls said that the location and orientation of the entrance of to their ablution blocks did not fulfil the cultural requirement of discretion upon entering. In most cases, girls complained that ablution blocks did not provide adequate privacy and reported that boys would walk or “peep” into their facilities. Honiara schools complained that outsiders sometimes came onto school grounds to use facilities.

At boarding schools, privacy was the biggest concern of the girls. With overcrowded dormitories, girls requested private spaces for bathing and changing clothing or sanitary materials in their ablution blocks. Showers at boarding schools were designed in one open room without separate compartments and communal drains. Changing rooms and mirrors were suggested improvements to provide privacy and check for stains to prevent embarrassment.

In addition to these problems, none of the girls’ toilets observed during the study were accessible to students with limited mobility.



Figure 3 While easy to clean, these showers lack privacy. Water is often not available and thus carried from the river in plastic buckets

Waste management was fragmented at all but one school. Rubbish or “privacy” bins were not available in toilet stalls at any school, and inconsistently available and emptied in ablution blocks. At day schools, girls were told by teachers and administrators to bring their used pads home with them as the schools lacked incinerators. Girls at one school were told to first wash the blood from used pads out in the river, then wrap them in paper or plastic and bring it home for disposal. Lacking rubbish bins, girls sometimes threw their pads behind the toilets or tried to flush them. At one boarding school with a well-functioning system, there was a separate rubbish bin for sanitary materials that was emptied regularly to a pit and burned with diesel.

Availability of hygiene materials

The presence or absence of hygiene materials like soap, toilet paper, and absorbent materials like sanitary pads or cloths, all affect the ability of girls to manage their menstruation at school. Similarly the availability of cleaning detergents and supplies will affect the cleanliness of facilities.

Access to absorbent materials was not a major bottleneck for girls living in Honiara and Guadalcanal Province as disposable pads were readily available in shops and most girls cited using them. Girls preferred disposable pads because they were the most secure, the most absorbent, and could be affordable. Some girls, mostly those boarding in Guadalcanal Province but coming from rural areas, could not afford disposable pads on a monthly basis and therefore used old clothing or hand towels.

School canteens mostly sold disposable pads but some barriers prevented girls from accessing them. The majority of school canteens use male teachers or students as shopkeepers, and girls feel embarrassed and uncomfortable purchasing pads from them. While some school canteens sold single pads for SBD 1 each, which is within reach of students, others only sell packets of disposable pads for a minimum of SBD 8, which may not be affordable for a girl at one time. Girls had very concrete and no-cost recommendations for making disposable pads more accessible at schools. All girls cited old pieces of cloth as a back-up option for absorbent materials. No schools provided materials for free in case of an emergency at school. Girls noted that simply by providing back-up uniform skirts for girls to check out, they could avoid missing school if they stained their skirts.

Knowledge of how to safely dispose of used sanitary materials like pads or cloths was mixed. Because of lack of facilities at school, 42 per cent of girls interviewed said that they take their used pads home with them for disposal and reported either being told or feeling compelled to first wash the blood out of the pad if possible, at school. Combined with the lack of water and handwashing soap observed at all schools, this creates an unhygienic situation. Two schools had a special bin for girls at their school for used absorbent materials that are later burned, though the practice of washing out disposable pads before disposal was still prevalent. Social norms led girls to hide their pads and used cloths. Girls will not wash and dry their cloths where boys or men can see them.

None of the schools visited had handwashing soap available in ablution blocks, though one had soap available at group handwashing facilities in the dining hall. Since girls were told to wash out their pads after use, this poses a hygiene problem.

None of the schools had toilet paper – the typical anal cleansing material in Honiara – available in toilet stalls on the day of the visit. At one boarding school, toilet paper is issued

to students on a monthly basis. Teachers at two schools said that toilet paper would be given to students upon request but girls reported that this did not happen. School managers cited theft, vandalism, and use of toilets by outsiders as reasons why toilet paper was not available in ablution blocks. For girls, this prevented wrapping used pads before disposal, and personal hygiene.

Girls raised lack of toilet paper and lack of pads available in an emergency at school as additional challenges at their schools. None of the schools visited provided handwashing soap in bathrooms or near toilets, though one boarding school had soap available at handwashing taps in the dining hall. Most schools had cleaning supplies available for the students on the duty roster to maintain their bathrooms.

Interpersonal Factors

Girls' relationships with peers, family, teachers, and school managers determined how they accessed resources and support for MHM. Teachers and school managers did not prioritize maintaining or improving school WASH facilities, creating disproportionate impacts on girls. Girls described their relationships with other girls and boys and family members, which varied widely.

Support from school managers and teachers

The overall lack of maintenance of school WASH facilities at all schools was indicative of lack of prioritization and resource allocation from school managers. Poorly maintained WASH facilities – a challenge for all students – affect menstruating girls the most.

At day schools, committees or rosters were put in place to clean facilities but effectiveness varied. One school had a health and hygiene committee is responsible for the WASH facilities but the committee was not active. Student cleaning rosters were equally assigned to girls and boys but effectiveness was limited because of lack of water, lack of waste containers, or lack of cleaning supplies. At boarding schools with full-time maintenance staff, lack of funding prevented maintenance.

Teachers expressed the desire to support girls, but frustration over lacking the appropriate resources to do so. Girls were punished for absenteeism and were too embarrassed or culturally prevented from citing menstruation as the reason, especially with male teachers.

Relationships with others

Girls' relationships with their peers differed between boarding and day schools. At boarding schools, girls reported positive, sharing relationships with their male and female peers, as well as with teachers. Because of the 'family feeling' among students at boarding schools, girls felt more comfortable asking for help when they had their period at school, and did not report as much teasing or harassment by boys. At day schools, girls were not as comfortable to ask for help during their period, and their circle of support generally was restricted to a few close girlfriends. The girls at day schools also reported more teasing by other students.

Across all schools, culture and personal comfort levels restricted girls' ability to discuss menstruation-related challenges or questions with male teachers. This often led to frustration among girls when, for example, they were punished for missing class for going home to change their pad or not excused from school work days when experiencing cramps or

headache. Male teachers similarly expressed frustration at punishing girls without realizing that their menses was the cause of absenteeism or low levels of participation.

Teachers noticed differences in behavior when girls are menstruating or when teachers suspect that girls are menstruating. For example, teachers remarked that menstruating girls often choose to sit towards the back of the classroom or will choose to sit close to a girls' group only. Girls will not actively participate in school physical activities and may cancel some of their daily class participation.

Personal factors

Access to information is a large determinant in girls' ability to manage menstruation at school. Most girls lacked key information at menarche and had limited resources available to them for accurate information. They are culturally restricted from discussing menstruating with men, including teachers, and in some cases are not able to discuss it with their own mothers. Despite cultural taboos, however, girls had generally positive attitudes toward menstruation.

"The first time I had my period is when I was in Form 1. I was 13 years old. I did not know what was happening. One of my friends had seen a stain on my skirt after class. I did not have a pad so my friend gave me one and taught me how to use it and take care of myself. We kept it a secret. During holidays, I went home and I told my mom and she taught me to keep myself clean at all times during menstruation."

Source: In-depth interview with girl age 18

Access to accurate information about menstruation

Girls and their teachers reported that girls lacked accurate information about menstruation and menstrual hygiene, both before and after menarche. At menarche, two-thirds of girls interviewed had some knowledge of menstruation, though most girls still reported "panic" and low knowledge of how to manage their period. The average age of menarche was 12.7 years, ranging from 12 to 15 years.

Girls do not have much information on menstruation prior to menarche, because the syllabus on puberty, reproductive and sexual health, and menstruation is only taught at Form 3 and 5 while puberty can begin as early as age 10 while girls are in primary school. During the study, girls voiced many misconceptions about menstruation. Girls said that menstruation happens to "clean women's body system," "clean out bad blood stored inside," "be able to produce a baby," and "have good health." Girls asked whether swimming in the sea can block menstruation. Girls recommended better information from parents and through school beginning at age 9 or 10, in advance of menarche.

Students and their teachers reported a lack of resources on adolescent health that specifically addressed menstruation. Where such materials did exist, many teachers refrained from teaching the lesson in depth due to lack of confidence or embarrassment. Teachers – especially male – feared complaints from parents for teaching sexual health or menstruation. Because of this, they also refrain from giving information about 'safe' and 'unsafe' periods to have sex. Many teachers consulted during the study gave incorrect information to the study team, showing that the information available to girls in the classroom is not reliable, even when it is taught.

Girls felt constrained to ask questions in health class by mixed-gender classrooms and male teachers. Only at one school where classes girls and boys attend separate classes up to Form 5 did teachers report having a separate session with girls to explain menstruation and other women's health issues. During the teachers' focus group discussions, teachers requested training and resource materials on menstruation from the Ministry of Health and Medical Services' adolescent health programme.

Parents were not providing girls and boys with sufficient information because of cultural barriers and lack of knowledge and information. Fathers and men in general are not supposed to discuss menstruation with women. It is seen as taboo for mothers to talk to their daughters about menstruation and thought to encourage sexual experimentation. It may be seen as a grandmothers' responsibility, but with many girls in Honiara or at boarding schools living away from their relatives these cultural obligations cannot be fulfilled. Teachers complained that parents do not prioritize educating their children, but rather say that it is the teachers' responsibility to teach their children about health.

In recounting the story of her first period when she was 12 years old, a girl told the interviewer that she was playing outside and was unaware that she had stained her clothing. The housemaid saw the stain, informed the girl, and called her mother. The girl panicked and cried when she saw the blood because she was scared something bad had happened to her. The mother took the girl into the house and explained that she was menstruating, why it happens, and how to clean and change herself. Prior to this, the girl was not aware of menstruation and had no experiences with menstruating women. As her mother talked to her, the girl calmed down and became interested. She said that she was not looking forward to having her monthly flow, but that she had gradually accepted the fact that menstruation is part of the 'womanhood process' so now has a more positive attitude.

Source: In-depth interview with girl age 17, as recorded by the interviewer

Attitudes and beliefs

Three-quarters of girls reported having a positive attitude about menstruation, with almost all explaining that it is a natural process. Almost all girls (92 per cent) reported always attending school when menstruating, though the majority of girls in both interviews and focus groups said that they are likely to go home if they get their period at school, so this question may not have had varying interpretations. Perhaps because the girls begin the day at school or may return later in the day to school, this is not considered in their minds to be a missed day, though it shows that menstruation can still lead to absenteeism.

Recommendations

Based on biggest barriers identified during the study, the key recommendations were:

Recommendation	Responsibility
1. Improve school policies, facilities, and resources available for girls to manage menstruation at schools.	
Schools allocate resources and to keep WASH facilities in working condition, particularly ensuring that water is available for washing, cleaning, and flushing. Maintenance requests are responded to in a timely manner.	School boards or committees Principals or head teachers
One female teacher is identified to support girls with their MHM-related challenges and questions.	Principals or head teachers
School canteens sell single disposable pads and are staffed by women, or appoint someone as an intermediary to allow girls to discreetly purchase disposable pads.	Principals or head teachers
Basic consumables are provided by schools, including toilet paper, soap, and cleaning detergents.	
Schools allocate budget and change policies to make absorbent materials accessible to girls at school. For instance, schools could allocate minimal budget to provide pads at school for emergency situations, administered through one teacher. At boarding schools, disposable pads be added to the monthly provision of toilet paper and laundry detergent that schools already provide. To avoid embarrassment and absenteeism due to uniform stains, schools provide a spare uniform skirt for a girl to ‘check out’ so that she can stay in school.	School boards or committees Principals or head teachers
Parents provide absorbent materials like pads or cloths monthly. Girls in Honiara requested money to buy disposable pads.	Parents
Schools manage waste hygienically and discreetly.	Schools
Girls wanted teachers to teach boys. Boys should respect girls and get the same information about reproductive systems and health. Girls wanted teachers to advise boys not to annoy or tease girls who are menstruating and tell boys not to go into the girls’ toilet.	Principals or head teachers Teachers

Recommendation	Responsibility
MEHRD and school managers prioritize WASH facilities for upgrading as schools receive funding.	MEHRD Asset Management Division School boards or committees
Boarding schools provide private changing and bathing spaces in dormitories or ablution blocks to ensure that girls have somewhere private to manage menstruation (see guidance note).	MEHRD Asset Management Division School boards or committees
Schools have functioning waste management systems, including rubbish bins in each stall, regular emptying, and safe incineration.	School boards or committees MEHRD Asset Management Division Education Authorities
Schools improve their facilities incrementally, acknowledging limited funding, until they can meet the (draft) <i>Technical Requirements</i> (see guidance note).	School boards or committees MEHRD Asset Management Division Education Authorities
Schools allocate funds for ongoing maintenance of WASH facilities and ensure that processes are in place to check functionality and cleanliness throughout the day. Duty rosters for cleaning should be developed and enforced, with staff supervision or prefect monitoring.	School boards or committees Principals or head teachers
2. Give girls knowledge and skills to maintain their menstrual hygiene safely and effectively at school.	
Teachers receive better training on sexual and reproductive health and are confident to teach these subjects in the classroom, through the national teacher training curriculum or in-service training provided by MEHRD or MHMS.	MEHRD MHMS Reproductive Health Programme Solomon Islands National University
Schools provide information on menstruation and personal hygiene (including MHM) prior to menarche, in grades 4 and 5. MHMS recommended that educational pamphlets and films about reproductive health be given to schools to support quality teaching and reinforce accurate information.	MEHRD Curriculum Division MHMS Reproductive Health Programme Faith based education authorities
Schools provide information in an appropriate format. Teaching girls and boys separately will allow students to freely express themselves. Students and teachers requested that female teachers teach MHM, reproductive system, and other basic topics like pregnancy to girls.	Principal or head teacher
Parents provide information on menstruation and MHM to their daughters prior to menarche. Girls requested information on: <ul style="list-style-type: none"> - Why women menstruate; - Not to fear getting their period for the first time; - How to manage menstruation; 	Parents

Recommendation	Responsibility
<ul style="list-style-type: none"> - Use of absorbent materials, including cleaning and disposal; - Personal hygiene practices in a home and school setting. 	
Girls learn how to use absorbent materials, operate WASH facilities, and manage solid waste safely.	Parents Teachers
Girls have access to resources for self-learning, such as booklets or videos that they can access privately.	MEHRD MHMS Reproductive Health Programme CSOs
Male and female teachers support and encourage girls when they need help, for instance by allowing girls to excuse themselves when they are having their period and provide sick leave when necessary.	Teachers
Parents have opportunities to learn and support their daughters with MHM at school and at home. Girls requested that their parents receive training from MHMS or another agency on reproductive health so that parents can prepare their children.	MHMS and CSOs
3. Improve national policies and monitoring of MHM in schools.	
Standard designs for WASH in schools facilities consider the design features required by girls to manage menstrual hygiene.	MEHRD Asset Management Division MHMS Rural WASH Programme
MEHRD approves the draft <i>Technical Requirements</i> for WASH in schools, and monitors compliance specifically on MHM.	MEHRD Asset Management Division and Inspectorate Division
All agencies involved in the education sector work together to ensure that new schools include WASH facilities that meet the needs of girls	MEHRD, MHMS, Education Authorities, United Nations agencies, CSOs, and donors

Areas for future study

In addition to the recommendations in the table above, the team made recommendations about future areas of study in the country on MHMS.

This small study provided insight into the challenges and possible solutions to effective menstrual hygiene management in schools in Honiara and Guadalcanal Province. Further study is recommended into menstrual hygiene management in other provinces and types of schools.

No focus groups were conducted with other key segments of the population, such as out-of-school girls, mothers, or boys. Other partners in the sector have expressed interest in picking up this work with MHMS and MEHRD; they should be supported to do so as the feedback will be of great use to the sector.

A dedicated study on the acceptability of different absorbent materials to girls, and their cleaning or disposal, would help to more fully explore options and implications for their management at schools. Schools faced difficulty with safe disposal of used absorbent materials; the use of school incinerators or another method of disposal need to be fully explored.

Given the strong links between access to WASH facilities and protection found by the 2011 Amnesty International report, the Ministry of Women, Youth, Children, and Family Affairs could be engaged in future studies.

Annex I. References

UNICEF (2011). *Children in the Solomon Islands: 2011 Atlas of Social Indicators*. UNICEF Pacific: Fiji.

Amnesty International (2011). *Where is the dignity in that? Women in Solomon Islands Slums denied Sanitation and Safety*. ASA 43/001/2011. Amnesty International: London. September 2011.

Long, Jeanne, B Caruso, D Lopez, K Vancraeynest, M Sahin, K Andes and M Freeman (2013). *WASH in Schools Empowers Girls' Education in Rural Cochabamba, Bolivia: An assessment of menstrual hygiene management in schools*. UNICEF: New York. November 2013.

Emory University / UNICEF (2013). *Tools for Assessing MHM in Schools*. UNICEF: New York.

House, S., T. Mahon and S. Cavill (2012). *Menstrual hygiene matters: A resource for improving menstrual hygiene around the world*. WaterAid: London.

Sommer, M. and M. Sahin (2013). *Advancing the Global Agenda for Menstrual Hygiene Management for Schoolgirls*. American Journal of Public Health, 18 July 2013.

WHO / UNICEF (2012). *Joint Monitoring Programme for Water Supply and Sanitation Consultation on Draft Long List of Goal, Target and Indicator Options for Future Global Monitoring of Water, Sanitation and Hygiene*. WHO: Geneva and UNICEF: New York.

UNDP (2013). *Human Development Report 2013*. UNDP: New York. Accessed online at: <http://hdr.undp.org/en/content/human-development-index-hdi>

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