



WASH IN SCHOOLS EMPOWERS GIRLS' EDUCATION

Proceedings of the 7th Annual Virtual Conference
on Menstrual Hygiene Management in Schools

30 OCTOBER 2018

unicef 
for every child

December 2018



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Cover photo credits : School girls, Salima, Malawi, 2018 © Daniela Enzler



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CONFERENCE OVERVIEW

Action to improve menstrual hygiene management (MHM) for schoolgirls in low- and middle-income countries continues to gather momentum around the world. The annual virtual conference on MHM in schools shared recent evidence and programmes that illustrate the continuing progress in the field. The conference provides a vital global platform for practitioners and policy makers to share ideas, discuss approaches to common problems, and to assess progress against the five priorities of the 'MHM in Ten' agenda. Now in its seventh year, the conference illustrated some of the successes and challenges we face if we are to realise the MHM in Ten priorities that will improve girls' lives by 2024.

This year's virtual conference was held on 30 October 2018 as part of the Water & Health Conference, hosted by the Water Institute at the University of North Carolina at Chapel Hill in the USA. It was streamed online for the second year, reaching an estimated 1,300 participants around the world. The registered participants represented the increasing diversity of the global MHM community, with over 100 countries represented. The participants included representatives from government ministries, civil society organizations, donor agencies, academic institutions, private sector companies, and United Nations agencies. Participants came from the WASH, education, gender, health and adolescent development sectors.

MHM IN TEN: PRIORITIES FOR MENSTRUAL HYGIENE MANAGEMENT IN SCHOOLS, 2014-2024

In 2014, UNICEF and Columbia University organised the 'MHM in Ten' meeting, with the objective of mapping out a ten-year agenda for MHM in schools. The meeting brought together a wide range of actors, including academics, donors, NGOs, governments, United Nations agencies and the private sector, as well as other relevant sectors, including WASH, education, sexual and reproductive health, gender, and adolescence. The participants identified five priorities to help transform MHM in schools for menstruating girls by 2024. These were:

Priority 1: Build a strong cross-sectoral evidence base for MHM in schools for prioritization of policies, resource allocation and programming at scale.

Priority 2: Develop and disseminate global guidelines for MHM in schools with minimum standards, indicators and illustrative strategies for adaptation, adoption and implementation at national and sub-national levels.

Priority 3: Advance the MHM in schools movement through a comprehensive, evidence-based advocacy platform that generates policies, funding and action across sectors and at all levels of government.

Priority 4: Allocate responsibility to designated governments for the provision of MHM in schools (including adequate budget and M&E) and reporting to global channels and constituents.

Priority 5: Integrate MHM, and the capacity and resources to deliver inclusive MHM, into the education system.

The conference featured eight presentations and ten poster presentations. The presenters covered work on MHM that spanned countries and regions across the world, but they identified shared challenges in programme design, implementation, and monitoring. These included the challenges of monitoring increasingly complex and multi-sector interventions, and the challenges of taking small programmes to scale through national education and health systems. These commonalities show the importance of global learning and knowledge exchange platforms and events, to strengthen the global community of practice working towards fulfilling girls' rights to health, education, WASH and equality.

The past seven years has seen the conference and the field of MHM mature and develop, with a clear and welcome increase in interest and action on MHM particularly in schools. The conference reports since 2012 show important shifts that mirror the state of the field globally. While early conferences featured many presentations of formative research, this year's conference also illustrated how programmes built on this early research are beginning to bear fruit – and at increasing scale. And while early programmes focused on monitoring simple and very specific inputs and outputs, as the field matures, we see many initiatives to monitor the impacts on girls' lives across a range of sectors – physical and mental health, participation, and education.

This year marked the highest number of abstracts received for poster and verbal presentations in any year of the conference so far, reflecting the increased action on MHM in schools around the world. Despite the increase in abstracts, most abstracts received still focused on evidence generation (MHM in Ten priority 1) and to some extent, guidelines and indicators (MHM in Ten priority 2). At-scale examples of the other

important priorities, such as national government planning, budgeting and capacity for MHM in schools remain limited – perhaps suggesting a limited number of partners positioned to effectively work with governments or insufficient funding for this area.

The imperative for quality programming at scale, supported by robust monitoring and evaluation, is stronger than ever given the number of girls around the world who still struggle to manage their menstruation at school. The stakes are high. MHM is not a standalone, obscure new field, but one that could mean the success or failure of WASH and adolescent programming. It is therefore an important contribution towards achieving the Sustainable Development Goals (SDGs). Supporting adolescent girls during menstruation is one step towards building their confidence in themselves and their bodies, enhancing their engagement at school and in their wider communities. Success improving MHM will make quality education (SDG 4), gender equality (SDG 5), and clean water and sanitation (SDG 6) more attainable for girls across the world.



FOCUS GROUP DISCUSSION, MZIMBA, MALAWI, 2018

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RAMSHA, 13, IN FRONT OF THE GIRL-FRIENDLY WASHROOM IN GOVERNMENT MIDDLE SCHOOL KALARWALA IN THE VILLAGE OF KALARWALA, DISTRICT MUZAFFARGARH, PROVINCE PUNJAB, PAKISTAN, NOVEMBER 2016

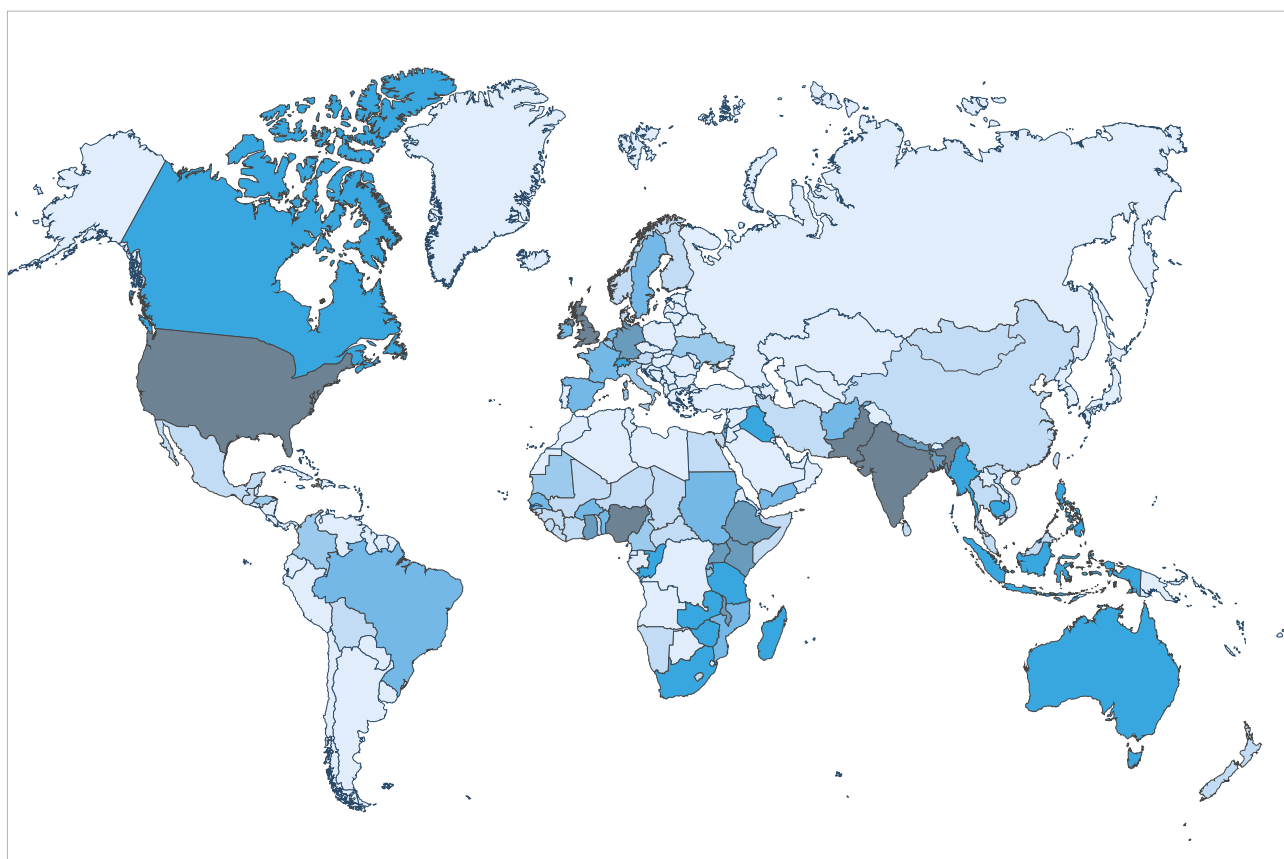
CONFERENCE PARTICIPATION

A virtual conference breaks down geographical, financial, and institutional constraints, leading to a more inclusive exchange that brings together people around the world. This year's conference saw over 1,300 people registered from 112 countries. The countries with the highest number of registrants were from India, USA, Nigeria, UK, and Kenya, reflecting the interest in MHM around the world.

For the second time, the virtual conference was streamed live from the Water Institute at the University of North Carolina's annual Water & Health Conference, reflecting how MHM has become a mainstream field for the WASH sector. In North Carolina, around 50 Water & Health attendees joined the virtual conference in person and used the opportunity to meet and connect with others working on MHM throughout the week.

This year, the conference organizers actively encouraged 'viewing parties' for virtual participants, to bring the learning and exchange to the local level. Groups connected from India, Kenya, the Netherlands, Uganda, UK and Zimbabwe.

The conference was recorded and can be streamed online at www.mhmvirtualconference.com



Intensity of color represents the number of participants, with darker color indicating more participants.



This map does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.

Number of estimated participants in the virtual conference

Number of in-person participants

Countries represented

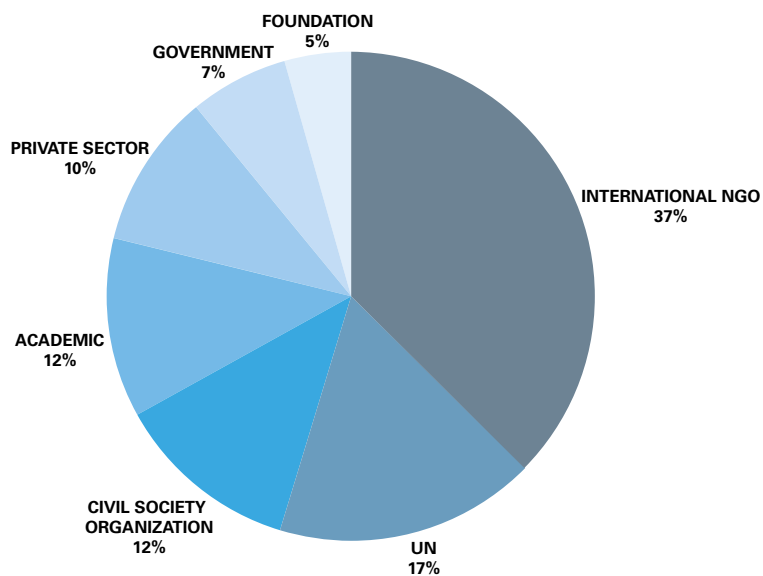
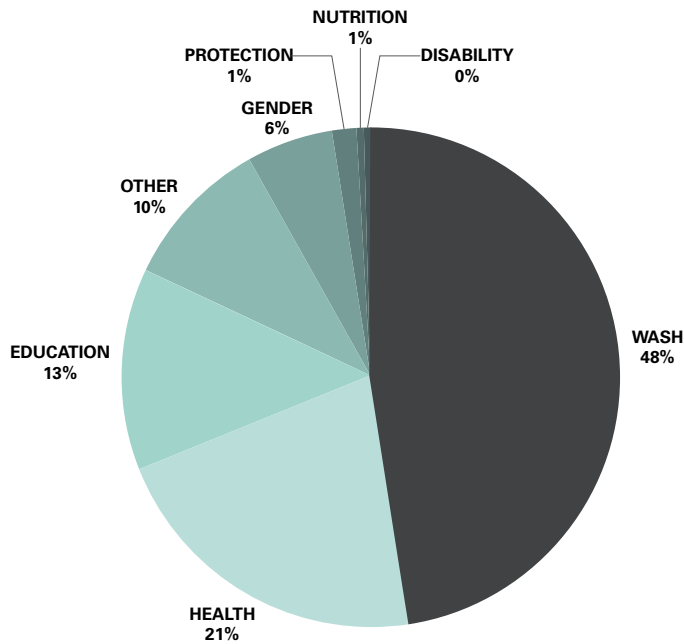
First-time virtual conference attendees

1,300¹

50

112

112



¹Based on the number of unique views of the conference platform and the estimated number of connections with over one person joining. This method of calculating may have meant more diversity in organizations and expertise than these estimates reflect.



MenstrualHygieneDay @MHD28May · Oct 30

#MHMConf Therese from @wateraid presents an overview of governments in #SouthAsia taking up #menstrualhygiene management. What is needed: convergence among ministries, standards, research on disposal and monitoring. And assure to #leavenoonebehind to reduce inequalities



Country	MHM in schools policy, standards and guidelines
Alghanistan	No current specific MHM policies. Government adopted CF's approach
Bangladesh	MoE circular - all educational institutions to provide MHM facilities
Bhutan	MoE (2017) pledged to provide sanitary pads to every girl.
India	MHM National Guidelines (2015) MWS
Maldives	Draft Policy on WASH in Schools, MoE (2017) with facilities for MHM
Nepal	Draft Dignified Menstruation Policy, (2018) MWS
Pakistan	MoE (2017) National Strategic Plan for WASH in Public Sector Schools
Sri Lanka	MoE WWS handbook, technical guideline 2017 includes MHM

Therese Mahon
WaterAid

October 30th, 2018
Friday Center - Chapel Hill, NC

unicef Virtual Conference on Menstrual Hygiene Management in Schools 2018

End Water Poverty @EndWaterPoverty · Oct 30

Want to learn more about the publication mentioned by @andreshuesoWA on incorporating gender safety considerations into community toilet infrastructure that was mentioned in the #MHMConf? Follow the link




Female-friendly public and community toilets: a guide for planners a...

How can toilets be made female-friendly? This guide, written by WaterAid, UNICEF and WSUP, advises local authorities and city planners on how to ...

washmatters.wateraid.org

Tropical Epidemiology Group @MRCTEG_LSHTM · Oct 30

A couple of photos from the fantastic drama skit that pupils at the schools receiving the MENISCUS-2 intervention perform - both boys and girls are involved. #mhmconf #menstruationmatters



Spurthi kolipaka @SpurthiKolipaka · Oct 30

Hey!! Shoutout from UNICEF hyderabad viewing party #MHMconf @UNICEFwater #menstruationmatters. #period



Days for Girls @DaysForGirls · Oct 30

Tuned in to #MHMConf today, hearing from studies like this one from @SavetheChildren that look beyond school absenteeism, and explore school participation and psychosocial stress as indicators of successful MHM programs. #MenstruationMatters #MHM

MenstrualHygieneDay @MHD28May

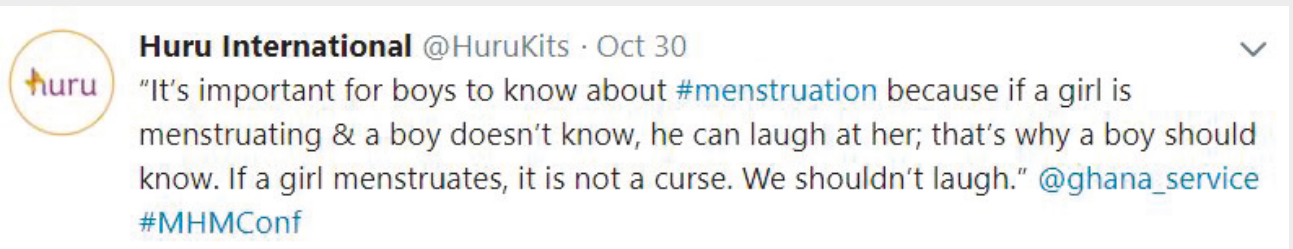
#mhmconf: Moving beyond school attendance: school participation, stress, self-efficacy of girls during menstruation matters! Jacquelyne from @SavetheChildren shares results and challenges to collect data in #Philippines



Phases of MRSS: Menstrual Research in Schools

unicef Virtual Conference on Menstrual Hygiene Management in Schools 2018

DIGITAL ENGAGEMENT



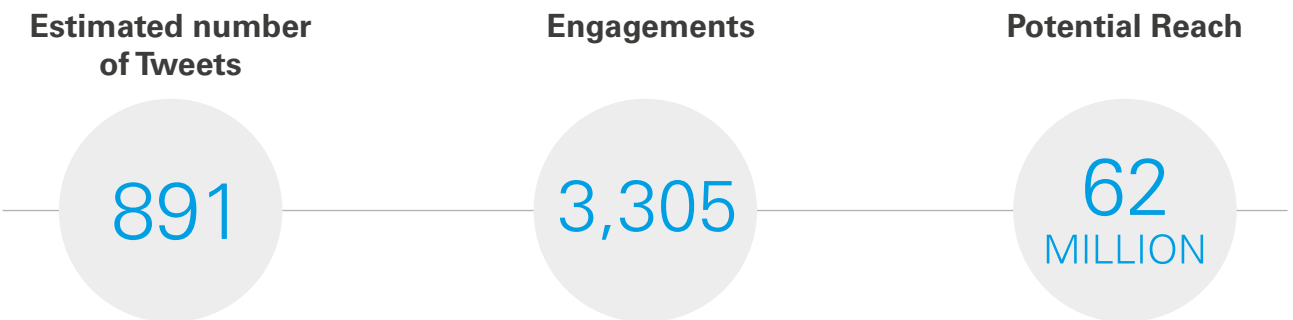
In the seventh year of this conference, digital engagement was the highest ever. MHM champions around the world used the real-time conference 'chat box' and social media to share, discuss and ask questions.

Virtual participants used the real-time chat box on the conference platform to ask questions to the presenters and moderators, allowing them to connect immediately. The chat box was most active around the impact of MHM interventions in school attendance, tools measuring programme success, discussions on types of MHM materials and the availability of MHM data for monitoring.

Virtual participants had a rich exchange of experiences and resources. To continue the exchange after the conference, the conversation was continued on the **WASH in Schools Network** 'Yammer' online discussion group, as a space to share new research and best practices, ask questions, and continue to connect with other MHM champions around the world :

<https://www.yammer.com/washinschoolsnetwork/#/home>

On social media, hundreds of people used the hashtags #MHMConf and #MenstruationMatters to share messages, photos and resources.



CONFERENCE PRESENTATIONS

The 2018 virtual conference included nine verbal presentations, sharing policy, practice, and research from around the world. The accompanying reports are presented in this section.

Presentation Title	Country	Organization
Pilot-test of a package of MHM interventions in urban and rural schools	BANGLADESH	icddr,b
Ensuring girls' rights through improved MHM	NEPAL & PAKISTAN	WaterAid Pakistan & WaterAid Nepal
Menstrual health interventions and school attendance among Ugandans (MENISCUS-2)	UGANDA	Medical Research Council / Uganda Virus Research Institute and London School of Hygiene and Tropical Medicine Uganda Research Unit
Girls' MHM knowledge, attitudes and practices, influencing factors, and the role of boys	MALAWI	Swiss Red Cross and Malawi Red Cross Society
Making the case for MHM in schools: a bottom-up approach to measuring programme success	EL SALVADOR & THE PHILIPPINES	Save the Children USA
Initial results of comprehensive MHM programme in Ghana	GHANA	UNICEF Ghana
A situation analysis of MHM in schools in South Asia	SOUTH ASIA	WaterAid
Availability of MHM data for global WASH in schools monitoring	GLOBAL	WHO/UNICEF Joint Monitoring Programme for Drinking Water, Sanitation and Hygiene

BANGLADESH

PILOT-TEST OF A PACKAGE OF
MHM INTERVENTIONS IN URBAN
AND RURAL SCHOOLS

MHM in Ten priority 1: Build a strong cross-sectoral evidence base for MHM in schools for prioritization of policies, resource allocation and programming at scale.

Introduction

Girls in low-income countries such as Bangladesh often lack the ability to manage their menstruation at school because of barriers such as a lack of access to MHM materials, and inadequate WASH facilities, with little privacy and no appropriate means to dispose of used MHM materials. This combined with a fear of leakages, social marginalization, and inadequate MHM practices contribute to 40% of school absences among menstruating girls in Bangladesh². Insufficient attention has been paid to how menstruation affects girls at school in Bangladesh, and the challenges it presents to their attendance, academic performance and right to education³.

In 2015, the Government of Bangladesh circulated a memorandum about improving WASH facilities in schools, with an emphasis on accommodating the MHM needs of female students. The memorandum states that educational officials, school committees and teachers are required to create separate toilet facilities for female students, improve all school toilets to include soap, water and a disposal bin and to appoint teachers to educate girls about menstruation. However, without a clear strategy based on evidence of what works, putting words into action and implementing the memorandum to improve the lives of menstruating girls is difficult.

In August 2016, icddr,b initiated a study entitled,

‘Piloting menstrual hygiene management interventions among urban and rural schools in Bangladesh’. The study aimed to provide evidence to develop and pilot a feasible and sustainable school-based MHM intervention, create enabling environments that enable girls to stay in school and improve their academic performance in the long run.

The education sector in Bangladesh is divided into three different levels: Primary (Grade 1 to 5), Secondary (Grade 6 to 10, or 9 to 12 at some schools), and Tertiary, which can last for 4 years. The targets of the ‘Piloting menstrual hygiene management interventions in urban and rural schools in Bangladesh’ study were students from Grades 5 to 10, so incorporated students from primary level and from secondary level. There is a total of 127,000 primary and secondary schools in Bangladesh, enrolling over 23 million students⁴. There are also alternative additional education systems, such as English language schools and those teaching Madrasah education.

School Management Committees (SMCs) are responsible in non-government secondary schools for mobilising resources, approving budgets, controlling expenditures, and appointing and disciplining staff. SMCs consist of the principal, community leaders, shareholders, and other responsible persons to discuss school-related issues.

²See for example Alam M-U., et al. (2017) Menstrual hygiene management among Bangladeshi adolescent schoolgirls and risk factors affecting school absence: results from a cross-sectional survey. *BMJ open*. [7(7):e015508].

³Alam M-U., et al. (2017) Menstrual hygiene management among Bangladeshi adolescent schoolgirls and risk factors affecting school absence: results from a cross-sectional survey. *BMJ open*. [7(7):e015508].

⁴Banbeis, Y., Bangladesh Education Statistics 2014. Dhaka, Bangladesh: Bangladesh Bureau of Educational Information and Statistics. Retrieved, 2015. 15.

They are therefore important stakeholders, so were engaged at the planning stage, to develop a sense of project ownership and sustainability.

Teachers of non-government secondary schools are recruited by the relevant SMCs, observing relevant government rules, while teachers of state secondary schools are recruited centrally by the Directorate of Secondary and Higher Education (DSHE), through a competitive examination.

Objectives

The broad objectives of the intervention and study were to develop a more supportive learning environment for menstruating girls among urban and rural schools in Bangladesh. This would be achieved through a combination of participatory behaviour change communication messages on social marginalization, and suggested hardware improvements such as the provision of products, disposal bins, and improvement of sanitation services. We conducted a formative study in four urban schools (located in Dhaka) and rural schools (located in Manikganj), to develop a feasible low-cost intervention to improve MHM practices and the school environment for menstruating girls.

We then piloted the intervention package (see details in methods section) in four different urban and rural schools with similar characteristics.

This paper focuses on the results from two of the specific objectives:



HOUSEHOLD INTERVIEW ON MHM PRACTICE
© icddr,b

1. To evaluate the uptake of cloth (reusable) pads among menstruating girls, and
2. To measure the impact of the intervention on school attendance during menstruation.

Research Methods

Internal Review Board (IRB) approval: We obtained the IRB approval from icddr,b to conduct the study. All teachers provided written consent and students assented to participate in this study.

Baseline survey: We conducted a baseline survey of 527 girls to assess students' current puberty and MHM knowledge and practices and to measure reported school attendance. Fieldworkers then deployed the intervention to all four schools.

The intervention included multiple components:

- **Supportive environment:** Consisting of the provision of MHM products, locally available disposal systems and behaviour change communication materials.
- **Provision of materials:** During the formative research girls were asked about their preferred MHM materials. Girls preferred both disposable and reusable cloth pads. They were therefore provided with both disposable and cloth pads. A three-month pre-testing phase in early 2017 was carried out, during which majority of the girls liked and used cloth pads as it was environment friendly, reusable and low-cost. Based on the formative findings, we then provided the other four pilot test schools with an MHM package which included two cloth pads, one item of underwear, one carrying case and one storage bag, as well as a menstrual tracking calendar.
- **Teaching and learning materials:** Boys and girls from Grade 5 to 10 were given three government approved puberty- and menstruation-related comic books. Teachers were given a pictorial flipchart called, 'Know yourself and grow', which included information related to puberty, changes during puberty, the male and female reproductive system, MHM, hygiene, nutrition and coping strategies during puberty changes.
- **Self-guided materials:** Girls were provided with calendars to track and better manage their menstruation. Cue cards were displayed next to the toilets to support better MHM practices among girls. The cue card depicted pictorial messages on the use and maintenance of MHM materials, and the disposal of disposable sanitary pads.
- **Training of teachers:** Training of 20 male and female teachers, supported by the provision of manuals and pictorial flipcharts to deliver MHM and puberty sessions, in conjunction with schools' regular physical education classes
- **Maintenance:** Formation of school-based 'gender committees' consisting of teachers, male and female students, education officers and other non-teaching school staff, to maintain intervention activities (such as distribution of pads and underwear) and facilities, and to promote gender equity (such as encouraging boys and girls to discuss MHM and puberty with their peers).
- **Improving policy implementation:** An 'MHM Working Group' was formed, made up of a variety of stakeholders, including officials from the Ministry of Education and Health, media partners, pad manufacturers, school teachers and NGOs working on MHM. The group meets on a quarterly basis to discuss national MHM policy, and to consider options for local implementation.

The baseline survey was carried out in August 2017 and the endline survey in April 2018. To accurately measure school attendance, a fingerprint scanning device in schools was installed for students to use.

After implementing the interventions, five monthly 'fidelity assessments' were conducted between September 2017 and March 2018. The purpose of the fidelity assessment was to follow up the project activities, including assessment of cloth pad uptake, absenteeism tracking and behaviour



changes, through making school and home visits and by conducting interviews and observations. Data was collected on tablets.

Fieldworkers interviewed a total of 432 girls. This included 268 to explore the uptake of cloth pads and 164 to measure school attendance during menstruation. Twelve girls were randomly selected each month from each of the four schools to assess the uptake of cloth pads. Fieldworkers interviewed 10 girls from the list of all absent girls from each school, to explore the reason for their absence.

Six months after the intervention, an endline survey of 528 girls was conducted in April 2018 to assess puberty and MHM knowledge and practices and levels of absenteeism (reported data).

Outcomes

Out of 404 menstruating girls that participated in the baseline survey, 28% reported that they had missed school during their last menstruation. The endline survey showed that out of 382 menstruating girls, the figure had dropped to 20% reporting missing school during their last menstruation. The 8% difference is statistically significant and suggests a decrease in absenteeism following the intervention. Some of the girls who did still miss school because of their menstruation cited excessive bleeding and pain, so did not feel comfortable to attend school during menstruation – suggesting that further research may be help us understand what would make them feel more able to manage their menstruation safely and confidently. The planned qualitative assessment will investigate this further.

The baseline survey of current MHM practices suggested that the use of cloth was 22% at baseline. However, the endline results showed that 83% of the girls used reusable cloth pads. The assessments during the intervention suggested that the majority of the girls that used the reusable pads reported that the cloth pad provided as part of the intervention was comfortable, did not stain, soft and reusable.

Maintenance of reusable cloth pads (washing, drying and storing), and knowledge and practices on the proper disposal of disposable sanitary pads has been improved from baseline. Reusable pad washing practices using detergent, soap and water, rather than simply water, has been improved by 15% from baseline.

At the end of the intervention, 74% of girls were drying their reusable pads in the open air, compared to 38% at baseline. The girls reported that a reason for this change was because the cloth pad did not look like a menstrual material, and girls were thus more comfortable drying them openly. The storage of reusable pads with other clothes rather than hiding them away also increased – by 27% compared to baseline. The data suggests that the intervention helped girls to improve their confidence and overcome some of the social stigma associated with menstruation.

The fidelity assessments showed that out of 164 absent girls, 12% (20) mentioned that they were absent for menstruation-related causes including heavy bleeding and pain, and 88% (144) cited other causes including visiting relatives, having guests at home and feeling unwell.

— Lessons learned and next steps

One lesson on the methodology of the study was that finger print scanners were not always an effective way of tracking school attendance. Challenges with the fingerprint system included some devices malfunctioning, and that students felt the system was duplicating other more traditional registration systems, which dampened enthusiasm for using the fingerprint system. Because official attendance was measured using traditional manual registers, teachers were less likely to encourage or remind the students to scan their fingerprints on a regular basis.

The involvement of the teachers to deliver puberty and MHM sessions was an added work for the teachers for which they were not paid. Therefore, future MHM work could consider providing incentives, so that teachers might be more willing to conduct sessions and promote an MHM-friendly school environment.

The MHM Working Group initiated as part of the project has provided a valuable platform where government, NGOs, corporate and media partners as well as others can come together to discuss MHM interventions and national MHM policy improvements and implementations. It is hoped the forum can be continued, as a discussion group led by the Ministry of Education. The Ministry of Education is willing to adapt the reusable MHM cloth pad to their 'Generation Breakthrough' project on sexual and reproductive health issues.

A randomized controlled trial is planned, to better understand the impact of the intervention on school attendance, performance and self-efficacy. Further collaboration with the Ministry of Education is then planned, to scale up the intervention to schools across Bangladesh.

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NEPAL & PAKISTAN

ENSURING GIRLS' RIGHTS
THROUGH IMPROVED **MHM**

WATERAID PAKISTAN

MHM in Ten priorities:

Priority 1: Build a strong cross-sectoral evidence base for MHM in schools for prioritization of policies, resource allocation and programming at scale.

Priority 2: Develop and disseminate global guidelines for MHM in schools with minimum standards, indicators and illustrative strategies for adaptation, adoption and implementation at national and sub-national levels.

Introduction

Menstruation is a taboo subject in South Asia, and is rarely discussed openly in Nepal and Pakistan. In order to increase access to adequate MHM materials and appropriate WASH services for girls and women, there is a need for both men and women to have greater awareness of good menstrual hygiene practices, and to increase institutional accountability. WASH facilities and MHM services that are inclusive, functional and safe are essential to enable women and girls to manage their menses hygienically, privately and with dignity.

In Pakistan 41.7% of the population lack basic sanitation services and 47.1% of the population lack basic drinking water services in 2015⁵. In addition, one in three schools do not have adequate sanitation facilities, which affects large number of girls⁶. Where there are sanitation facilities, anecdotal evidence shows that these facilities often do not work properly.

WaterAid and its partners in Pakistan and Nepal are working with the respective governments to

improve school WASH facilities along with MHM, and to develop the capacity and accountability of local stakeholders to improve MHM in schools in the districts the project was working in. The project was supported by funding from UK Aid, with the overarching idea that improving aspects of MHM in the schools will contribute to improving gender equality.

This project was implemented in 217 schools across five districts; three districts in Nepal: Siraha, Sindhuli and Udaypur, and two from Pakistan: Muzaffargarh and Swat, which are two of the districts most severely affected by the devastating floods in 2010.

A knowledge, attitudes and practice survey in Muzaffargarh and rapid assessment in Swat by WaterAid Pakistan partner organisations⁷ in 2014 demonstrated that almost all school children in both districts are currently facing problems in accessing clean and safe water, toilet facilities, washing places with proper drainage and in disposing/collecting solid waste. This survey also found that 82% of the girls' toilets in rural schools

⁵ WHO/UNICEF JMP (2017) <http://washdata.org/>

⁶ Alif Ailaan (2017) Pakistan District Education Rankings 2016. Available at: https://d3n8a8pro7vnm.cloudfront.net/alifailaan/pages/537/attachments/original/1474368820/Pakistan_District_Education_Rankings_2016_Full_Report.pdf?1474368820. Accessed 19 December 2018.

⁷ Association for Gender Awareness & Human Empowerment (AGAHE) and Environmental Protection Society (EPS)

were unclean and no toilets had suitable facilities for the hygienic management of menstruation and disposal of used sanitary materials.

The project was implemented in 217 selected government schools and the surrounding communities. The schools are managed by a 'District Education Executive Officer' (CEO), linked to the relevant ministry of education at the provincial and national level. The schools have their own 'School Management Committees' that are responsible for the overall management of schools. Schools are categorised into 'primary' schools (Classes 1-5 for children aged from 5-9 years), 'middle' or 'lower secondary' schools (Classes 6-8, for children aged from 10-13 years), 'secondary' schools (Classes 9-10, for children aged from 14-15 years) and 'higher secondary' schools (Classes 11-12, for students aged from 15-16 years).

In Pakistan, all the targeted schools were girls' only schools, from middle and secondary level. In Nepal, schools are from primary to secondary level, and were mixed gender.

Objectives

The long-term objective of the programme was to contribute to improving gender equality in schools and the surrounding communities, through increased access to inclusive WASH with a focus on improving access to MHM facilities and increasing MHM knowledge among adolescent girls, women and men, in targeted regions of Nepal and Pakistan.

The short-term objective of the programme was to bring sustainable, inclusive WASH services to 217 schools and surrounding areas in five districts in Nepal and Pakistan, including supporting schoolgirls and teachers to manage their menstruation hygienically and with dignity.

The project followed a model for MHM in schools that combines four key components:

1. Inclusive WASH facilities at school, adapted for MHM;
2. Providing menstrual hygiene information, backed by social support;
3. Provision of menstrual materials; and
4. Work to increase institutional accountability and responsibility for MHM at different levels.

Formative research and analysis informed how these four components were adapted to the different country and district contexts, in order to address differences in socio-cultural, economic, geographical and institutional factors.

The project identified three outcome indicators:

1. Number of people with access to safe, inclusive, sustainable WASH facilities, including MHM- friendly facilities for girls and women in schools;
2. Increased confidence and ability of girls to manage menstruation at school; and
3. Percentage of targeted schools where public WASH audits are conducted, enabling recommendations at policy level.



RAMSHA, 13, WITH HER CLASSMATES IN GOVERNMENT MIDDLE SCHOOL KALARWALA IN THE VILLAGE OF KALARWALA, DISTRICT MUZAFFARGARH, PROVINCE PUNJAB, PAKISTAN, NOVEMBER 2016

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In addition, while not measured as an official outcome, one of the most beneficial outcomes of the project was seen as the raising of MHM awareness – among students, teachers, community members and officials, leading to the social and political will to make the changes necessary to help girls and women to improve their experience of menstruation.

The key stakeholders for the project were:

- Schoolchildren, who were the direct beneficiaries of improved access to safe drinking water, inclusive sanitation facilities and raised awareness of healthy hygiene behaviours at their schools. While Pakistan schools were girls only, in Nepal's mixed sex schools, schoolboys also learnt about menstruation, with the aim of reducing stigma and cultural secrecy surrounding the subject.
- Out-of-school girls and community women, who benefited from associated outreach activities to raise awareness of MHM, with support from their peers. To ensure that these girls were not left behind, WaterAid raised awareness on MHM and WASH in the surrounding communities as well inside school premises.
- Female teachers, who were a key part of the all activities in schools, and benefited from improved WASH and MHM services, and enhanced ability to support schoolchildren on hygiene. From all school teachers, two focal teachers were selected in each school to lead, support and involve WASH club members throughout the project life on MHM activities in schools.
- Members of the surrounding communities, who were engaged and consulted, and who benefited from community WASH awareness-raising activities through community-based organisation and the formation of women's groups.
- Government officials, who were engaged and involved from the start of the project in the identification of the schools, and consulted during the construction process to increase the sense of ownership and accountability. They were involved and trained on monitoring approaches, MHM and WASH aspects, so that when WaterAid leaves they will be more likely to continue their support to the department and to schools.

Description of intervention

The intervention was framed around the four key components mentioned above; inclusive WASH facilities at school adapted for MHM; providing menstrual hygiene information, backed by social support; the provision of menstrual materials; and work to increase institutional accountability and responsibility for MHM at different levels.

The approach incorporated existing research, but with the aim of generating further practical evidence of what works. There is limited quality evidence on the outcomes of MHM interventions in Nepal and Pakistan, and therefore this project contributes to that evidence base.

- Inclusive WASH facilities:** This involved construction or rehabilitation of inclusive water and sanitation facilities supporting better MHM in 217 schools across the five districts. School Management Committee members and school caretakers were also trained in how to operate and maintain the facilities. Water facilities were developed according to local topographical context. Sanitation facilities were developed to be MHM-friendly (for example, including a full-size mirror, a handwashing facility inside the toilet, a hook to hang clothes, and an adequate disposal facility).
- MHM information and awareness:** MHM awareness-raising was adopted in targeted schools, primarily through the formation of school WASH clubs. Teachers lead the WASH clubs, and are trained on MHM and how to guide girls if they need any support in school. The clubs learned good hygiene practices such as hand washing with soap after defecation, as well as good MHM practices. School WASH clubs can act as change agents and leaders in schools and communities, keeping up the momentum of behaviour change, and therefore helping to increase sustainability. Creative material was used to provide the information on MHM, for example using cartoons, quiz and speech competitions, and inter- and intra-school drawing competitions.
- Provision of menstrual material and supply chains:** The project worked with schoolgirls, teachers, women in the community and the local private sector to develop supply chains which ensure girls' access to affordable menstrual materials. The approach was based on listening to what girls wanted; formative research, feasibility studies and market appraisals during the first year of the project helped to identify appropriate materials, what prices girls can afford, and what facilities they need and may prefer for disposal. In Pakistan a business of low cost sanitary napkins production was established, producing low-cost sanitary napkins for all the targeted schools in Muzaffargarh district.
- Institutional accountability:** The project involved local and district level institutions and professionals, such as district WASH forums, village level committees, WASH committees, health practitioners, female clerics and the district education offices, on raising awareness on MHM, how they can support improvements and how they can replicate the project in other schools outside the 217 targeted by the intervention. Developing monitoring mechanisms helped create a sense of institutional responsibility; monitoring committees comprised of representatives from education, WASH forums and implementing partners. The committees certify each MHM facility in schools at district level in both countries. At the provincial and national level, different duty bearers from education, health and human rights departments and parliamentarians were involved on MHM through seminars, workshops and holding 'celebration days' – helping to develop and sustain the enabling environment around MHM service provision.



IQRA, STUDENT OF CLASS 10, WASHING HANDS INSIDE THE WATERAID INSTALLED GIRLS' FRIENDLY TOILET IN GOVERNMENT GIRLS HIGH SCHOOL CHAK 518, UNION COUNCIL MEER PUR BHAGAL, TEHSIL KOT ADDU, DISTRICT MUZAFFARGARH, PROVINCE PUNJAB, PAKISTAN, MAY 2018

The project has a conscious focus on continuous learning and reflection; learning initiatives have been undertaken to strengthen the design of interventions, as well as the development of monitoring tools to track progress against the project outcomes. These include mixed methods research in the targeted districts with girls, boys, teachers and mothers, as well as a participatory photography project in both countries, and the gathering and analysis of the experiences and reflections of the project team.

A monthly progress data collection system was developed generating monthly reports on progress and to verify the status of WASH facilities. Visit reports were uploaded to 'mWater' (the online application that WaterAid promotes globally for surveys and verification of data). Data was reviewed continually throughout the project, with updates provided and analysed on a quarterly basis.

Feedback on progress is communicated to partners, with areas for improvement suggested. Field monitoring visits by the monitoring and evaluation officer and programme team are validated by taking a random sample from mWater data (which is recorded by partner), and by visiting the school. These monitoring and evaluation visits end with a debriefing meeting, with actions agreed where necessary.

A baseline study was carried for the project in both countries, including an inventory of water and sanitation facilities in the targeted schools and of knowledge, attitudes and practices around MHM. The survey tools included observation checklists for facilities and questionnaires and focus group discussions with students, mothers, teachers, School Management Committees and local institutions. Formative research was also conducted in Nepal, to investigate further the challenges faced by girls in relation to MHM at school.

To assess the quality of the project, a mid-term study was carried out, which helped to assess the project's trends, the relevance and effectiveness of the approaches, technologies and strategies applied, and to review lessons so far that could be learned and applied for wider impact.

At the end of the project, a project review was carried out. This end-line review was qualitative and focused mainly on the relevance of the approach, strengths and weaknesses, lessons learned, and considerations of sustainability.

To further capture the impact of the project, a participatory photography workshop with schoolgirls was organized in both countries. Photography workshops were organised for four hours a day after school, including guidance on producing ethical imagery, basic photography and camera handling, storytelling, MHM, and social taboos. Through the course of the workshop, the group developed their photography skills and were asked to document their personal experiences around menstruation issues using photography as their final task. Cameras were



WASH GROUP MEMBERS, (LEFT TO RIGHT) KIRAN, MAHWISH, SABA, RAMSHA AND IQRA, IN FRONT OF THE WATERAID INSTALLED GIRLS' FRIENDLY TOILET IN GOVERNMENT GIRLS HIGH SCHOOL CHAK 518, UNION COUNCIL MEER PUR BHAGAL, TEHSIL KOT ADDU, DISTRICT MUZAFFARGARH, PROVINCE PUNJAB, PAKISTAN, MAY 2018

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provided. The group were then left to their own devices with the cameras to capture their stories. Our team returned after one week and collected the images to start the editing processes. The group produced more than 6000 photos, of which they selected their top ten images. The images were then exhibited at school and printed by the local and global media. The project had a positive impact in the community, school, and most importantly the group's confidence to speak out about MHM issues.

Outcomes

Between November 2014 to March 2018, over 75,000 school children and 1228 teachers in 217 schools were provided with access to safe and inclusive water and sanitation facilities that are MHM-friendly. Caretakers, WASH clubs and School Management Committee members have been trained on operation and maintenance, helping increase sustainability.

School WASH club members from 217 schools have been trained on WASH rights, hygiene and MHM. They have shared their learning to peers and out-of-school girls through training sessions and campaigns. Parent Teacher Associations, School Management Committees and school WASH committees from the 217 schools have also been trained on WASH rights, hygiene awareness and the importance of MHM facilities in schools.

District WASH forum members, area education officers, local religious leaders, female health workers, Village Development Committee members, Health Post Management Committee members, and other staff of the committees have also been trained in WASH, including MHM-friendly WASH facilities.

In addition, 480 'MHM promoters', including teachers, senior health facilitators and Female Community Health Volunteers were trained and mobilized, to ensure regular supply of menstrual hygiene materials in Village Development Committees and schools. As a result, local beauty parlours and grocery stores as well as medical outlets now sell sanitary napkins in the community. At school, WASH clubs, Parent Teacher Associations and School Management Committees have taken up the responsibility to provide or sell sanitary pads for female students. There have been schools that have established hygiene donation boxes to make disposable sanitary pads easily available at schools.

There are also now 834 government officials who have been trained on WASH and MHM. A joint monitoring committee visits all schools' WASH facilities to assess the facilities.

Local staff noted that there is a high level of participation by local stakeholders, indicating that the programme has been widely accepted by the users and relevant government stakeholders, despite menstruation being a topic that previously was not openly discussed. The project team also report that menstruation is now discussed more openly in the project schools. Male school teachers and boys have been involved in the awareness-raising sessions and trainings and are supporting the programme, for example through contributions to the sanitary materials fund in schools. Schools outside the project areas (community schools and private schools) have also begun intervention activities and are interested in carrying out similar projects in their schools. It is hoped that through the project's work at the district level, these schools may also be reached through the government or other development partners.

Lessons learned and next steps

To overcome cultural prohibitions around talking about MHM, the team adopted a strategy of holding sessions on WASH and other more neutral topics to get people comfortable before talking specifically about MHM. The team could take further advantage of these sessions to identify dynamic women who may be well suited for further engagement on the project.

It was also found that hosting all trainings and activities, including community-level activities, at the schools was beneficial. Schools were seen as an appropriate venue for women to attend, as their family members sometimes restricted them from going to other public venues. In addition, some communities were more receptive of work taking place at the school rather than wider community action, as the focus was on children and their health, rather than social or community development.

Several good practices in mobilisation techniques were identified, including:

- Identification of active and motivated girls for WASH clubs through consultation with teachers and soliciting volunteers;
- The use of games around WASH and MHM, to make it less embarrassing, and more interesting and fun. The use of stage plays was also found to be an effective and engaging way to share WASH messages with other pupils;
- The use of 'drop box' suggestion boxes, which can help girls who are shyer to participate; and
- The use of videos, to create more visually engaging mobilisation sessions.

Strengthening WASH clubs through training sessions and incorporating interactive activities (such as soap making, creating art on MHM for the walls of the school) on MHM in schools helped them to focus on other issues which broadly help the school and their peers. For example, the WASH club mobilised the school girls to clear bushes around the school, which increased a sense of safety and security for the girls.

This project was a pilot for a wider MHM project in Pakistan. The project provided the momentum for scale up from the government and other local agencies who were involved during the implementation process, because of their involvement in training, and in provincial and national seminars, and advocacy forum initiatives like MHM working groups. Officials involved in the Nepal Pakistan project now play heightened roles in their respective departments on MHM; for example, after closing of the project an official from Punjab added indicators on MHM to the school health nutrition monitoring format.

The MHM toolkit developed under this project – comprised of conversation guidelines on menstruation, cartoons and a flip book on the role of focal teacher and WASH club – has been adopted by other organisations working on MHM, such as Islamic Relief and the National Rural Support Programme in Pakistan.

Both of WaterAid's local partner organisations now include MHM as a core theme in their work. They integrate MHM awareness-raising in their other projects.

The low-cost sanitary napkins production centre established under this project in Muzaffargarh continues to supply napkins and MHM kits (napkins, underwear, small soap and brown envelope) to schools and organisations working on MHM.

This project also enhanced the MHM capabilities of WaterAid Pakistan, which now advocates for MHM on a national scale. The key element of this national movement is to develop a teacher training manual package on MHM in schools (adopting the learnings and communication material from this project), as well as to train a cadre of master trainers on MHM in schools from the education department at the federal and provincial level.

Recommendations for others hoping to learn from this effort

Further development of contextualised approaches is needed. For example, our experience showed that younger girls (aged 9-12) and girls with disabilities have specific needs that were not necessarily within the scope of the programme – we suggest it is necessary to include and consider these groups as a logical next step, or if possible, to include from the planning stage of an MHM intervention as much as possible.

Monitoring approaches could be adapted and applied more widely to assess changes to the girls' levels of confidence and ability to

manage their menstruation at school, as well as measuring the accountability of stakeholders for MHM in schools.

Sustainability is an underestimated challenge; it requires a thorough understanding of life cycle costs for the operation and maintenance of facilities and services, careful consideration for the ongoing availability of MHM supplies, and behaviour change considerations, including the institutionalisation of menstruation education and support through the education and reproductive health sectors.

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UGANDA

MENSTRUAL HEALTH INTERVENTIONS AND SCHOOL ATTENDANCE AMONG UGANDANS (**MENISCUS-2**)

MEDICAL RESEARCH COUNCIL / UGANDA VIRUS RESEARCH
INSTITUTE AND LONDON SCHOOL OF HYGIENE AND TROPICAL
MEDICINE UGANDA RESEARCH UNIT.

MHM in Ten priority 1: Build a strong cross-sectoral evidence base for MHM in schools for prioritization of policies, resource allocation and programming at scale.

Introduction

Inadequate MHM support affects many girls in low- and middle-income countries. In Uganda, the Government has prioritized the need to improve MHM, outlined in its 'Menstrual Hygiene Charter' in 2015, in which it committed to work with government ministries, civil society organizations, NGOs and international organizations to promote MHM.

An original mixed-methods feasibility study (known as the Menstrual Hygiene and Safe Male Circumcision in Ugandan Schools study, or 'MENISCUS-1') conducted from February 2015 to July 2016, suggested that menstruation is a frequently cited reason for female school absenteeism. Qualitative research showed substantial embarrassment and fear of teasing regarding menstruation, and suggested that this, together with pain and lack of access to appropriate and effective MHM materials, led to girls often not attending school during menstruation. In a quantitative sub-study of daily diaries, 40 girls reported school absence on 28% of period days, compared with 7% of non-period days (adjusted odds ratio=5.99, 95%CI 4.4-8.2, $p<0.001$). MENISCUS-1 highlighted the importance of including the whole school community (i.e. boys and teachers as well as girls) and of engaging parents in any intervention to improve MHM.

In Uganda, as elsewhere, few programmes have conducted rigorous evaluation of MHM interventions. Studies often focus on rural populations, on primary schools, or on either the physical or psychosocial aspects of single MHM interventions for girls (but often not both). MENISCUS was set up to consider both the psychosocial aspects of menstruation (knowledge, self-confidence, attitudes) and the physical aspects (management of pain, use of appropriate

materials, improved WASH facilities, etc.), and the effects of community-led interventions on school dropout, attendance and performance.

The long-term goal of the MENISCUS programme of research is to develop an evidence-based intervention package to improve MHM management among school girls. The current study, MENISCUS-2, began in September 2017 and is expected to be completed in July 2018. It has pilot-tested a comprehensive school-based MHM intervention package delivered to schoolgirls, schoolboys, teachers and parents. The primary objective of the MENISCUS-2 study was to review whether a cluster randomised trial is justified to evaluate whether an MHM intervention package improves school attendance and performance in secondary schools in Wakiso District, Uganda.

The MENISCUS-2 study took place in two secondary schools (one private school and one government school) in Entebbe, a peri-urban sub-district of Wakiso District. The Entebbe municipality is located within one of the peninsulas of Lake Victoria, the largest lake in Africa.

The intervention was delivered to all students in class Secondary 2 ('S2') and followed up in Secondary 3 ('S3'). Students in this class are typically aged between 13 and 17 years old. This was shown in the feasibility work to be an appropriate class for receiving the intervention, as almost all girls have started menstruation, and students in this class are more likely to be receptive to interventions compared to older students.

The system of education in Uganda has a structure of seven years of primary education, six years of secondary education, and three to five years of post-secondary education.

Objectives

The goal of MENISCUS-2 was to assess whether progression to a third phase – a cluster randomized trial – is justified in terms of pre-specified criteria. A Phase 3 trial would deliver a menstrual hygiene intervention package to improve psychosocial outcomes, school attendance and performance in 30 secondary schools in Wakiso District.

The objectives were to:

- Pilot a combined package of MHM intervention elements developed in MENISCUS-1, delivered to a whole secondary school year for nine months;
- Measure the uptake and assess perceptions of each element of the intervention package, and the package as a whole;
- Pilot the use of daily diaries to estimate school attendance, and compare attendance with estimates using registers, observation visits and retrospective self-report; and
- Estimate the sample size required for a future trial.

Ultimately, the longer-term goal was to develop an effective MHM package which is sustainable and cost-effective and addresses a range of issues associated with MHM, including both 'software' (psychosocial issues, social norms, knowledge) and 'hardware' (provision of re-usable pads and analgesics, and improved WASH facilities).

Direct stakeholders are the students (both boys and girls), as well as their parents or guardians, male and female teachers, head teachers, school prefects (student leaders in the school), and school nurses and matrons.

High-level stakeholders are the ministries of education and health, the district education officer, and officials at Entebbe municipality. NGOs working on MHM in Uganda (for example Irise, Plan International, WoMena, RubyLife, AFRIpads) are also critical stakeholders, together with other institutions such as the Medical Research Council / Uganda Virus Research Institute (MRC/UVRI) and the London School of Hygiene & Tropical Medicine Uganda Research Unit, Makerere University, the World Health Organization, and the London School of Hygiene and Tropical Medicine (LSHTM).

Description of intervention and study methods

The intervention is made up of five components and was provided by the research team – MRC/UVRI and LSHTM Uganda Research Unit (who conducted the survey, WASH facilities, painkillers and diary menstrual diaries) – and the implementing partner; WoMena Uganda (who developed the drama skit, menstrual kit and training of trainers on MHM).

The five components of the MENISCUS-2 study/intervention package were:

- Training teachers to improve current delivery of government guidelines for puberty education delivered by teachers (both female and male);
- A drama skit to address issues around menstruation, engaging girls, boys, parents and teachers;
- Provision of a menstrual management kit, including re-usable pads and training teachers and peers to teach girls how to manage their menstruation;
- Pain relief (paracetamol) for menstrual pain using a voucher scheme; and
- Basic improvements to school WASH facilities (providing liquid handwashing soap, replacing of broken doors, water drums, disposal bins, toilet paper holders and locks) to improve girls' privacy.

MENISCUS-2 included:

- A stakeholders' workshop to finalise the intervention package;
- Cross-sectional surveys for both girls and boys at baseline and end-line to assess knowledge, attitudes and perceptions of menstruation and the intervention package;
- In-depth interviews and participatory group discussions with girls, teachers and parents to assess perceptions of the intervention; and
- (Unannounced) visits to check the maintenance of the WASH component of the intervention.

Each intervention had one or more evaluation indicators to monitor progress and assess how the programme implementation was achieved. The outcome of school attendance was primarily monitored using data from daily diaries given to 100 female students over nine months, to record school attendance and menstruation. Data for cross-sectional surveys were collected using electronic data capture (self-completed questionnaires entered on tablets using 'Open Data Kit' software). Retention in school was also measured as an estimate of loss-to-follow-up of participants in the future trial.



STUDENTS FROM THE GOVERNMENT SCHOOL PARTICIPATING IN BASELINE SURVEY USING TABLETS.

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Outcomes

Fieldwork for the MENISCUS-2 study has been completed. Of the 450 S2 students enrolled in the study (October 2017), 82% participated in the end-line survey (August 2018). Self-completed electronic data collection on tablets was feasible and popular with students. 81% of girls completed diaries to assess school attendance and menstrual patterns over a nine-month period between October 2017 and July 2018. All five elements of the intervention package were delivered in both schools and the intervention was found to be acceptable to girls, teachers and parents.

Key findings:**The primary outcome, school attendance, is feasibly estimated using menstrual daily diaries**

which were found to be more complete and accurate than attendance registers in the schools, were acceptable and feasible to administer, and were popular with girls as they help with tracking and prediction of menstrual cycles.

There were substantial improvements in MHM following the intervention.

The proportion of girls reporting using exclusively manufactured materials (re-usable or disposable pads, tampons or menstrual cups) for their last menstruation increased from 73% to 90%; the proportion of girls who knew at least one effective method of pain relief increased from 25% to 70%; reporting of boys teasing girls about their menstruation decreased from 63% to 25%; girls reporting leaking blood during their last menstruation decreased from 33% to 19%; and girls reporting feeling anxious about their next menstrual period went down by around a quarter to 34%, from 58%. Most girls (85%) said that school toilet facilities had improved during the study, and of these, 94% reported that this improved their comfort managing their menstruation.

Girls reported improvement in school attendance

in qualitative interviews, due to reduced stigma, availability of MHM materials (especially pads), menstrual cycle tracking skills and pain management methods. They also reported improved knowledge of puberty and MHM and increased support from teachers and boys.

— Lessons learned and next steps

Delayed national ethics approvals, and a general lack of familiarity with the menstrual cup as a menstrual management option for schoolgirls was a significant challenge. The national ethics approval body expressed concerns with parents not having sufficient information about the menstrual cup to make an informed decision. One of the main concerns was the use of the menstrual cup in children before they are sexually active, and how usage might affect their hymen and virginity. Although information and evidence were provided to address these concerns, approval was not granted to include the cup in the menstrual kit. Continued liaison with the ethics board has been necessary, as well as menstrual cup awareness activities with parents in schools, to work towards offering the cup as an opt-in additional menstrual management choice in future work. The menstrual cup is

cheaper compared to other manufactured materials, because it is bought once and used for 10 years, therefore also reducing environmental impact, and is also reported to be effective and comfortable to use, once familiar with it.

Abrupt changes in school programmes, including the timing of the end of term hindered the continuity of project activities, such as obtaining consent from parents and the assent of students.

Assessing school attendance was also a challenge. Lack of updated class registers affected the programme in assessing school attendance; encouraging focal teachers to register students was attempted, but ultimately unsuccessful. The project did also conduct spot checks to register and cross check attendance of students who were filling out their daily MHM and attendance diaries. However, confidence in

'official' class registers to provide accurate data on school attendance remains low, and the daily diaries are being used to measure attendance for MENISCUS-2, having worked well in MENISCUS-1.

Poor attendance at parents' meetings that involved information sharing and obtaining consent for students was also found to be an issue, which meant inviting parents to schools more than once. Sometimes, parents can be spoken to during other school activities, but attendance remains poor.

School ownership and ongoing leadership has also been a challenge for all aspects of the intervention which required ongoing input by the school (e.g. the delivery of puberty education to girls and boys in school or maintenance of the WASH facilities) – leading to concerns about sustainability of the intervention.

The MENISCUS-2 team hosted a three-day workshop on MHM methodology for researchers from Uganda, Kenya and Tanzania in November 2017, to initiate a regional MHM research network, develop a tool to capture key MHM indicators, and identify research gaps and funding opportunities. This was funded through a career development grant to a Tanzanian MHM researcher.

The team presented the MENISCUS-2 study at the Ugandan 'National MHM Day' in May 2018, including a presentation of the drama skit from students in one of the intervention schools.

The principal investigator from MENISCUS-2 is the co-principal investigator for a new MHM network grant from the Global Challenges Research Fund (GCRF), to strengthen MHM research in East and Southern Africa (Kenya, Tanzania, Uganda and Zimbabwe. The network grant funds four early-career researchers from each of these four countries, including Dr Catherine Kansime, (the MENISCUS-2 study coordinator), and will help build capacity for MHM research in East and Southern Africa.

The team hosted a one-day stakeholder and dissemination meeting on 8 October 2018 and a three-day workshop in October 2018 for MENISCUS-2 co-investigators and GCRF MHM network members to i) present the results and lessons learned from MENISCUS-2 and ii) initiate activities for the GCRF MHM network.

The next step will be the wider, cluster-randomised trial involving 30 schools from Wakiso district. The principal aim of the trial would be to consider the effectiveness and cost-effectiveness of a comprehensive school-based MHM intervention. It would consider issues such as reducing school absenteeism during menstruation, improving school performance, improving menstruation knowledge, changes in attitudes and practices for MHM, psychosocial outcomes, health issues such as bacterial vaginosis in the schoolgirls, and the cleanliness and functionality of school WASH facilities.

There are clear challenges that will need to be overcome to scale up. There were challenges liaising with the schools in terms of timing of activities, which could mean that providing support for every school could well be too costly for an implementing partner. Obtaining and maintaining sufficient numbers of electronic tablets to enable self-completion of surveys by students is also an ongoing challenge even for two schools, so a procurement and maintenance solution for these tablets – the girls' preferred method of keeping their MHM and attendance diaries – will be essential.

On the positive side, once scaled up, there will be the opportunity for mass procurement of items such as WASH facility hardware and painkillers, which should enable savings, which could then be re-directed. In addition, training a larger number of teachers and prefects across the district may enable the development of a broad support network across schools, both for puberty education and for enabling 'training of trainers' for MHM.



STUDENTS FROM THE GOVERNMENT SCHOOL PARTICIPATING IN BASELINE SURVEY USING TABLETS

Recommendations for others hoping to learn from this effort

MENISCUS-1 and MENISCUS-2 have highlighted several practical steps needed to help ensure that school based MHM interventions run smoothly. The main recommendations would be:

- To allow adequate time to obtain the necessary ethical approvals prior to start of the project. In this intervention, additional information and time was needed attempting to gain approval for the menstrual cup.
- To identify committed school administrators and contact teachers, to keep the research team updated on school programme changes, and the coordination of student activities.
- To maintain strong and effective stakeholder management; keeping a strong focus on the coordination and involvement of parents, teachers, students and high-level stakeholders, which include NGOs, district leaders, school board members, the relevant ministries and community leaders.
- To use experienced field-based researchers, to predict work plan timelines and activity implementation, which can be challenging to fit into term time and other school activities.

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MALAWI

GIRLS' MHM KNOWLEDGE,
ATTITUDES AND PRACTICES,
INFLUENCING FACTORS,
AND THE ROLE OF BOYS

SWISS RED CROSS AND MALAWI RED CROSS SOCIETY

MHM in Ten priority 1: Build a strong cross-sectoral evidence base for MHM in schools for prioritization of policies, resource allocation and programming at scale.

Introduction

Menstruation still puts many girls in Sub-Saharan Africa in extremely challenging situations every month, which has potentially devastating ramifications for their health, wellbeing and empowerment. The development of adequate and evidence-based measures and programmes to address this requires in-depth understanding of all aspects of MHM. It also requires knowledge and appreciation of how MHM may be affected by different geographical and cultural contexts; something that is still lacking, particularly for the rural areas of Malawi.

Malawi is a landlocked country in South-East Africa, divided into three main regions and 28 districts, with a total land surface of 118,484 km² and a dense population of 18.06 million people. Ranked 170 out of 188 countries in the UNDP Human Development Index Report, around 50% of the former British colony's population lives below the poverty line. Such an economic and developmental situation contributes to the country having poor coverage of WASH services.

The Malawi Red Cross Society (MRCS), with funding from the Swiss Red Cross (SRC), is implementing a community-based health programme in Mzimba and Salima districts, with MHM promotion as one of the activities under the project. A study on knowledge, attitudes, practices and influencing factors regarding MHM was conducted between January 2018 and June 2018, with the aim of finding sustainable, accessible, affordable and culturally acceptable ways to improve MHM, and help empower girls and women to reach their full potential. The survey focussed on the 37 rural primary schools in Mzimba and Salima, with a total of around 24,000 pupils. Unlike previous research, this study also included boys.

Malawi has a '3-8-2-2' formal education structure: three years of pre-primary school, eight years of primary school, two years of lower secondary school and two years of upper secondary school. Primary school is free and compulsory. It has an official entry age of six and a duration of eight grades. At the end of primary school, students need to pass an exam in order to receive the 'Primary School Leaving Certificate'. Students who do not pass the exam repeat the school year, sometimes several times. Students aged between 12 and 20 were selected in Standard 8, to represent the spectrum of adolescence.

Objectives

The primary objective of the study was to investigate and document the current state of knowledge and attitudes towards menstruation, among adolescent boys and girls in rural primary schools in Malawi, as well as MHM practices among the girls – and to establish a better understanding of associated influencing factors and people.

Understanding local knowledge, attitudes and practice regarding MHM will enable the MRCS and SRC to design MHM project interventions at schools in Malawi that are regionally and culturally appropriate, as well as in similar contexts. The results of the study will serve as a baseline that will allow MRCS and SRC tracking of changes in MHM knowledge, attitudes and practices over time.

The study project was carried out as a collaboration between Malawi Red Cross Society and the district offices of Mzimba and Salima, financed by the Swiss Red Cross. The study was the final thesis project of Daniela Enzler, a Masters student who acted as the principle investigator. For data collection, a team comprised of three female and one male enumerators was engaged and trained in each district.

Ethical approval to conduct the study was obtained from the National Health Sciences Research Committee of Malawi. In addition, the study was approved by the district education managers, the district commissioners of Salima and Mzimba, as well as the targeted schools themselves.

All study participants were informed on the purpose, themes and procedures of the study during a first visit of selected schools. Written informed consent sheets were signed by the pupils and their caregivers to participate in the study. Teachers and head teachers contributed to the data collection process.



SCHOOL CLASS RECEIVING SOAPS, MZIMBA, MALAWI, 2018

Research methods



STUDENTS IN THE SCHOOLYARD, SALIMA, MALAWI, 2018

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A mixed-method design combined a cross-sectional survey, and qualitative data collection. The total study population included approximately 1200 standard 8 primary school pupils in Malawi Red Cross Society project areas in Mzimba (23 schools) and Salima (14 schools). Six hundred students, or 50% of the targeted population were invited to participate in the study. This included seven standard 8 classes (and one test class) in Salima, and ten standard 8 classes in Mzimba.

Quantitative data collection: 522 students who submitted informed consent were interviewed. A questionnaire on knowledge, attitudes, practices and influencing factors was developed based on existing literature, scales and measures. The software 'Kobo Toolbox' was used to digitalise the questionnaire into English, Tumbuka and Chichewa. Students were interviewed by an enumerator of the same sex, and in the students' own language, filling in the digital forms according to the pupils' answers to closed questions. Depending on sex, knowledge level, status of menstruation and chosen MHM materials, pupils were asked between 2 and 46 questions. Interviews with boys focused on knowledge and attitudes, while girls were also asked about sources of information, influencing factors, and their MHM practice if they had reached menarche.

Associations between exposures and knowledge, attitudes and practices were analysed using

specialist statistics software (STATA, using Pearson's r test). Factors that showed a significant correlation were selectively examined through multivariate regressions.

Qualitative data collection: Twenty-nine focus group discussions and 13 key informant interviews, involving a total of 120 girls, 42 boys, 7 mother groups, 14 teachers and 7 villagers were audio-recorded in local language (Tumbuka in Mzimba and Chichewa in Salima), transcribed, and translated to English. The content of qualitative interviews was categorised and analysed using 'NVIVO' software to triangulate quantitative outcomes, and to gain further insights.

School survey: The school environment was assessed through a school survey, which was based on a closed interview with an employee of each school, as well as a sanitary infrastructure inspectional walk.

Outcomes

The study findings enhanced understanding of knowledge, attitudes and practices regarding the MHM experience of girls in school environments in rural Malawi. The findings will enable MRCS and SRC to design interventions and will serve as a baseline to track of changes in MHM knowledge, attitudes and practices.

The findings show that the onset of menstruation, which was between 10 and 16 years (with a median of 13.77 years), represented a negative experience and a shock to most girls. During menses, girls were often seen as unclean, and were restricted from many activities, especially in housekeeping and in their interactions with boys. At school, MHM was addressed only marginally. Schools did not provide effective means for privacy or adequate MHM practice, with sanitary infrastructures that lacked doors, soap or functional water systems. In addition, schools generally lacked reliable and accessible sources of information for pupils and their influencers. Although mother groups were implemented in all schools, their capacities differed significantly.

Girls had significantly higher levels of MHM knowledge than boys, and for girls, increased knowledge was associated with better MHM practices and with reduced absenteeism. Girls with a sister or a mother group (e.g. a female parent committee) as their source of information knew significantly more. An extremely interesting finding was that boys' increased knowledge of MHM was associated with higher levels of teasing and school absenteeism during girls' menses. Feelings of pain and soiling were other key challenges that caused absenteeism. Positive associations were found, however, between the use of disposable sanitary pads and girls' school attendance during menses. Another observation was that the two districts differed significantly in terms of girls' knowledge, attitudes, sources of information and absenteeism.

Lessons learned and next steps

A major limitation of the knowledge, attitudes and practices study design lays in its reliance on self-perception. There is a compromise in validity because of inevitable different interpretations by interviewees, enumerators and study leaders, and, for MHM, taboos surrounding the subject will have prevented some interviewees from talking openly. Training and motivation of the enumerators were shown to be key to getting pupils to talk openly. The fact that the study was carried out in cooperation with the Malawi Red Cross Society, an organisation well known for its development projects in the area, might have increased the risk of desirability bias; very high return of informed consent sheets for example, indicated a sense of duty to contribute to interventions initiated through school or MRCS.

The study focused on in-school pupils only and did not capture any information of drop-out students. Their tracking was beyond the scope of this study due to missing registers and population census and remains an unexplored field for further investigation. Attendance registers could further

generate a more valid external means for investigating absenteeism. Study data showed a negative correlation between school attendance and MHM knowledge of boys, as well as when girls' mothers were confidants about MHM. These unexpected but potentially significant outcomes remained scientifically unexplained and open a field for further investigation.

Although higher levels of knowledge of MHM in both girls and boys should be seen as positive, the connection between girls' absenteeism and boys' MHM knowledge suggests that addressing the taboo of menstruation can put girls in challenging and uncomfortable situations – at least initially. Teachers should be aware of this, and should integrate the topic of MHM in learning and teaching in particularly sensitive ways.

The considerable differences found at district level underscore the need for an in-depth understanding of each local context, and for the development of appropriately tailored programmes.



Recommendations for others hoping to learn from this effort

Access to clean and comfortable MHM materials, adequate WASH as well as timely information, support and inclusive decision-making processes are key factors to improving MHM for girls in schools.

The use of appropriate MHM materials had a positive impact on girls' school attendance. They should be accessible; independent of a girls' economic status. However, as previous studies have shown, the distribution of sanitary pads alone is not sufficient; it should be combined with effective puberty education to reduce absenteeism.

The alignment of sanitary infrastructure with girls' MHM needs should be seen as a recognised element of improving sanitation facilities. Girls who preferred to use the latrine for absorbent change, as opposed to designated MHM rooms explained how they wanted to visit one place only to use the toilet and change their absorbent at the same time. It was easier to dispose of used MHM materials in the latrine.

Additionally, of course, using the usual latrine meant they avoided disclosure of their menstruation status. Based on these findings, girls' latrines should combine toilet and disposal, a water bucket or a tube, water drainage, space and a shelf to put soap, clothes or fresh absorbents during wash and change in just one room.

Bucket-based systems were often found to be unusable, and boreholes found to be far from sanitary infrastructure, and lacking privacy. Sustainable, functioning hand washing facilities with soap are critical for improved hygiene practices and should be available in a private area. Pulling a water pipe to the inside of the sanitary infrastructure is often the most suitable, sustainable option.

The disposal of non-biodegradable absorbents in the latrine does not affect menstrual health, but it must be considered planning latrines capacity and reprocessing, if no disposal system is in place.

Girls and their influencers should be included in the planning and design of structures and materials should be handed over with training and the responsibility for their maintenance.

Girls should know about menstruation before they reach menarche, to avoid a traumatising experience at the onset. The study showed that mother groups have a positive influence on girls' knowledge and school attendance. These existing entry points serve to reach pupils and their influencers. Training to teachers and mother groups, including interested villagers and traditional counsellors should be provided. In addition to content, trainings should include the subject of knowledge gathering and management, to build a sustainable information body.

Potential harms of interventions, like boys teasing girls, need to be considered and steps taken to avoid and negate them. Both female and male teachers should be sensitised on transferring information as a role model to build supportive environments. The relevant information materials on MHM should be accessible to teachers, influencers and pupils, to serve as a reliable and consistent source of information.

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EL SALVADOR & THE PHILIPPINES

MAKING THE CASE FOR **MHM** IN SCHOOLS: A BOTTOM-UP APPROACH TO MEASURING PROGRAMME SUCCESS

SAVE THE CHILDREN USA

MHM in Ten priorities:

Priority 1: Build a strong cross-sectoral evidence base for MHM in schools for prioritization of policies, resource allocation and programming at scale.

Priority 2: Develop and disseminate global guidelines for MHM in schools with minimum standards, indicators and illustrative strategies for adaptation, adoption and implementation at national and sub-national levels.

Introduction

The growing body of literature on menstrual hygiene continues to show that with the onset of menstruation, girls report physical, emotional and social challenges managing their menses in school. Girls report feeling shame and confusion around their periods, and often lack the knowledge, WASH infrastructure, menstrual supplies and social support to manage their periods in school. As a result, girls report feeling preoccupied in the classroom and at school, developing coping mechanisms to deal with their challenges, such as self-exclusion from social and classroom activities, as well as a propensity to miss full or partial days of school. Qualitative studies with these repeated findings from across the globe, have led researchers to ask whether we should focus on other outcomes more closely mirroring the actual experiences girls have while managing their periods in school⁸. In other words, a focus on the quality of the learning experience is needed rather than a singular focus on attendance tracking.

In 2015, Save the Children developed a different research question on MHM. Instead of asking: "Do our MHM programs reduce absenteeism among school girls?"; we asked: "Can an MHM intervention increase school participation, decrease psychosocial stress, and increase self-efficacy?" We understood that girls who have their periods in school cope by changing the way they interact with peers and in the classroom: by raising their hands less, sitting in the back of the classroom, perhaps even missing some classes so they can change their menstrual products in privacy. Girls repeatedly talk about fear, embarrassment and confusion associated with their periods – and we know that when children are stressed, they cannot learn as well. Lastly, we know that before someone can change behaviour they have to believe in their ability to do that. It follows that an MHM programme should be able to increase self-efficacy so that girls are able to manage their periods better. Without existing measures, and given these concepts likely cannot be measured with one question, Save the Children began to develop specific MHM-related measures⁹.

The intervention looking at these alternative MHM-related measures involved public schools in both El Salvador and the Philippines, which are part of Save the Children's 'Child Sponsorship' programme. Schools in El Salvador were rural and schools in the Philippines were urban.

⁸Phillips-Howard, P. A., Caruso, B., Torondel, B., Zulaika, G., Sahin, M., & Sommer, M. (2016b). 'Menstrual hygiene management among adolescent schoolgirls in low-and middle-income countries: research priorities.' In *Global health action*, 9(1), 33032.

⁹Haver, J., Long, J. L., Caruso, B. A., & Dreibelbis, R. (In press- 2018). 'New directions for assessing Menstrual Hygiene Management in schools: A bottom-up approach to measuring program success.' In *Studies in Social Justice*, 12(2), 10pp.).

Objectives

The short-term goals are to continue to refine the measurement tool and to pilot it across contexts in order to develop a tool that can help assess MHM interventions at the programme level. We aim to have a tool that can be open source, available both to MHM programmes within Save the Children as well as being externally available. The goal is to have the ability to gain new insights about the impacts of MHM programming and determine successful interventions and activities that can be prioritised and scaled.

MHM inTen Priority 1 focuses on building a strong cross-sectoral evidence base for MHM in schools. The tool development is helping us to contribute to this priority as it will help us to measure what is working within programmes. We view the tool as complementary to Save the Children's 'MHM Operational Guidelines', which provides an overview and instructions to practitioners to develop, implement and monitor programming. This is available to anyone, as the tool will be once completed; this is part of Save the Children's contribution to Priority 2, on developing standards and indicators.

Stakeholders include girls, boys, caregivers, teachers, community health workers, the Ministry of Education in El Salvador and the Department of Education in the Philippines.

Research methods

We started with qualitative research in El Salvador and in the Philippines to understand how girls experienced and described school participation, stress and self-efficacy in regard to menstruation. In both locations, between May and November of 2016, Save the Children staff and Columbia University Fellows used qualitative methods, including participatory learning activities, in-depth interviews, focus group discussions, and key informant interviews. Mothers, fathers, teachers, and girls and boys in school grades 5 to 7 were engaged in discussions regarding girls' typical worries managing their menses in school (stress), how their behaviour in class or with peers changed on those days (school participation), and the abilities girls believed they had to solve these challenges (self-efficacy). Qualitative tools were initially the same for each

country and were iteratively adapted in each location to consider each unique context. For example, formative research in the Philippines had previously reported that a major stressor for girls during menstruation was boys peeking into girls' bathrooms – so probing questions to capture this context specific information were used.

The qualitative data was transcribed verbatim and analysed using 'MAX QDA', a qualitative analysis software. The domains of interest were coded, and then each domain was analysed separately to understand the various facets that defined school participation, stress and self-efficacy for girls. We used the findings from each domain, including many direct quotes, to develop survey questions.

Eighty-six MR-SSS (menstrual-related – school participation, stress and self-efficacy) questions



GIRLS RECEIVING CORRECT INFORMATION ON MHM USING THE GROWING HEALTHY BOOKLET WITH SUPPORT FROM THE CHILD HEALTH PROMOTERS

were piloted in El Salvador in October 2016, among 200 menstruating girls in grades 6 to 8, from 13 rural schools. These questions were developed and piloted in Spanish and later translated to English.

Low interrater reliability measures, or the consistency of how the questions were asked by enumerators or understood by participants, suggested potential challenges with the administration of the tool and format of the questions. Results were used to refine the MR-SSS survey questions and format, as well as create an intensive enumerator training and survey protocol for subsequent surveys in the Philippines.

The revised MR-SSS tool included 13 school participation questions, 13 questions about stress and 21 self-efficacy questions. The tool was translated from English to Tagalog, the standard national language of the Philippines, and back-translated to English, and the training for enumerators was designed around the revised tool.

A sample of 645 girls in grades 5 and 6, across six schools in Metro Manila were selected, and of those, 266 girls had reached menarche and answered the full survey¹⁰.

Outcomes

The work to date has suggested that further exploration and use of the tool is warranted, both in terms of data collection and analytic approaches. Of the 13 school participation questions, 8 questions will be retained. Of the 13 stress questions tested, 10 questions will be retained in the survey. And 10 of the 21 self-efficacy questions were deemed to be workable in the field, and will be retained. The questions will continue to be refined and piloted with the aim of achieving a simple effective measurement tool for MHM.

The training for enumerators administering the tool has also been developed and refined. The training is context-adaptable, and includes an orientation to MHM, background information on MHM that is specific to the country context, research ethics and methods for interviewing, instructions for selecting participants, orientation to electronic data collection and time for practicing survey questions. As well as training materials, consent and assent documents and information for schools and teachers have been developed, for adaptation to the relevant country context.

The tool has been prepared to be piloted across other country contexts, and when preparing the tool for use in urban Mexico and rural Nepal, the majority of the questions were able to remain the same – meaning the survey questions seem to work well and are appropriate across varying cultures. This needs further validation through data collection and analysis; however, it is promising that the indications so far are that the tool can be used for looking at MHM programming across various contexts.

¹⁰Haver, J., Long, J. L., Caruso, B. A., & Dreibelbis, R. (In press- 2018). 'New directions for assessing Menstrual Hygiene Management in schools: A bottom-up approach to measuring program success.' In *Studies in Social Justice*, 12(2), 10pp.

Lessons learned and next steps

Those administering the tool in the field require a clear understanding of the questions and survey protocol, an introduction to field of MHM, and an understanding of the overall objective of the work. Adequate enumerator engagement and interaction with the tool during the training, as well as taking the time to pre-test and conduct cognitive interviews with participants made a positive difference in the quality of the data collected.

It was important to be able to tailor the survey to individuals, as appropriate and when necessary. Not all girls use the same words to describe menses or their menstrual materials, which may also vary between disposable and reusable products. Our team used 'Kobo' (electronic data collection tools) that could be customised based on the terminology used by each person. Early in the assessment girls were asked their preferred term for menstruation. The enumerators then were prompted to enter this term into the tool, and the assessment form was automatically updated to use each girl's preferred term throughout the survey. This not only made girls feel more comfortable and able to answer the survey questions, but it also eased the burden of the enumerator to remember their word of choice.

Next steps include using the tool in Indonesia, Nepal, and Mexico to further refine the tool and training protocols for use across contexts. Tool refinement and piloting will continue throughout 2019. We will also be adding in non-MHM related measures such as education outcomes, gender outcomes and general social support indices.

Recommendations for others hoping to learn from this effort

Academic partnership has been essential in developing the measurement tool. Save the Children has depended on guidance and analysis support from researchers at London School of Hygiene and Tropical Medicine and Emory University. We would strongly recommend that other NGOs trying to learn and develop MHM programmatic measures to work closely with academic partners.

Aside from developing measures for measuring MHM, we have also been working on more robust monitoring of programming activities for MHM. It is important to have a tool to measure potential impacts or outcomes of the programme, but it is also essential to monitor whether the programme is being implemented as planned, and if not, what adaptations have been necessary.



Further references

Sommer, M., Ackatia-Armah, N., Connolly, S., & Smiles, D. (2015). 'A comparison of the menstruation and education experiences of girls in Tanzania, Ghana, Cambodia and Ethiopia'. In *Compare: A Journal of Comparative and International Education*, 45(4), 589-609.

Sommer, M., Caruso, B. A., Sahin, M., Calderon, T., Cavill, S., Mahon, T., & Phillips-Howard, P. A. (2016). 'A time for global action: addressing girls' menstrual hygiene management needs in schools'. In *PLoS medicine*, 13(2), e1001962.

Haver, J., Caruso, B.A., Ellis, A., Sahin, M., Villasenor, J.M., Andes, K.L. and Freeman, M.C. (2013). *WASH in Schools Empowers Girls' Education in Masbate Province and Metro Manila, Philippines: An Assessment of Menstrual Hygiene Management in Schools*. New York: United Nations Children's Fund.

Long, J., Caruso, B.A., Lopez, D., Vancraeynes, K., Sahin, M., Andes, K.L. and Freeman, M.C. (2013) *WASH in Schools Empowers Girls' Education in Rural Cochabamba, Bolivia: An Assessment of Menstrual Hygiene Management in Schools*. New York: United Nations Children's Fund.

Caruso, B.A., Fehr, A., Inden, K., Sahin, M., Ellis, A., Andes, K.L. and Freeman, M.C. (2013). *WASH in Schools Empowers Girls' Education in Freetown, Sierra Leone: An Assessment of Menstrual-Hygiene Management in Schools*. New York: United Nations Children's Fund.

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GHANA

INITIAL RESULTS OF COMPREHENSIVE **MHM** PROGRAMME IN GHANA

UNICEF GHANA AND GHANA EDUCATION SERVICE

MHM in Ten priority 1: Build a strong cross-sectoral evidence base for MHM in schools for prioritization of policies, resource allocation and programming at scale.

Introduction

The WASH in schools for girls (WinS4Girls) project ran from November 2013 to October 2017 and sought to strengthen MHM in 127 schools through research, capacity building, and awareness-raising, ultimately to support advocacy for the incorporation of MHM into WinS programmes. The project had a strong focus on providing young girls and boys with information on menstruation and MHM. It was targeted towards building the confidence of Ghanaian girls to maintain safe and effective MHM practices and to remain engaged in school during their period.

The project was designed recognising that menstruation remains a taboo subject in many settings in Ghana, and that for girls at school it can be almost impossible to manage their menses as they have little – if any – access to appropriate private, hygienic and safe WASH spaces.

Ghana was one of 14 countries across the world implementing the WinS4Girls project. Ghana is classified as a lower middle-income country and has a population of 29.6 million¹¹. It is estimated that 50.9% live in rural areas, whilst 49.1% live in urban settings¹². The basic education system in Ghana runs from kindergarten to junior high school level, with pupils generally aged between 4 and 15 years. Some pupils can be aged up to 18, due to late entry or repeating years. There are approximately 40,000 such basic education schools in Ghana, serving 5.8 million pupils¹³. The WinS4Girls project in Ghana worked with 127 schools, covering the upper primary school and junior high school levels in five out of the ten regions of the country (Northern, Upper East, Upper West, Volta and Central Regions), in both rural and urban schools. The project worked with pupils mostly aged between 9 and 15 years old.

The project was implemented in three phases:

1. The formative research;
2. The development and roll out of the MHM package using recommendations from the research; and
3. The end of project assessment.

¹¹ World Bank (2018). Ghana Overview, Accra. Available online at <http://www.worldbank.org/en/country/ghana/overview>

¹² Ghana Statistical Service (2012). 2010 Population and Housing Census: Summary Report of Final Results, Accra.

¹³ Ghana Education Management Information System (EMIS) 2016/17

Objectives

The overall objective of the WinS4Girls project was to empower girls to safely manage their MHM in Ghana, therefore helping to reduce menstruation-related absenteeism for girls at school.

In the short term, the goal was to improve MHM knowledge of girls before menarche, strengthen available evidence on the benefits of improving MHM to support advocacy, develop behaviour change communication material for MHM, and to improve coordination of MHM programming across the country.

In the long term, objectives are that the research and roll out will: support the mainstreaming of MHM into basic education; challenge the myths and taboos surrounding menstruation through engaging traditional leaders, influencers and the media; and strengthen advocacy for government to support funding towards clean, improved WASH facilities to enable effective MHM.

The main government partner was the Ministry of Education, as well as various units of the Ghana education service (GES), including the 'School Health Education Programme', 'Girls Education', 'Guidance and Counselling' and the 'Curriculum Research and Development Division'. The University of Ghana (Institute of African Studies) conducted the formative research. Stratcomm Africa developed the MHM basic package, while Kantar Public undertook the end of project assessment.

An MHM technical working group was constituted made up of representatives from Ghana education service, NGOs, development partners and UNICEF. NGOs on the technical working group were the Forum for African Women Educationalists (FAWE) Ghana chapter,

Right-to-Play, WaterAid and Global Communities. Development partners and donors on the technical working group were the aid agencies of Canada, the Netherlands and Korea. The key role of the technical working group was to coordinate the implementation of MHM programming by all partners.

Key stakeholders for the research and programme implementation included the pupils (both girls and boys), teachers, parents and guardians, opinion leaders, religious leaders, officials and other representatives from the education sector, and the NGOs and civil society organisations implementing the MHM programming.

Implementing partners included WaterAid, World Vision, Global Communities, Right to Play and Curious Minds. Presently the Korea International Cooperation Agency (KOICA) is building on the outcome of the WinS4Girls programme, supporting the provision of changing rooms for girls and educating girls on MHM.



SCHOOLS GIRLS IN GHANA
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Description of intervention and study methods

Formative research: Two research studies were undertaken; the formative research and end of project assessment. The formative research was conducted in 12 schools, in two districts: North Dayi in Ghana's Northern region and Zabzugu in the Volta region in the south of the country. The two districts were chosen because they each represent a different ecological zone in Ghana, and have different cultural practices and religious backgrounds (Muslim and Christian respectively). Urban and rural schools were included in both districts. These two districts reflected many of the differences that exist across Ghana and were considered broadly representative of the country. The study adopted a purely qualitative approach, using focus group discussions, key informant interviews and in-depth interviews. In all there were 64 respondents, including 36 girls.

Key findings from the formative research indicated that menstrual taboos and restrictions are prevalent in both regions. For example, girls and women are not allowed to enter mosques and some churches during their period because they are considered unholy. The study found that girls' main source of information on menstruation is from peers and lessons in schools, but that information on MHM is often incomplete and incorrect. Many girls only learnt about menstruation after menarche. The research showed that girls tended to use reusable clean cloth and toilet tissue over disposable pads or other MHM materials, because of the high cost of MHM materials. Girls reported that the lack of functional WASH facilities in schools was a barrier to their attendance.

Developing and introducing the MHM package: Findings from the formative research informed the development of the MHM information campaign, which was launched on the international Menstrual Hygiene Day. The campaign was catch-phrased: 'Be Amazing! Period', and was an opportunity to showcase the MHM package to stakeholders. There was also the launch of the website (www.menstrualhygienegh.org) where the materials could be downloaded. The package also had information on MHM, reproductive health and nutrition. Topics covered included menstruation, the menstrual cycle, materials for menstruation, personal hygiene, safe disposal of used sanitary material, nutrition and pain management.

The package was formed of teaching manuals, flip charts, an educational booklet, calendar for period tracking, and posters. The package is an open resource – available online at www.menstrualhygienegh.org – for other implementing partners to use. Advocates and champions comprising popular personalities in both the media and art sectors were engaged to drive public debate and raise interest across a wide audience at the national level.

The rollout of the MHM information package reached 32,584 students (15,218 girls) in 127 schools. Capacity and knowledge of 582 teachers at the 127 schools was also increased through the project. The process of the formation of the MHM technical working group and the development of the MHM package has also helped to strengthen coordination on MHM programming and policy.



End of project assessment: An assessment of short-term impacts of the MHM package was undertaken in 16 schools covering five districts (North Dayi, Asikuma/Odoben/Brakwa, Kumbungu, Tolon and Zabzugu) in three regions (Volta, Central and Northern).

The end of project assessment adopted a mixed methodology using both quantitative and qualitative approaches. It was a comparative study with eight schools that had received the MHM information package, and eight control schools which had not. The selection criteria for the end of project assessment were schools that: i) were public schools with both the primary and junior high schools on the same compound; ii) had WASH facilities; iii) had good representation of girls; and iv) had no previous MHM programmes from other partners within the sector.

The qualitative data collection involved classroom lesson observations of MHM module delivery, focus groups with pupils, in-depth interviews at district and school levels with institutional stakeholders on knowledge, attitudes and practices. School facility inspections were conducted at the survey schools. In all, 401 pupils were selected from the MHM package schools and 406 from the control schools.

Outcomes

The end of programme assessment indicated that the programme had significantly increased positive attitudes and practices around menstruation. Pupils in intervention schools were more comfortable talking about menstruation (88% in the intervention schools compared to 79% in control). Boys in treatment schools teased girls less about menstruation (4% in intervention compared to 28% in control schools). It was also found that knowledge about MHM was higher in treatment schools (81% of correct answers on a short assessment compared to 68%).

A girl remarked when asked about the MHM package: *“With the materials shared with us, I learnt how to track my period. So when I come to school, I’m prepared, and I don’t need to go home.”*

A boy also shared the following thoughts: *“I think it’s important for boys to know about MHM because if a girl is menstruating and a boy doesn’t know, he can laugh at her; that’s why a boy should know. If a girl menstruates it is not a curse, so we shouldn’t laugh at them.”*

The MHM package was identified as a useful resource for education for girls, as supplementary teaching material, and for wider community education. The website has received over 50,000 hits since its creation in January 2017 to provide information on MHM, indicating a good level of dissemination through this online channel.

The end of programme assessment also suggested that MHM is becoming an increasing policy priority within Ghana’s Ministry of Education.

The end-line survey also showed that pupils in MHM intervention schools were more comfortable talking about menstruation (88% said they felt comfortable in the MHM intervention schools compared to 79% in the control schools).

Lessons learned and next steps or scale up

The WinS4Girls programme has required multi-sectoral collaboration in an emerging area, which has presented new challenges. The additional time needed for multiple engagements, advocacy and reviews has resulted in delays in the development of the MHM package. The extra time needed should not be underestimated and should be factored in to programme timelines and planning.

Existing government funding for WASH and MHM education essentially meant there were no current government programmes for the WinS4Girls to build upon. The WinS4Girls programme therefore had to rely entirely on donor funding. Until advocacy produces results in terms of an increased government policy focus and subsequent funding allocation, MHM programmes will continue to be donor driven. It is therefore even more crucial to foster collaboration, to avoid duplication and give the funding that does exist the best chance of supporting as many girls as possible.

The period of implementation and evaluation of the MHM package was not long enough to make definitive conclusions. A longer timescale would allow for better assessment of the medium- to long-term effects of the intervention.

The MHM information materials created under the programme are all available online, at www.menstrualhygienegh.org and www.wins4girls.org, making it easier for civil society organizations and corporate partners to include MHM in their future interventions and campaigns. UNICEF has already obtained funding from KOICA and will be using the MHM information package in 100 public schools across Ghana.

The WinS4Girls programme, and particularly the media and social media elements of it, as well as the engagement of MHM champions, has generated a national dialogue on the importance of MHM for the first time. This has generated a space for advocacy, which is being taken up by parts of the media.

Cross-sectoral government and partner collaboration, and the setting up of the national MHM technical working group has provided a useful platform for further collaboration, a space for policy discussion and the opportunity for a more consolidated approach for future investment in MHM. Similar working groups may have similar benefits for other projects.

The first step of scale-up is to integrate an MHM module into the current 'National Minimum Guidelines and Implementation' monitoring. This is being led by Ghana Education Service, with support from UNICEF. The MHM module/guideline is to be developed by the education service with technical support from UNICEF and funding by KOICA by the end of 2019. The MHM technical

working group will carry out advocacy and continue to offer technical assistance for the roll out of MHM programmes. In the long term, the aim is for MHM to be mainstreamed into curricula for teacher training colleges alongside general WASH education, so that all teachers will have the capacity to support, educate and empower girls in schools.

Organization and record keeping of project activity reports by key programme partners like the Ghana Education Service is an area for future work, which could help strengthen monitoring and evaluation activities.

Limited government funds (for capacity building, the physical printing of the MHM information package and subsequent monitoring) threaten the long-term sustainability of the programme outcomes. There is a need to look at how to reduce the costs of the MHM education materials, and to keep up advocacy for greater government investment in MHM educational programmes and girl-friendly infrastructure.

Recommendations for others hoping to learn from this effort

Findings from the research and implementation help contribute to achieving Priority 1 of MHM in Ten. Findings from the research suggest that there are constraints to funding that are hindering the potential for scaling up MHM education and increasing access to MHM friendly facilities. The evidence generated by the project has helped national advocacy efforts; however, to continue to support policy advocacy in Ghana, more work will be required to clarify the costs, capacity and guidance required to improve the wider enabling environment for MHM in schools.

Adequate performance monitoring of MHM interventions is extremely important, to help illustrate quickly the positive effects of programming. At the national level this may mean work and advocacy to analyse and refine monitoring and information systems – especially education monitoring systems.

Multi-stakeholder collaboration and government leadership are both essential and must be fostered from the start. They help to strengthen national capacity, policy ownership and awareness, as well as helping to avoid programme duplication, and create the potential for increased future funding.

The programme was focused on attitudes and perceptions at school level. Even though there have been observed benefits in terms of improved attitude of boys, when it comes to supporting girls during menstruation, anecdotal evidence and study findings suggest that negative social and/or cultural norms of exclusion are still prevalent in communities. It is likely that a targeted social norms campaign may be required to address these. Such a campaign might also reduce misunderstandings

by parents, including addressing myths, taboos and misconceptions such as MHM education causing or encouraging promiscuity.

Finally, there are many related and overlapping programmes that MHM programming could be integrated with successfully and effectively – programmes such as comprehensive sexual education, WASH, adolescent nutrition, iron and folic acid supplementation.

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SOUTH ASIA

A SITUATION ANALYSIS OF **MHM** IN SCHOOLS IN SOUTH ASIA

WATERAID AND UNICEF

MHM in Ten priority 1: Build a strong cross-sectoral evidence base for MHM in schools for prioritization of policies, resource allocation and programming at scale.

Introduction

Significant experience of developing effective WinS programmes has been amassed in recent years – and several countries in the South Asia region have undertaken related formative research to better understand current MHM practices and the barriers girls face in schools. The findings have shaped the inclusion of gender-sensitive MHM into existing national WinS programmes, as well as informing advocacy actions for increased national leadership by ministries of education on MHM, to ensure that MHM gets much-needed attention in planning, monitoring and evaluation of programmes. Mechanisms have also been tested to hold duty bearers accountable to provide MHM-friendly WASH services.

Despite this progress, critical gaps remain: ensuring more inclusive MHM programming that effectively targets hard-to-reach women and girls, for example those marginalised by geography, caste or ethnicity, disability, disasters and extreme poverty; developing better national monitoring of MHM services in schools; and more effective approaches for safe disposal of menstrual waste. Across South Asia, UNICEF, WaterAid and many others have been generating evidence on WinS programmes that address MHM. To drive change within programming, it is essential to review progress, identify successful approaches and innovations that can be scaled up, and to ensure that the voices of women and girls are heard, so that solutions effectively address their needs and promote their rights.

This review conducted a comparative analysis and synthesised country level experiences from Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka to assess the regional status of MHM in WinS, with the overall objective to identify progress, gaps and priorities, as well as to disseminate country-level information, lessons and good practices. The analysis mainly focused on understanding the MHM situation in government schools, but also refers and is applicable to private, residential or boarding schools, and religious schools including nunneries.

Objectives

In the longer term the research will be applied to identify and take actions for national and regional priorities for improving MHM in schools, to share good practice across countries for adaptation and replication. The key audience for the research is policy makers and programme implementers, including government stakeholders, donors and NGOs. The research was funded by UK Aid and UNICEF's Regional Office for South Asia (ROSA).

Research methods

The analytical framework for the analysis incorporated elements of the following: MHM inTen global priorities (each of the five priorities were coded and mapped in the analytical framework); UNICEF's WASH bottleneck analysis tool; and WaterAid's school WASH guidelines. The authors also reviewed other recent WinS and MHM research and analysis frameworks to assess latest thinking on how to improve programming and how to enhance advocacy and policy influencing on both topics. Qualitative methods were used, including a wide-ranging literature review and interviews with MHM practitioners and advocates in each country, and with those working at the regional or global level. Given UNICEF's and WaterAid's

lead on the analysis, initial interviews were conducted with each organisation's WinS and MHM staff members, who then identified other interviewees at national and regional levels, including government, national MHM working groups, INGOs and donor partners.

The analysis was conducted relatively quickly (over three months). The short time-frame meant it was not possible to conduct an exhaustive review of the context and situation in each country – rather, the aim has been to provide a brief overview of the status and journey of MHM in WinS in each, to contribute to national analyses and help the drive towards improved MHM in all schools.

Outcomes

The experience of WaterAid and UNICEF in South Asia has shown that strong leadership in establishing an enabling environment for MHM services in schools is essential, and underscores the importance of a coherent policy and institutional context for scaling up and sustaining outreach programmes. Considerable progress in the region has been made on promoting MHM-friendly WASH facilities, the key outcome for which has been separate toilets for girls and boys, which is now the norm in most countries in the region. Innovative training materials have helped build the capacity and knowledge of teachers to provide accurate and age-appropriate MHM information to girls in schools.

Programmes have also consciously focused on providing social support for MHM, by increasing awareness of the need to address the concerns of girls and female school staff for managing their menstruation among teachers, parents and other

school members. However, more work needs to be done on engaging leadership at the highest levels in government to champion the cause. Monitoring systems and multi-stakeholder platforms need to be aligned across the district, regional and national levels for comprehensive data sharing, in order to strengthen programmes to deliver effective infrastructure and services for MHM.

Several opportunities exist to strengthen MHM programmes, such as improving the quality of programme design and monitoring within each sector to establish more effective information and communication platforms. There are also opportunities to strengthen the supply chain for MHM materials, by involving the private sector to facilitate the availability and accessibility of low-cost MHM products that meet quality standards. Cross sectoral integration and coordination is essential to build national policy and programming convergence on the issue.



SCHOOLGIRLS IN BHUTAN

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There is a critical need, therefore, for collective advocacy; building a strong cross sectoral evidence base for programming at scale and sharing of best practices will encourage relevant stakeholders to make commitments and act towards improving MHM in the region.

The report was written by consultants Tracey Keatman and Sue Cavill, and a summary of reports is available at: <https://washmatters.wateraid.org/publications/menstrual-hygiene-management-in-schools-south-asia>

Lessons learned and next steps

The MHM in Ten priorities were useful for developing the analytical framework. Additionally, an emerging consensus around the key components for MHM in schools programmes helped to structure the report. The analysis was completed over a period of three months; with additional time and resources, further stakeholders could have contributed, particularly from government, and a more thorough validation process could have been undertaken.

The research is being used nationally and regionally to develop programme and advocacy strategies, take up the opportunities identified and further build collaboration at national and regional levels. The research has produced clear and concise snapshots for each country that can be replicated by other countries and regions.

Recommendations for others hoping to learn from this effort

The research was able to fulfil its objectives due to the experience and calibre of the leading consultants as well as the comprehensive support of WaterAid and UNICEF teams regionally and nationally, and the valuable inputs from other stakeholders. Ensuring that the research did not just focus on WaterAid and UNICEF's work on MHM in Schools, but also shone a spotlight on some of the key contributions of others in the region was also important in providing a well-balanced report.

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GLOBAL

AVAILABILITY OF **MHM** DATA FOR GLOBAL WASH IN SCHOOLS MONITORING

WHO/UNICEF JOINT MONITORING PROGRAMME

MHM in Ten priorities:

Priority 1: Build a strong cross-sectoral evidence base for MHM in schools for prioritization of policies, resource allocation and programming at scale.

Priority 2: Advance the MHM in schools movement through a comprehensive, evidence-based advocacy platform that generates policies, funding and action across sectors and at all levels of government.

Priority 3: Allocate responsibility to designated governments for the provision of MHM in schools (including adequate budget and M&E) and reporting to global channels and constituents.

Introduction

The SDGs call for equitable sanitation and hygiene for all, paying attention to the specific needs of girls (target 6.2), and WASH services in schools that are gender sensitive (target 4.a). This clearly highlights the importance of MHM services for girls, including while at school.

The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) published national, regional and global estimates for WASH in schools in a 2018 global baseline report¹⁴. The report focuses on monitoring basic services, including drinking water availability, usable single-sex sanitation, and water and soap for handwashing. The JMP estimates that, in 2016, 69%, 66% and 53% of schools worldwide had basic drinking water, sanitation and hygiene services respectively, and that an estimated 335 million girls went to school without water and soap available for washing their hands when changing their MHM materials.

While these basic services are an essential foundation for MHM, it is recognised that this basic minimum level of service is not sufficient for full realisation of the human rights to education, safe water and sanitation, and that monitoring of more advanced levels of service may be needed, including additional criteria specific to MHM. The JMP 2018 global baseline report on WASH in schools therefore reviews emerging data for enhanced monitoring of MHM services at schools. The data available for global monitoring of MHM, including gaps in monitoring and coverage are considered below.

¹⁴ World Health Organization and the United Nations Children's Fund Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, Drinking water, sanitation and hygiene in schools [WHO/UNICEF JMP]. (2018). Global baseline report. WHO/UNICEF, 2018. Available at: <https://washdata.org/report/jmp-2018-wash-in-schools-final>.

Objectives

The JMP would like to include MHM-specific indicators in global monitoring of WASH in schools. This aim requires that sufficient national data on MHM are available (at least 30% coverage of the global school-age population), and that MHM indicators become standardised, to enable benchmarking and comparison of progress across countries.

Progress toward the MHM in Ten priority 4¹⁵, including reporting coverage of MHM provision through global channels, will support this objective. Data on global progress toward providing MHM services in all schools would support MHM in Ten priority 1 on building a cross sectoral evidence base, and priority 3 on working towards a global advocacy platform.

Data for JMP global monitoring of WASH in schools include inputs from a range of stakeholders, including national statistical offices, ministries of education, ministries of health, regional and district level education authorities, local and international non-profit organisations, school head masters, teachers, parents and students.

Research methods

The JMP estimates on WASH in schools are calculated from national data sources. These may include Education Management Information Systems (EMIS), periodic (non-EMIS) censuses, and other school facility surveys. In 2018, the JMP global database for WASH in schools contained 616 national datasets, which were used to generate national estimates for WASH. Regional and global estimates are only calculated if data are available for at least 30% of the school-age population for each indicator.

National data on WASH in schools were compiled through online searches of national authority websites and a global 'data drive' where UNICEF and WHO regional and country offices were asked to work with national authorities to identify relevant national data on WASH in schools. The data drive, and subsequent country consultation process to validate the use of identified data, focused primarily on the official SDG indicators for basic WASH in schools services and did not systematically address 'advanced' services, including MHM-specific indicators.

However, the JMP team identified 11 datasets with specific MHM indicators beyond the foundational basic WASH services – 10 of which were nationally representative. These data were analysed and initial findings were highlighted in the 2018 global baseline report. Additional countries may have national data on MHM specific indicators that could potentially be added to the JMP global database and analysed in future JMP global reports on WASH in schools.

¹⁵ The MHM in Ten priority actions can be read in more detail at: <https://www.mhmvirtualconference.com/mhm-in-ten/>

Outcomes

Global estimates have been established for basic WASH in schools, which provide a baseline for monitoring progress towards the 2030 SDG targets (Figure 1). Additional data on 'advanced' services specific to MHM in schools have been analysed for 11 countries, including a review of the comparability of questions and indicators used and the remaining data gaps (Figure 2). Of the 11 countries, data are nationally representative for 10, and indicators monitored vary widely between countries, with most (eight) tracking if there are bins with a lid available in the toilet and two tracking if there are disposal or incineration facilities for managing the waste collected in those bins.

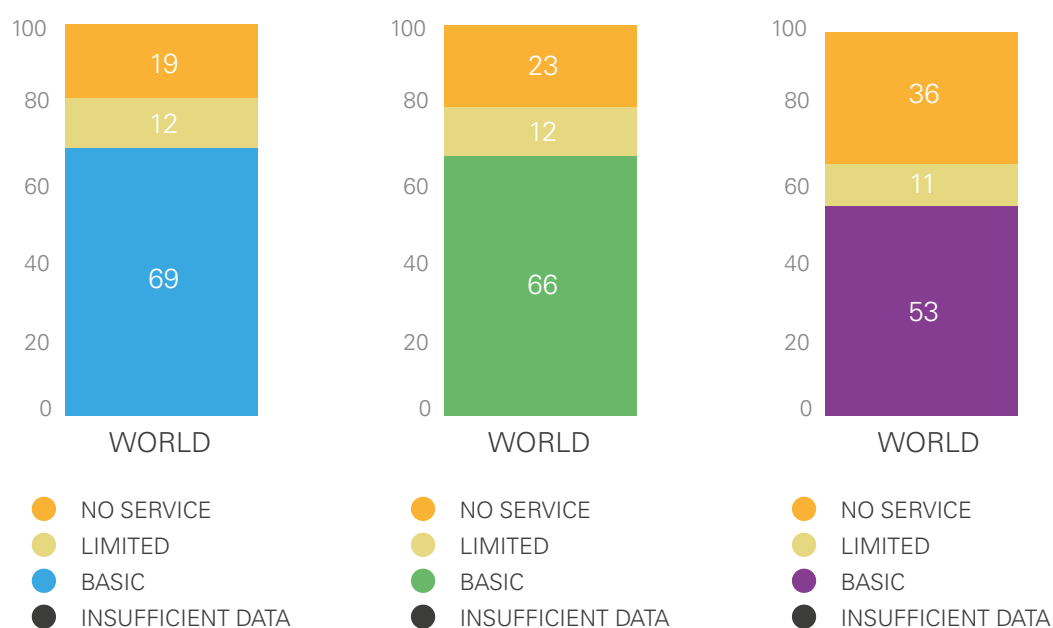


Figure 1. Global coverage of basic drinking water, sanitation and hygiene services in schools.
Source: **WHO/UNICEF JMP 2018.**

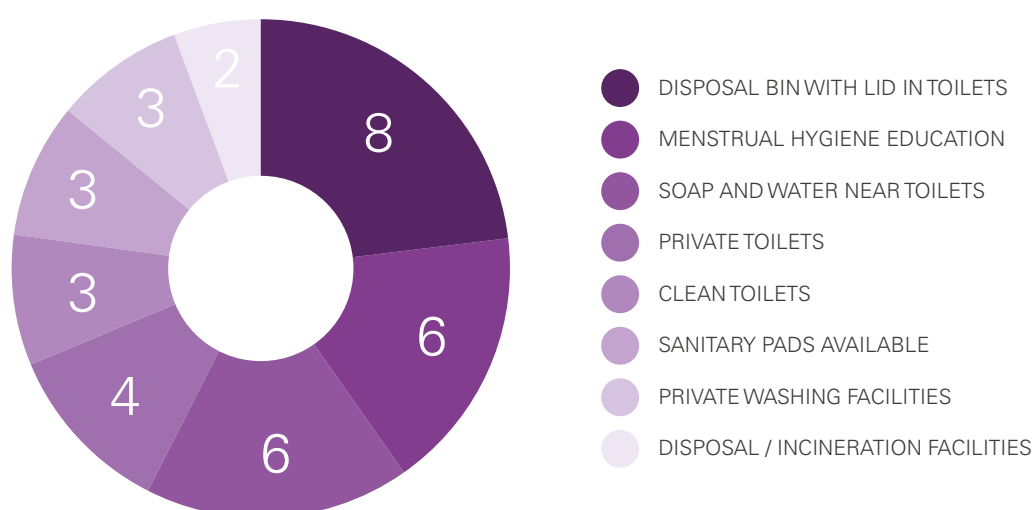


Figure 2. Monitoring indicators used for tracking MHM in schools based on data from 11 countries.
Source: **WHO/UNICEF JMP 2018.**

— Lessons learned and next steps

Global monitoring of WASH in schools currently includes basic services that are foundational to MHM. In order to track progress toward universal provision of advanced MHM-specific services in schools, harmonized nationally representative data are needed for at least 30% of the global school-age population. Addressing the following three challenges would support global monitoring of MHM in schools:

1. Very few countries have national data on WASH in schools. National data need to be collected to establish national baselines. MHM in schools should be monitored through existing national systems (e.g. EMIS and school surveys) where possible (supporting MHM in Ten priority 4, on allocating responsibility to designated governments on MHM).
2. Where data are available, indicators on MHM in schools vary widely between and within countries. Clear indicators and methodologies for collecting data on different aspects of MHM in schools should be established. National monitoring can be harmonized with the global expanded questions where appropriate. Learning from female students can help to establish context-specific priority indicators for sub-national programmes (supporting MHM in Ten priority 2, on developing MHM guidelines).
3. There are insufficient national data available to produce global estimates for MHM in schools. Data on MHM should be routinely collected and reported at national and sub-national levels in order to better inform policy, resource allocation and programming (supporting MHM in Ten priorities 1 on building the evidence base, and priority 3 on building a global advocacy platform).

— Recommendations for others hoping to learn from this effort

The WHO/UNICEF JMP has developed a set of recommended questions and indicators for monitoring WASH in schools¹⁶. These include core questions relating to basic drinking water, sanitation and hygiene and expanded questions relating to advanced service levels including MHM. These questions are available in English, French, Spanish, Arabic and Russian.

¹⁶ WHO/UNICEF JMP. *Core questions and indicators for monitoring WASH in schools in the Sustainable Development Goals*. WHO/UNICEF, New York, 2018. <https://washdata.org/report/jmp-2018-core-questions-and-indicators-monitoring-wins>

Inclusion of these WASH and MHM specific questions in existing national monitoring systems would support progress tracking and institutionalisation of MHM services in schools, in addition to global monitoring of MHM. The JMP can provide technical support to partners working on piloting questions and indicators on MHM in schools in their own programmes and integrating them within national monitoring systems. The JMP would also welcome feedback on how these questions perform in different contexts, as well as suggested improvements or additions.

For more information please visit the **JMP website** or contact **info@washdata.org**

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POSTER SESSION

The conference included a virtual poster session, where participants could view and leave comments for the authors through the online platform. The posters showcased recent research and implementations on MHM across the world.

All posters can be viewed at www.mhmvirtualconference.com

Poster Title	Organization (s)	Country of focus	Contact
Evidence informed programming and RCT on menstrual health	DORP and Simavi	BANGLADESH	Hilda Alberda (Simavi) hilda.alberda@simavi.nl
A rite of passage: knowledge, perceptions and practices of menstrual hygiene management in rural Gambia. A mixed methodology study	London School of Hygiene and Tropical Medicine (LSHTM) and Medical Research Council The Gambia (MRCG)	THE GAMBIA	Vishna Shah (LSHTM) Vishna.Shah@lshtm.ac.uk
Disabling menstrual barriers – investigating the barriers to MHM that adolescents and young people with a disability face in Nepal	WaterAid	NEPAL	Jane Wilbur (WaterAid) JaneWilbur@wateraid.org
Factors supporting menstrual confidence at home and at school: findings from a cross-sectional survey of schoolgirls in rural Bangladesh	Johns Hopkins Bloomberg School of Public Health and Maastricht University	BANGLADESH	Lidwien Sol (Maastricht University) l.sol@maastrichtuniversity.nl Julie Hennegan (Johns Hopkins University) jhenneg1@jhu.edu
Study on MHM in two intervention zones of the healthy school and village national programme and in one emergency zone in the Democratic Republic of the Congo	UNICEF and Catholic Relief Services	DEMOCRATIC REPUBLIC OF THE CONGO	Mukuna Ghislain (CRS) ghislain.mukuna@crs.org
MHM clubs for promoting MHM at school	WaterAid and UNICEF	BURKINA FASO	Madeleine Diessongo Zabre (UNICEF) mdiessongozabre@unicef.org
Understanding MHM barriers to improving girls' attendance at schools in northern Ghana	Catholic Relief Services	GHANA	Darko, Philip Kwaku (CRS) philipkwaku.darko@crs.org
App design for girls, by girls, Period!	UNICEF	INDONESIA & MONGOLIA	Gerda Binder (UNICEF) gbinder@unicef.org
Gamifying menstrual health and hygiene for girls' in schools	UNICEF	STATE OF PALESTINE	Carol Awad (UNICEF) cawad@unicef.org
How do Cambodian schoolgirls manage their menstruation in schools? Gaps and solution.	UNICEF	CAMBODIA	Chanthea Chaing (UNICEF) cchaing@unicef.org



Conclusion

This year – 2018 – the MHM inTen Agenda is five years into its ten-year timeline. In the concluding remarks of the conference, the speakers drew lessons learned and next steps from the presentations for advancing the agenda towards 2024.

Taken together, the virtual conferences over the past seven years are a small reflection of the enormous progress in building the evidence base on MHM in schools. Starting from formative research and maturing to randomized controlled trials and process evaluations, we increasingly see that national and global actors are teaming up not only to continue generating evidence, but also to do this in a more rigorous way. Multiple presentations and posters shared research findings, such as those from Malawi, DRC, Cambodia, Bangladesh, and Uganda. Evidence generation will remain a strong priority as the field matures; this year's conference shared new tools and approaches to measure the impact of increasingly complex, multi-component and multi-sector MHM interventions on a range of areas that impact girls' experiences and life chances – for example education, health, well-being, and participation.

Since the launch of the MHM inTen Agenda, MHM has been integrated into some global guidelines and minimum standards, but there is much more work that needs to be done in this area. This year, the WHO/UNICEF Joint Monitoring Programme for Drinking Water, Sanitation, and Hygiene presented on MHM data collected through their first global baseline report on WASH in schools. The 2018 JMP report on WASH in schools paints a stark picture, suggesting that, in 2016, around 335 million girls went to primary and secondary schools without water and soap available for

washing their hands, bodies, or clothes when changing sanitary pads. The JMP's analysis also showed that only 11 governments collect information related to MHM in schools through their national education monitoring systems, and that there is great variation in the indicators and questions used. Clearly, despite the progress made putting MHM on the global agenda, there is a long road ahead if we are to improve the quality and comparability of data – and therefore monitor the quality of services that girls are receiving.

Some of the global and national advocacy around MHM have seen clear successes since the launch of the MHM in Ten agenda. Successful campaigns focused on human rights have resulted in taxes being removed from sanitary products in India, Kenya, Australia, and other countries, as well as free sanitary products being provided for homeless women and girls in major American cities. Yet there remains a need for more and better evidence-based advocacy – convincing governments to consider MHM as part of their policy considerations for the education sector, allocate funding to MHM programmes and include MHM as a part of curricula. Moving forward, advocacy work will continue to benefit from a stronger evidence base, and mean that incisive and powerful facts and figures on MHM reach a wider audience.

The inclusion of MHM education within national education systems is increasing – clearly illustrated at the conference through a regional review of MHM in schools in South Asia, but where a significant variation in the uptake of MHM was also made clear. Around the world, governments face competing priorities for scarce resources, and building the investment case for



GIRLS KEEN TO KNOW ABOUT PUBERTY

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MHM in schools will depend on strong evidence linking these investments to improvements in girls' lives. This will mean developing not just stronger programmes, but stronger monitoring tools that measure girls' broader wellbeing such as their confidence and self-efficacy – helping us gain a better understanding of the effectiveness and costs of multicomponent interventions needed to support MHM.

The conference ended with a call to leave no one behind. We must redouble our efforts to fulfil the rights of every girl, no matter her circumstances, both through inclusive programming and by a determined, holistic focus on improving the national education and health systems. This is no small task. Scaling up must not be done at the expense of inclusion, or displaced girls, girls out of school, girls with disabilities and other potentially excluded groups will be left even further behind, as the rest of the world makes valuable progress.

Using the virtual conferences as a proxy for action on MHM in Ten priorities, it becomes clear that there remains a strong need for the

community of MHM actors to strongly support national government planning, budgeting and capacity for MHM in schools. Doing so will require continued and even better coordination and stronger commitment from funding partners. Future meetings of MHM in Ten, along with new initiatives such as the Africa Coalition for Menstrual Health, are venues for larger partners to take up this call and intensify their partnerships with governments, civil society, universities and other actors on MHM in priority low- and middle-income countries.

We are mid-way on the MHM in ten agenda and the 2018 virtual conference has showcased progress to celebrate – clear examples of programming and research changing girls' lives for the better. Yet, we must not lose sight of the scale of the challenge if we are to meet the aims of the agenda. To capitalise on the progress of the last five years and build on the growing knowledge that menstruation is normal and a sign of good health, we must continue to unblock our shared challenges through strong advocacy efforts, education plans, robust monitoring systems and collective actions.



2018

MENSTRUAL HYGIENE MANAGEMENT IN SCHOOLS CASE STUDIES

Bangladesh	Pilot-test of a package of MHM interventions in urban and rural schools
Nepal & Pakistan	Ensuring girls' rights through improved MHM in Nepal and Pakistan
Uganda	Menstrual health interventions and school attendance among Ugandans (MENISCUS-2)
Malawi	Girls' MHM knowledge, attitudes and practices, influencing factors, and the role of boys
El Salvador & The Philippines	Making the case for MHM in schools: a bottom-up approach to measuring programme success
Ghana	Initial results of comprehensive MHM programme in Ghana
South Asia	A situation analysis of MHM in schools in South Asia
Global	Availability of MHM data for global WASH in schools monitoring

For more information on this publication and menstrual hygiene management as part of WASH in schools programmes, contact **Brooke Yamakoshi** at UNICEF, byamakoshi@unicef.org