

WASH in Schools Empowers Girls' Education

Proceedings of the 6th Annual Virtual Conference
on Menstrual Hygiene Management in Schools

17 October 2017



December 2017



for every child

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Contents

Acknowledgments	4
Contents	5
Conference overview	6
Conference participation	7
Digital engagement	9
Conference presentations	13
Philippines: Mainstreaming MHM in public basic education in the Philippines	14
Bangladesh: Bangladeshi schoolgirls' self-efficacy in managing menstrual hygiene: Conceptualization and development of a novel measurement too	15
Kenya: Strategies for inclusive MHM for girls with disabilities	19
Lao PDR: Engaging Laotian teachers in MHM	25
Uganda: Menstrual Health Interventions and School Attendance among Ugandans (MENISCUS-2)	33
Global: Integrating MHM into an Education in Emergencies response: Learning from the development of a cross-sectoral toolkit	38
Eritrea: "Breaking the Taboo": male perceptions of menstruation in Eritrea	44
Kenya: Improving MHM in Schools to enhance learning for adolescent girls in Kenya ...	45
Zambia: Rolling out the MHM programme through the Zambian Ministry of General Education	52
Poster session	56
Conclusions	59

Overview

The Menstrual Hygiene Management (MHM) in Schools agenda continues to gather momentum as evidence for effective action builds, and increasing resources are committed to transforming menstruating girls' experiences in school. This year's virtual conference showcased the important progress that has been made so far across the five priorities of the 'MHM in Ten' agenda, covering 2014 to 2024 (see page 7). However, it is clear that much remains to be done if the scaled and integrated national policies and programmes that we know will improve girls' lives around the world are to be widely realised.

Conference theme: MHM and WASH: Supporting a gender-responsive learning environment

The 6th Annual Virtual Conference on Menstrual Hygiene Management in Schools was co-hosted by Columbia University's Mailman School of Public Health and UNICEF on 17 October 2017.

The conference enables the global sharing of new ideas and 'lessons learned', and connects people online who are working on MHM in Schools in a wide range of countries. Participants from around the world come together for a day to network, share their work on advancing the agenda of MHM in schools, and to identify potential future collaborations beyond their usual organisational or geographical boundaries.

In 2017, the conference brought together an estimated 1000 participants from over 60 countries around the world. For the first time ever, the MHM virtual conference was also streamed live as part of the 'WASH and Gender' track of the University of North Carolina's annual Water & Health Conference.

This year's virtual conference theme, MHM and WASH: Supporting a gender-responsive learning environment, sought to highlight national examples of supportive WASH in Schools programmes that create and nurture enabling environments in schools, helping ensure that MHM is considered as part of creating more comfortable places for girls to learn in.

The conference focused on the five priorities of the MHM in Ten agenda, which were identified in 2014 with the aim of transforming MHM in Schools by 2024. The number of high quality case studies yet again increased, with strong submissions from a range of countries and regions.

Why is menstrual hygiene management important?

There are over 600 million adolescent girls living around the world. Many of them face barriers to accessing education¹ – and often this includes barriers related to menstruation. Adolescence itself is a challenging time, accompanied by a range of physical, emotional and societal changes for both girls and boys. MHM is important because without it, girls already struggling to access education are faced with an additional burden simply because of a natural part of growing up – an extra barrier to their education and to achieving their potential.

Social pressures and biological needs may prevent girls from participating actively in school or engaging with clubs, sports, or religious life. There may exist physical barriers such as inadequate sanitation facilities, or emotional barriers such as embarrassment

¹ The power of 1.8 billion: adolescents, youth and the transformation of the future. New York: UNFPA; 2014. Retrieved from https://www.unfpa.org/sites/default/files/pub-pdf/EN-SWOP14-Report_FINAL-web.pdf

or fear related to managing menstruation in schools, resource barriers such as a lack of menstrual materials, and social barriers such as potentially harmful cultural beliefs or stigma. There are many negative social and cultural perceptions around menstruation globally that can impact a girl's confidence, and her social engagement and mobility. Many girls in low- and middle-income countries are not adequately prepared for the onset of menstruation, facing a lack of adequate information on the biological processes happening in their bodies, and of practical guidance on managing menstruation with confidence and dignity.

These challenges can have a far-reaching impact on a girl's ability to succeed in and out of school, and to thrive into adulthood. This is especially the case for girls who are uniquely vulnerable, such as those experiencing poverty, gender restrictions, living in conflict settings or with unique physical or mental needs or disabilities. Supporting adolescent girls during menstruation is one step towards building their confidence in themselves and their bodies, and can enhance their ability to engage in their schools and their wider communities. Increasing and improving such engagement can improve their future economic

and social empowerment, contributing towards achieving several of the Sustainable Development Goals (SDGs) – including those focused on quality education (SDG 4), on gender equality (SDG 5), and on clean water and sanitation (SDG 6).

Since 2012, the year of the inaugural virtual MHM conference, there has been increasing global attention and momentum around reducing the MHM barriers for girls and female teachers in schools. This includes efforts to build the evidence on effective approaches for addressing MHM, and introducing new policy and programming initiatives. This progress should be celebrated, nurtured as it has been through effective partnerships between national governments, academics, non-governmental organizations, international agencies, and the private sector.

Researchers and practitioners continue to generate important learning on the barriers and experiences of menstruation for girls in schools in a range of global contexts. This includes challenges directly related to inadequate toilet and water facilities for managing menstruation in schools, lack of supportive menstrual materials and supplies, and insufficient practical

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, and 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.

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.

and informative education on MHM. Learning is now expanding beyond formative research to focus on the implementation of new MHM initiatives, approaches and programmes, and the development and testing of MHM-related indicators. The 6th Virtual Conference showed that a few pioneering country governments are actively translating this learning directly into specific policy initiatives for programming at national scale.

Conference summary

Over 1000 participants from 60 countries came together to participate online and in-person for the annual MHM conference, demonstrating wide interest and engagement from around the world. The conference included nine verbal presentations and 18 MHM posters², all streamed online. A select number of posters were printed and displayed as part of the UNC Water & Health Conference's general poster session, where practitioners and researchers presented

² All of the nine presentations and 18 posters are available at <https://www.mhmvirtualconference.com/>

their achievements. The presentations and posters displayed a range of strategies, learning and progress for integrating and scaling up MHM in Schools.

The conference included exciting national policy presentations by government representatives from Zambia, the Philippines and Kenya, who spoke about their respective countries efforts to scale up MHM. The presentations demonstrated the process and roles of different actors in finding a pathway to scale, starting with evidence generation and small-scale pilot studies conducted by multiple partners to demonstrate effective approaches, before being integrated into national programmes and systems.

A presentation from Lao PDR focused on the importance of enhancing the capacity of female teachers on teaching about menstruation, while another presentation from Kenya showcased efforts focused on inclusive MHM programming specifically to support girls with disabilities.



Access to water in toilets is a key challenge to MHM in schools in the Philippines, as half of elementary schools have no piped-in water supply. © Erwin Lim / Philippines.

Presentations also illustrated new research underway, recent research findings and tools for the MHM community to consider and use. A new randomised control trial is underway in Uganda that includes the testing of a package of MHM interventions on girls' experiences in school, and the Government of Eritrea presented on the critical learning that emerged from a formative study exploring the attitudes of boys and men towards menstruation, with the findings on the negative attitudes towards menstruation shared at the national level, providing strong impetus for national action.

Another presentation focused on the MHM challenges for schoolgirls living in three diverse emergency contexts (Myanmar, Lebanon, and Tanzania), emphasising the unique MHM needs of displaced girls, including poor access to materials and supplies, difficulties washing, drying and storing reusable materials discreetly, and an overall lack of access to basic menstrual health education. A new assessment method was also shared through a presentation focused on efforts to develop a system for measuring self-efficacy on MHM with schoolgirls in Bangladesh.

The conference also saw two short films, bringing girls' voices powerfully and directly to the conference audience. The first, developed in partnership with the Government of Indonesia, shared young people's understandings about menstruation, and the second showcased a participatory film making effort with Nepali girls.

The virtual conference provides an exciting and interactive forum for sharing new learning and ideas on MHM in Schools. For example, the online chat box platform enabled vibrant discussions between global conference participants, in addition to the sharing of practical learning and examples from listeners around the world. Conference viewers are able to share specific questions directly to the presenters through the chat box platform, giving the conference a strong interactive and responsive feel.

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 brought over 1,000 participants from 69 countries

1,000³
**Estimated online
Participants in the
Virtual Conference**

79%
**First-time virtual
conference attendees**

69
**Countries
Represented**

60
**In-Person
Participants**

around the world together online, with the majority of participants joining for the first time. In some cases, organizations hosted group viewing sessions, such as in the Philippines, Kenya and Rwanda.

This year's conference was streamed live from the Water Institute at the University of North Carolina's annual Water & Health Conference, reflecting how mainstreamed MHM has become in the WASH sector. In North Carolina, over 60 people from WASH-focused organizations joined the virtual conference in person and used the opportunity to meet and connect with others working on MHM throughout the week.

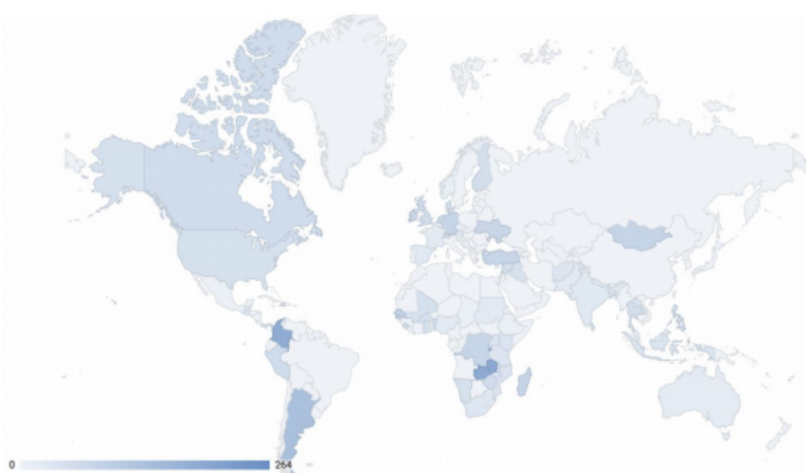
The various time zones of presenters and participants remains a challenge and efforts will continue in future years to accommodate participants across the globe. As a first step, the conference was recorded and will be available online at <https://www.mhmvirtualconference.com/> to watch.

³ Based 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 organisations and expertise than these estimates reflect.

Digital Engagement

Participants around the world used social media (#MHMConf) and the real-time conference chat box to share, discuss and ask questions. A benefit of the online platform is the real-time chat box for those logged on to the platform to discuss the presentations and ask questions to the presenters and moderators. This enables participants to connect immediately to share relevant resources through the chat box on the virtual platform, instead of waiting to return to their computers or offices, as in a typical conference. The chat box was most active around programmes to engage boys and fathers, reaching girls with disabilities, stand-alone MHM policies and integrating MHM into humanitarian response in schools.

Conference Participants



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

1,395*

Estimated Tweets

*299 tweets and 1,096 retweets

736

Contributors

7.4M

Potential Reach

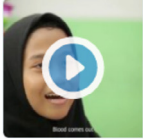
The conference organizers asked those tuning in around the world to share an empowering message to girls about their periods on Twitter. The most liked tweet was highlighted on UNICEF's global social media channel:

“When you break the stigma, shame and silence, you liberate girls from illiteracy, child marriage, and inequality.”

- Niharika Singh (@niharika_nsp)



MenstrualHygieneDay @MHD28May · Oct 17
 Another lovely video at #mhmconf by @UNICEFindonesia on what boys and girls think abt #menstruation



Menstruasi bukan hal tabu, namun hal yang perlu d...
 Manajemen Kebersihan Menstruasi sangat penting untuk remaja putri. Tapi jangan salah, remaja putra juga perlu memahaminya. Menstrual Hygiene Management is ve...
 youtube.com

6 2



Voices of Youth @voicesofyouth · Oct 18
 Amazing to see the support for menstrual health in schools as part of #MHMConf yesterday! #MenstruationMatters uni.cf/2xJ3gsf



UNGEI @UNGEI · Oct 17
 What you need to know about #MHM 4 Fast Facts about Menstruation & Girls' Education bit.ly/2fj8lmJ #MHMConf #MenstruationMatters



Huru International @HuruKits · Oct 17
 #Girls are strong. Girls are smart. Girls have endless potential. Period. #ThisAbility #MenstruationMatters #PeriodPride #MHMConf



Just a Drop @Just_a_Drop · Oct 17
 Menstrual health & hygiene education raises awareness & breaks down taboos. Girls spend more time in school & have brighter futures #MHMConf



WoMena @WoMena_Official · Oct 17
 Inspiring presentations at the #MHMConf. Having your period should not prevent girls from going to school and reaching their full potential!



WaterEmpowerment @h20empowerment · Oct 17
 Teaching women/girls to manage their own menstrual hygiene is empowering & positively impacts communities #MHMConf #mhm



Peace Corps @PeaceCorps · Oct 17
 Reusable menstrual pads are one way Volunteers support keeping girls in school. peacecorps.gov/stories/video-... #MHMConf #MenstruationMatters

Conference presentations

The 2017 virtual conference included nine verbal presentations, showing policy, practice, and research from around the world. The accompanying reports are presented in this section.

Presentation Title	Country	Organizations
Mainstreaming MHM in public basic education in the Philippines	Philippines	Philippines Department of Education, Save the Children, and UNICEF Philippines
Bangladeshi schoolgirls' self-efficacy in managing menstrual hygiene: Conceptualization and development of a novel measurement tool	Bangladesh	Johns Hopkins Bloomberg School of Public Health
Strategies for inclusive MHM for girls with disabilities	Kenya	HURU International
Engaging Laotian teachers in MHM	Lao PDR	Eau Laos Solidarité
Menstrual Health Interventions and School Attendance among Ugandans (MENISCUS-2)	Uganda	London School of Hygiene and Tropical Medicine, Women Uganda, and MRC/UVRI Uganda
Integrating MHM into an Education in Emergencies response: Learning from the development of a cross sectoral toolkit	Global	Columbia University Mailman School of Public Health and the International Rescue Committee
"Breaking the Taboo": male perceptions of menstruation in Eritrea	Eritrea	Eritrean Ministry of Education and UNICEF Eritrea
Improving MHM in schools to enhance learning for adolescent girls in Kenya	Kenya	Kenyan Ministry of Health and UNICEF Kenya
Rolling out the MHM programme through the Zambian Ministry of General Education	Zambia	Zambian Ministry of Education and UNICEF Zambia

Philippines

Mainstreaming MHM in public basic education in the Philippines

Philippines Department of Education, Save the Children, and UNICEF Philippines

MHM in Ten

Priority 5:

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

Introduction

Background

Research has demonstrated that girls in the Philippines face multiple challenges related to menstruation and MHM.¹ Girls lack comprehensive information on managing menstruation at home and at school, and biological and hygiene information is often blurred with cultural beliefs and practices. Teachers do not have the training or resources to adequately teach on the subject of menstruation and puberty. Lack of affordable and accessible menstrual management options that provide adequate protection from leaks affects girls' concentration – and their attendance – in schools. Stigma and teasing related to menstruation can cause girls stress, embarrassment and shame, further impacting social health, participation and attendance.² Many school environments lack clean, functional, gender-specific toilets where girls can manage menstrual hygiene with privacy and dignity. Furthermore, the lack of operation and maintenance

systems contributes to a high number of non-functional toilets and unreliable water supply in schools.

MHM education is theoretically addressed in the Philippines through integration into appropriate subject areas and topics. However, the lack of standard guidance and tools for promoting MHM in the public basic education system means that in practice there are questions of whether this is achieved, and to what extent, across the country. The lack of capacity among teachers and the often unsupportive attitudes of boys and men in schools reflects the prevailing blindness to considerations of gender issues in the Philippine basic education system. The poor MHM school environment is also just part of the broader problem of inadequate WASH service delivery in schools and the poor sustainability of WASH facilities.

There have been efforts, both at the national and sub-national level, at promoting MHM. However, these have had limited coverage and have proven ultimately unsustainable. To this end, strengthening the enabling environment at national level has been a high priority, to ensure the Department of Education's services and systems are able to create a supportive MHM environment for adolescent girls in schools.

Context

The Philippine basic public education system is made up of 59,282 public schools and caters for over 20 million schoolchildren. Of these, around 14.5 million pupils are in elementary schools (Grades 1 to 6), and just over 6 million are at secondary schools (Grades 7-12). About 52 per cent of pupils are girls.

According to government figures, over the past five years the toilet-pupil ratio has improved, from

¹ Haver, Jacquelyn, Bethany A. Caruso, Anna Ellis, Murat Sahin, Jon Michael Villaseñor, Karen L. Andes and Matthew C. Freeman, 'WASH in Schools Empowers Girls' Education in Masbate Province and Metro Manila, Philippines: An assessment of menstrual hygiene management in schools', United Nations Children's Fund, New York, November 2013.

² Ibid.

1:55 in 2010 to 1:37 in 2016.³ However, the poor operation and maintenance of toilets in schools raises questions over their functionality, and therefore how much this improvement has contributed to promoting gender equity. The percentage of schools with access to water increased from 80 percent in 2010 to 88 percent in 2015.⁴ However, less than half of the water sources are piped-in systems, suggesting that many schools still have unimproved sources and lack adequate water supply in toilet facilities. Many of the schools without piped-in water networks are in rural areas, showing that children face different challenges in rural and urban contexts around access to and management of WASH services.

WASH improvements are not sustained because WASH services are often not prioritised as part of school governance. The level of destruction that has been wrought by frequent disasters has also exacerbated the situation; during emergencies, the displacement of populations as well as the damage to school facilities increases the vulnerability of girls. In addition, traditional approaches to hygiene education have not been effective at debunking the myths and misconceptions around menstruation. These approaches that are largely limited to classroom lecture and the science of menstruation have been ineffective at engaging both girls and boys and improving awareness and behaviour. This raises the need for interactive tools that address cultural stigmas, and which target and optimise the participation of boys as well as girls.

In order to mainstream MHM into the public basic education system, much work has been done to strengthen the national enabling environment that would provide the mandate, mechanisms and guidance for MHM implementation at the sub-national level. The work at the national level has taken advantage of the centralised governance of the basic education sector to create instruments and provide instructions for their implementation nationwide. The work has harnessed the experiences and products by sub-national initiatives to inform the national instruments.

³ Enhanced Basic Education Information System. Department of Education, Republic of the Philippines, 2016.

⁴ Enhanced Basic Education Information System. Department of Education, Republic of the Philippines, 2015.

Stakeholders

At the centre of the movement to mainstream MHM in public basic education are the adolescent girls. They are the primary stakeholders who we are trying to give a voice to on MHM and WASH, and whose lives we are trying to improve. Around them are the boys and men, teachers and families whose capacity to understand and support the adolescent girls in managing their menstruation needs to be built up and mobilised. Other stakeholders include the managers of education service delivery at national and sub-national levels, who can encourage the participation of girls and boys served by education structures and processes. The movement also requires the support of decision makers in the Department of Education to institutionalise MHM as a priority, and for them to provide both the resources and accountability for MHM and WinS nationally. On their part, the development partners, including the private sector, also need to align their work effectively with the Department of Education's priorities, standards and curriculum.

Research Methods/ Description of intervention

Mainstreaming MHM within the public basic education involves building evidence on MHM, policy advocacy, MHM promotion in post-disaster work, systems building, and curriculum integration. Building evidence. In collaboration with partners, the Department of Education facilitated a couple of research studies on MHM in rural and urban areas. The studies made visible the challenges adolescent schoolgirls face in managing their menstruation in school and at home – and provided a better understanding of the contexts at home and in school that increase those challenges.

Policy advocacy. The research process prompted Department of Education officials to raise concerns over MHM in schools, beginning the movement on MHM policy within the department. The findings guided the formulation of the national WinS policy, which was crafted to ensure a gender-responsive WinS service delivery.

MHM promotion in post-disaster work. Alongside policy advocacy, sub-national projects demonstrated methods and results of effective WASH service delivery that mobilise Department of Education



Schoolgirls discussing the booklet “Growing Healthy: things girls need to know.” The booklet is designed as a personal tool for adolescent schoolgirls to encourage healthy discussion on MHM. © UNICEF.

systems and capacities. In particular, the recovery work in the aftermath of Typhoon Haiyan provided a strategic opportunity for raising the profile of MHM. The department’s use of the ‘Three Star Approach’ as a roadmap in the Haiyan recovery established MHM as a critical component of WinS. The WASH in Schools Three Star Approach provides an incremental process to improve WASH conditions in schools towards reaching the national standards. MHM is a core service that the Three Star Approach seeks to improve and sustain.

Building systems to support management and implementation of WinS. Guided by experience from the sub-national initiatives, the Department of Education crafted the implementing mechanisms of the WinS policy, including the national Three Star Approach, online monitoring system and Recognition and Incentive System. These mechanisms allow the schools to assess their WASH conditions, chart their direction towards improvement, track their progress, and be recognized for their incremental achievements and attainment of the national standards.

In addition, the WASH indicators in the existing ‘Enhanced Basic Education Information System’ were expanded, to include WinS operation and

maintenance and availability of MHM supplies for the first time. TheBEIS, together with the separate Online Monitoring System, serve as monitoring, reporting and planning tools for WinS at local and national levels.

Curriculum integration. The nascent twelve-year curriculum provides the entry point for developing materials for integrating MHM in curricular instruction and extra-curricular activities. Initial MHM material UNICEF developed for the Haiyan recovery programme has been adopted by the Department of Education for national use. Other material on MHM developed elsewhere could also be adopted nationally, while the development of a set of MHM communication for development tools is also underway. The tools are designed for use by teachers to enable interactive learning in the classroom and by pupils to facilitate children’s participation in MHM promotion in extra-curricular activities.

Objectives

The work on MHM in public schools seeks to ensure that adolescent girls are knowledgeable about and comfortable with their menstruation, and that they are able to manage their menses at school in a comfortable, safe and dignified way. The WinS policy

has been developed with this in mind, specifically aiming to ‘improve hygiene and sanitation practices among the learners to enable them to develop life-long positive hygiene and sanitation behaviours’. The policy also states that ‘a system and support mechanisms for effective menstrual hygiene management shall be ensured in all schools’.

The work pursues ‘MHM in Ten’ Priority No. 5: Integrate MHM, and the capacity and resources to deliver inclusive MHM, into the education system.

Outcomes

A range of important outcomes were identified following the implementation of the project, including the following key items:

- MHM recognized as critical to achieving learning outcomes. The MHM school research in 2012 and the MHM situational analysis in 2013 made visible the previously largely hidden issues and challenges faced by adolescent girls in



A Child Health Promoter assisting a girl in need of menstrual pad. Sanitary pads are more accessible to menstruating girls when made available through peers. © Save the Children.

managing menstruation in school. It stimulated the discussions on MHM and established MHM as a critical area for achieving learning outcomes.

- MHM standards and targets in public basic education institutionalized. The Department of Education has now officially harmonized and codified standards, guidelines and approaches to WASH education and service delivery in schools.⁵ It has enacted specific provisions on MHM promotion in schools and the fundamental principle of a gender-responsive WinS programme.
- MHM in schools integrated in disaster recovery. In the post-Haiyan recovery programme, in Regions six and eight, 100,000 adolescent schoolgirls were provided with menstrual pads and information on MHM. Department of Education personnel were trained and mobilised on MHM promotion, and MHM indicators were integrated in the post-Haiyan WinS 'Three-star Approach'.
- MHM materials developed and adopted by the Department of Education. The adoption of the MHM information booklet (developed by the education departments in Region six and eight during the post-Haiyan recovery programme) by the central Department of Education for national use initiated the engagement of the Bureau of Curriculum Development, and rallied the work on enhancing the K-12 curriculum with MHM content and tools.
- MHM standards and targets operationalised in the national 'Three Star Approach and education information system. The availability of sanitary pads in schools is designated as one of five requirements for schools to achieve 'One-Star' status and progression to two and three stars. The 'Three-Star System' formulated the indicators and the graduated rating scheme to help promote a gender-responsive approach to WinS improvement. The inclusion of indicators in the education monitoring system designates MHM promotion as a performance area for schools and an object for national monitoring and planning.

Lessons learned and next steps

A variety of lessons were learned and key challenges identified, including the following key themes:

⁵ Department of Education Order no. 10, series of 2016: Policy and Guidelines for the Comprehensive Water, Sanitation and Hygiene in Schools Program. Department of Education, Republic of the Philippines.

The 'invisibility problem' of MHM. There are no established ritual barriers that discriminate against menstruating women in the Philippines, unlike in some other contexts. Menstrual hygiene and products are commonly promoted in the media and the market. However, this hides the challenges schoolgirls face on MHM, from myths and misconceptions about menstruation, from a lack of understanding by boys, from a lack of focus on the sustainability of WASH facilities, and from the prevailing social narrative that often trivialises the gender-specific needs of women.

The research studies were pivotal in that they put MHM up for discussion at the Department of Education. Since then, the national WinS policy, the 'Three-Star Approach', and the education monitoring system indicators have all helped improve the understanding of the specific issues surrounding MHM – and what action might be taken to address them.

Linking upstream and downstream work. To effectively strengthen the national enabling environment, there is a need to bring up the experience and results of sub-national initiatives to inform national discussions at the Central Office of the Department of Education. This national-subnational linkage is best facilitated if there is a conscious design for linking upstream and downstream work. For instance, the development of the MHM booklet "Growing up healthy: Things girls need to know" and the modelling of the WinS Three-Star Approach in the post-Haiyan work were submitted for review and adoption at the national level. This ensures that the mechanisms and instruments crafted at the national level are acceptable and feasible to implement nationwide.

Next steps

The work on mainstreaming MHM in the public education system continues, with the development of tools, generating research and evidence, and building multi-sectoral support for effective implementation.

Development of guidelines and mechanisms for MHM in schools in an emergency situation

The 'MHM in an emergency' guidelines seek to ensure that the menstrual needs of girls are addressed in schools in post-disaster situations. This is to help ease the return to normalcy for the affected school children and promote reproductive health and

hygiene among girls. This activity involves working with the Department of Education's 'Disaster Risk Reduction and Management Service', and it will contribute to the development of the bigger 'school health and nutrition in an emergency' guidelines.

Development and scale-up of MHM communication for development (C4D) package

The MHM C4D package includes communication tools for use in classroom instruction and extra-curricular activities of adolescent school girls and boys. This activity involves working with the Bureau of Curriculum Development, and will contribute to the Department of Education's 'Adolescent Sexuality and Reproductive Health Education' curriculum.

Demonstrating models of MHM in schools implementation

This activity will support selected schools in implementing activities for creating supportive environment for MHM in schools. This also involves documentation and dissemination of good practices of WinS/MHM programming and implementation.

Building evidence on MHM impacts on learning

Research will be conducted to generate evidence on MHM impacts on school participation and performance.

Mobilising partnerships for MHM in schools

The support of the private sector, civil society and other concerned government agencies is vital to improving access to MHM services in schools. The support can range from direct assistance to schools, technical assistance, adoption/alignment with Department of Education standards and processes, to public-awareness raising.

Scale up for policy / program

A few concrete steps are underway to ensure the scale up of this work. These include the following:

The Bureau of Curriculum Development is guiding the development of the MHM C4D package, with support from development partners. The package will be rolled-out nationwide, as part of the K-12 curriculum.

The Department of Education has rolled out the WinS policy and its implementing mechanisms to its 16 regions. The standards in the policy and the implementing instruments provide the public school sector, at all levels, with tools to implement WASH elements of MHM in all schools and monitor progress.

Recommendations for others hoping to learn from this effort

Experience from this programme has suggested some key actions that are vital to mainstreaming MHM in the public education system. These include the following: Building the evidence base on MHM. Building the evidence on the issue of MHM in schools is a critical first step. With focus on marginalised populations (for example, rural and urban poor, indigenous peoples), the evidence can help illustrate the various challenges adolescent girls face and suggest a possible course for potential interventions. The research and discussions should involve government in a facilitator role, which helps establish the Government's ownership of the findings – and the impetus to act accordingly.

Establish a platform for multi-sectoral engagement. An inter-agency body, normally a technical working group, is a strategic platform for appreciating the MHM issue and advocating with the decision-makers the appropriate actions and direction for MHM promotion.

Link downstream and upstream work. The national government appreciates knowing what have been or are being done at the sub-national level. It is strategic for MHM promotion for the design of small-scale projects to seek the vetting and adoption of their outputs by the national government. Linking upstream and downstream work eases the decisions and actions at national level in creating an enabling environment for MHM promotion, which, in turn, benefits downstream work.

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Bangladeshi schoolgirls' self-efficacy in managing menstrual hygiene: conceptualization and development of a novel measurement tool

Johns Hopkins Bloomberg School of Public Health

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

Background

Hennegan and Montgomery's 2016 systematic review appraised the current evidence for the effectiveness of school-based MHM interventions in improving girls' education and psychosocial outcomes in low and middle-income countries.¹ They concluded that while trials of MHM interventions report positive impacts on menstrual knowledge and practices, few have quantified relevant psychosocial constructs.

The construct of self-efficacy should be of interest to MHM stakeholders, and indeed has been highlighted as an 'MHM in Ten' research priority.² Drawing from

1 Hennegan, Julie, and Paul Montgomery. "Do menstrual hygiene management interventions improve education and psychosocial outcomes for women and girls in low and middle income countries? A systematic review." *PLoS One* 11:2 (2016). doi:10.1371/journal.pone.0146985.

2 Phillips-Howard, Penelope A, Bethany Caruso, Belen Torondel, Garazi Zulaika, Murat Sahin, and Marni Sommer. "Menstrual hygiene management among adolescent schoolgirls in low-and middle-in-

Bandura's self-efficacy theory³ and the definition of MHM4, the author defines MHM self-efficacy as a girl's beliefs in her capabilities to organise and execute the courses of action required to maintain her menstrual hygiene – namely, obtaining and using a clean menstrual management material to absorb or collect menstrual blood, changing it in privacy as often as necessary, using soap and water for washing the body as required, and accessing facilities to dispose of or wash and dry used management materials. In other words, it is the confidence a girl feels in her abilities to perform the tasks required to maintain menstrual hygiene. Self-efficacy beliefs come from mastery experience, vicarious experience (witnessing other people modelling the behaviour), verbal persuasion (feedback and encouragement), and one's physiological/emotional state.³

Self-efficacy theory suggests that girls' MHM self-efficacy beliefs should influence whether or not they choose to pursue certain courses of action (e.g. attempt to change a pad while at school), how much effort they put forth, how much they persevere in the face of obstacles, and how much stress they experience when coping in unsupportive environments (e.g. schools with poor sanitation facilities). Theoretically, increasing girls' MHM-related self-efficacy should reduce their anxiety arousal and ensure they feel more comfortable attending school during menstruation. Although stakeholders have highlighted MHM self-efficacy

come countries: research priorities." *Global Health Action* 9:1 (2016). doi:10.3402/gha.v9.33032.

3 Bandura, Albert. *Self-Efficacy: The Exercise of Control*. New York: W.H. Freeman & Company, 1997.

Figure 1

Development of Definition & Conceptual Framework

- Systematic literature review
- In-depth interviews



Creation of Item Pool

- Key informant interviews
- Focus group discussions
- Content-expert validation exercise



Pretesting

- Cognitive interviews



Preliminary Analyses and Refinement of Tool



Formal Testing

- Inclusion of scale in parent study's endline survey



Reliability Analyses and Psychometric Evaluation



Interpretation of Scale's Factor Structure

- Key informant interviews



Recommendations for Further Refinement

measurement as a research priority⁴, to date there exists no widely-available, validated tools to measure the construct. Therefore, our study aims to conceptualise, construct, and pilot a scale specifically for measuring MHM-related self-efficacy in order to fill this gap.

Context

Our research is taking place in Bangladesh, where the 2014 National Hygiene Baseline Survey⁵ suggested up to 40% of schoolgirls miss school due to their periods. Schools across the country lack adequate sanitation facilities and girls fear staining their school uniforms because they are unable to easily change their absorbents during the school day. In order to develop and test the MHM self-efficacy scale, we are working with girls in classes 5-10 in eight schools in Dhaka Division, Bangladesh. Of the eight schools, four are located in rural areas of Manikganj District and four are located in the capital city of Dhaka.

Stakeholders

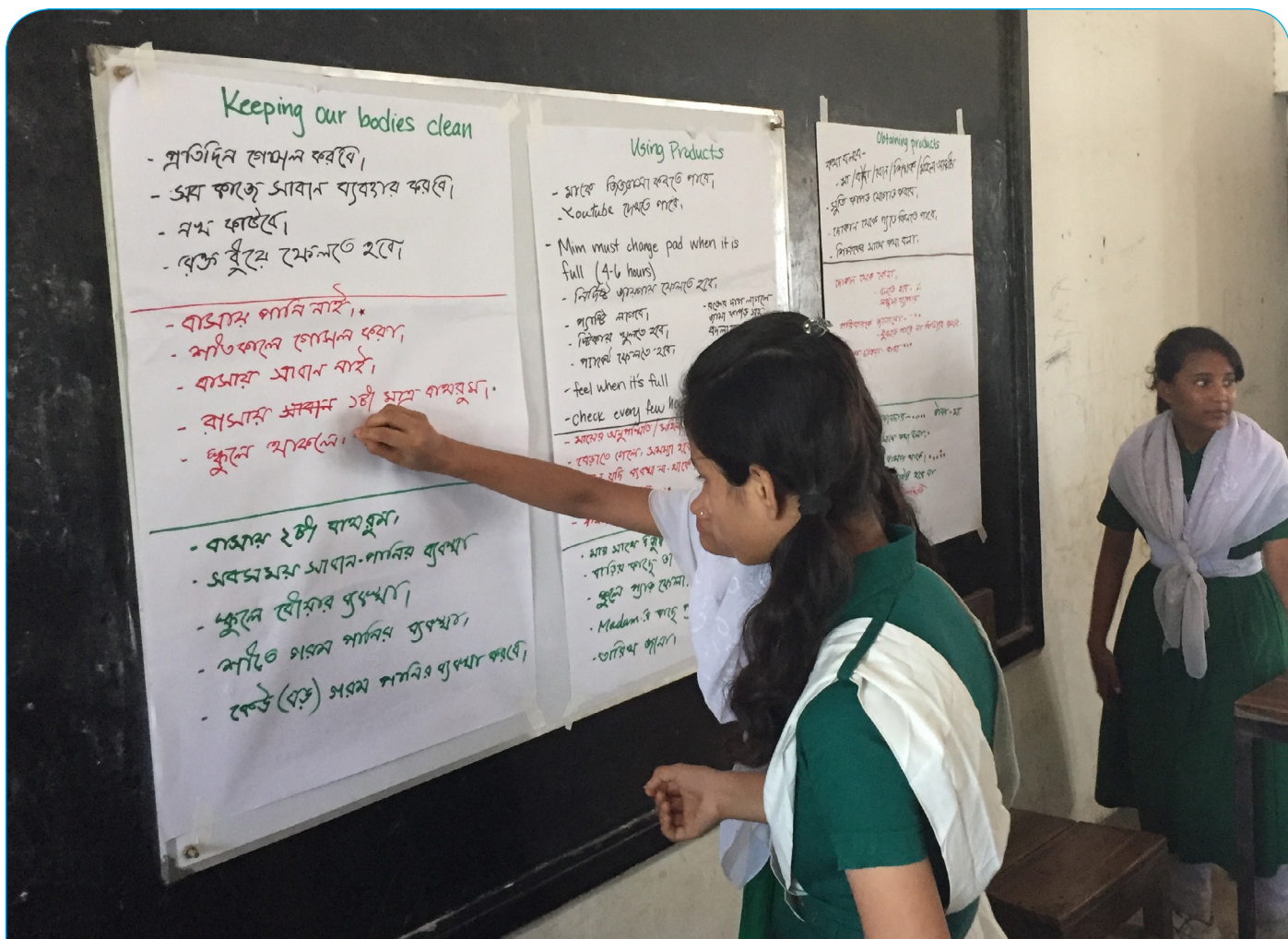
Our tool is being developed through the active participation of girls in both urban and rural schools in Bangladesh, as well as through feedback from MHM experts globally. It is our intention that the resulting scale will be used by MHM practitioners and researchers alike in Bangladesh, and that researchers will adapt and validate the scale in other contexts. Such a scale could enable randomised control trials to determine whether school-based MHM interventions are effective in improving schoolgirls' self-efficacy in managing their menstruation comfortably, safely, and with dignity, and thus likely to contribute to a reduction of MHM-related anxiety in the school environment. If researchers are better able to quantify the effect of MHM interventions on such an important outcome, they will be in a better position to provide strong evidence that is useful for effective policy-making regarding school-based MHM programmes.

Research methods

The scale development work is being conducted under the umbrella of a larger study entitled 'Piloting menstrual

4 Sommer, Marni, and Murat Sahin. "Overcoming the taboo: advancing the global agenda for menstrual hygiene management for school-girls". *American Journal of Public Health* 103:9 (2013). 1556-1559. doi:10.2105/AJPH.2013.301374.

5 ICDDR, Bangladesh National Hygiene Baseline Survey. WaterAid Bangladesh, 2014. Accessed November 12, 2017. <https://washmaters.wateraid.org/publications/bangladesh-national-hygiene-baseline-survey-preliminary-report-2014>



Students discussing menstrual hygiene in a group exercise in Bangladesh.
© Johns Hopkins Bloomberg School of Public Health

hygiene management interventions among urban and rural schools in Bangladesh,' funded by the Bill and Melinda Gates Foundation and implemented by icddr. Figure 1 outlines the scale development process model. A systematic literature review and secondary analysis of in-depth interviews with 48 schoolgirls participating in the parent study's formative research phase is informing our development of a definition and conceptual framework for the construct of MHM self-efficacy – and how it might relate to other constructs of interest such as empowerment. We are now in the process of developing a pool of potential items for inclusion in the scale, and are moving through an iterative process of narrowing the pool and strengthening the items before pre-testing and formal testing of the scale in our study population.

Key informant interviews and focus group discussions with schoolgirls are helping us to write appropriate items for the initial item pool. A content-expert validation exercise will provide feedback and suggestions for

honing the pool of items, and pre-testing through the use of cognitive interviews of up to 42 schoolgirls will enable us to finalise the items to include in the formal testing process. Formal testing will involve incorporating the scale into the parent study's endline survey of up to 500 schoolgirls, providing data for us to examine the scale's reliability and other psychometric properties.

Objectives

'MHM in Ten' has called on researchers to build a strong cross-sectoral evidence base for MHM in schools for prioritisation of policies, resource allocation and programming at scale. In order to build such an evidence base, validated measurement tools are critical. Our study's objectives are as follows:

- Define and develop a conceptual framework for the construct 'menstrual hygiene management self-efficacy' specific to adolescent girls in the Bangladeshi context; and

- Develop and validate a psychometric scale to measure adolescent Bangladeshi schoolgirls' self-efficacy in effectively managing their menstruation.

Outcomes

We are in the process of conducting a systematic literature review and analysing data from in-depth interviews and focus group discussions with Bangladeshi schoolgirls to contribute to our conceptualisation of the MHM self-efficacy construct and to develop the initial pool of potential items for the scale. In order to avoid a so-called 'ceiling effect' in our measurement tool, we have taken effort to ensure we include items across the entire domain of MHM-related tasks and across an appropriate range of difficulty. Focus group discussions using hypothetical situations (a 'vignette' approach) and structured group exercises have been critically important in informing this effort.

Next steps

As this work is ongoing, we welcome expert opinion and feedback throughout the process. We will be connecting directly with MHM experts in the coming months to conduct the content-expert validation exercise mentioned above, to formally elicit feedback regarding potential items for inclusion on the scale. This will allow us to gather evidence to evaluate the item sampling adequacy or, in other words, the extent to which the selection of items reflects the entire content domain (often referred to as a scale's 'content validity'). During the subsequent pre-testing and formal testing phase, we aim to gather further evidence to evaluate the scale's validity by exploring how scale scores correlate with other variables according to the construct's conceptual framework.

Recommendations

Measures of self-efficacy are most useful when tailored to a specific domain of functioning³. Therefore, programmes wishing to assess MHM self-efficacy and how it correlates with other factors would benefit from using an MHM-specific scale rather than generalised self-efficacy scales. Many actions or behaviours involved in MHM can quickly become routine over time; to avoid reaching a ceiling effect, MHM self-efficacy scales must include items that appropriately reflect varying levels of difficulty. Focus group discussions and interviews with girls can help researchers understand which MHM-related tasks are considered more or less difficult, thus enabling them to write appropriate scale items.

An MHM self-efficacy scale may be used in studies and programme evaluations in the future to determine interventions' effects on girls' MHM self-efficacy and how girls' MHM self-efficacy is associated with other factors of interest: for example, anxiety or stress, school attendance, and academic achievement. It is our hope that such a measure will be used to amass evidence for or against MHM programmes' effectiveness, enabling concrete recommendations to policymakers and school administrators so that we might take forward strides in ensuring supportive school environments for menstruating girls globally.

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Strategies for inclusive MHM for girls with disabilities too

Huru International

MHM in Ten

Priority 5:

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

of adolescent girls with disabilities in Kenya – and to create programming and curricula to effectively reach this population with MHM and sexual and reproductive health education. To meet these goals, Huru International collaborated with key stakeholders to adapt the Huru curriculum and educational interventions for this target population, with the tertiary aim of increasing related knowledge and skills among teachers and parents. These adapted methodologies were developed and implemented in an effort to reduce menstruation-related school absenteeism, improve quality of living, and create a more supportive and understanding environment for girls with disabilities as they approach adolescence and enter puberty.

Introduction

Background

Girls with disabilities in low-resource settings experience unique challenges to hygienically managing menstruation, due to the additional care and support they need to acquire adequate MHM skills, as well as restrictive physical space in schools, and lower standards of living at home. While they frequently experience discrimination based on their disability as well as their gender and age, the United Nations Girls' Education Initiative (UNGEI) recognises that the needs of adolescent girls with disabilities have remained largely unaddressed by the women's rights, children's rights and disability rights movements.

Huru International is a not-for-profit organization founded in Kenya in 2008 with the mission to keep the most vulnerable girls in school through a social enterprise model that provides re-usable sanitary pad kits combined with sexual and reproductive health education and life skills workshops.

The primary aims of this particular project were to identify and increase awareness about the needs

Context

This project targeted 1000 girls attending five special schools and 12 inclusive schools in Kenya's Kiambu and Nairobi counties. Kiambu County is located in the central highlands of Kenya. According to the county's statistics, it has an urban population of 936,411.¹ Nairobi County borders Kiambu to the south, with an urban population of 3,138,369. The target population of girls with disabilities ranged in age from 10 to 31, with the majority (approximately 66%) between the ages of 10 to 14 years.

The Ministry of Education uses the term 'special schools' to describe institutions that provide specialised education for students who are d/Deaf² or hard of hearing, blind or visually impaired, as well as other students with a diversity of disabilities. 'Inclusive schools' are comprised of mainstream students, as well

¹ County Government of Kiambu. (2015). Position & Size. Retrieved from <http://www.kiambu.go.ke/about/position-size>

² In some cultures, a lowercase "d" is used when referring to a person's audiological ability to hear. A capital "D" is used to indicate a person's identity as part of the Deaf community.

as students who are eligible to attend special schools.

Stakeholders

Direct stakeholders included 1,000 girls with disabilities, aged 10 to 31, with approximately 66 per cent of the target population aged between 10 and 14 years. There were also 191 parents and 1,220 boys with disabilities (aged 10 to 31, with the majority between the ages of 10 and 14 years) who received education on MHM, sexual and reproductive health and other relevant life skills; the direct stakeholders interact with these male classmates on a daily basis. Huru programming teaches them to support their female peers, which helps to create a more gender equitable environment for the girls themselves. Fourteen teachers were also trained as trainers in the Huru International curriculum. Higher-level stakeholders included the Peace Corps, the Ministry of Health for Kenya, local Ministry of Education offices in Kiambu and Nairobi counties, five special schools and 12 inclusive schools, and a private foundation in Kenya.

Research Methods / Description of intervention

Prior to project implementation, Huru International worked with teachers and staff to adapt the Huru curriculum around life skills and sexual and reproductive health education, in order to address the issues most relevant to the target populations and so that intervention styles could be adapted to make them as accessible as possible to the girls at each school. Huru staff also trained teachers as trainers and encouraged them to further adapt follow-up sessions as appropriate for their students, using the evidence-based information contained in the Huru curriculum. This was found to be the most helpful methodology because the teachers have a wide-range of academic and hands-on experience working with girls with disabilities.

Adapted methodologies for girls with developmental and intellectual disabilities included:

- Shorter educational sessions with increased repetition on how to properly use Huru reusable sanitary pads;
- Training of trainers modules so that teachers could conduct follow-up sessions with students, reinforcing the messages discussed during initial programme implementation;
- Involvement of teachers, parents and caregivers in a student's personal MHM routine;

- Use of song to facilitate increased understanding of concepts related to physical anatomy; and
- Activity-based education for male classmates with disabilities on issues related to menstruation, puberty and sexual and reproductive health;
- Huru staff also spent additional time emphasising basic lesson topics such as 'sex and sexuality and gender-based violence.'

Adapted methodologies for d/Deaf girls included

- Working closely with school staff and interpreters throughout the planning phase to develop clear and accurate communication in Kenyan Sign Language, on the topics of MHM, sexual and reproductive health, life skills and proper use of Huru pads;
- Utilising sign language resources from the Peace Corps, including posters with important sexual and reproductive health vocabulary.

Adapted methodologies for blind or visually impaired girls included

- Working closely with school staff during project implementation in small group settings;
- One on one instruction;
- Audio resources on how to properly use and care for the Huru pads.

At each school, the involvement of teachers, staff and caregivers was critical throughout project development and implementation. They were key to making the Huru intervention contextually specific for the target populations with whom they work every day.

Monitoring consisted of quality assurance visits after the distribution of Huru Kits³, which occurred at approximately the project's half-way mark, during which Huru staff observed educational sessions in their entirety and provided feedback to the teachers implementing the Huru curriculum. Huru staff further conducted in-depth interviews with each teacher to discuss the Huru intervention, initial observations, successes, challenges and ways forward. Interviews were also conducted with school administrators to assess the observation of short-term project impact and any additional issues.

³ Each Huru Kit contains: 8 reusable sanitary pads; 3 pairs of underwear; 2 waterproof resealable bags for carrying soiled pads; 1 bar of detergent soap to clean the pads; an educational booklet on menstruation, puberty, sexual health and proper Huru pad care. The contents are packaged in a colorful backpack.

Baseline and endline evaluation surveys were completed by project participants with the help of their teachers. Teachers were asked to observe any girls unable to complete the surveys and then submit a written document describing their methods for managing menstruation.

In addition, Huru's quality assurance visits provided the opportunity to identify ongoing challenges and areas for additional research and intervention. These include the need to further adapt monitoring and evaluation approaches to increase accessibility for these populations. As described below, Huru staff found that the most effective way to gather clear and accurate information from the target population was to speak with the girls one-on-one; though this is not sustainable in terms of scale-up. Huru has started conducting surveys digitally using the KoboCollect application on tablets and smart phones, which should help to address this. Additionally, due to the diversity of disability within the target populations, the need for adapted methodologies was often identified on a case-by-case basis at the time of data collection. The next phase of this project includes the development of a monitoring tool for parents of girls who are unable to answer the questions themselves. Adapted methodologies for M&E will help to better articulate the needs of girls with disabilities so that future interventions can address their unique issues with evidence-based programming.

Objectives

This project is relevant to 'MHM in Ten' Priority 5: Integrate MHM, and the capacity and resources to deliver inclusive MHM, into the education system. Short-term goals were to increase awareness about the needs of adolescent girls with disabilities in Kenya, while reducing menstruation-related school absenteeism and improving quality of life. The project also endeavoured to increase MHM-related knowledge and skills among parents and teachers, creating a more supportive and understanding environment for girls with disabilities as they approach adolescence and enter puberty.

Long-term goals include the creation of programming and curricula to effectively reach this population with MHM and sexual and reproductive health education, as well as expansion of this project to the neighbouring countries of Tanzania, Uganda and Malawi.

75%

Girls who were missing 3 or more days of school a month due to menstruation

25%

Girls who were missing 1-2 days of school a month due to menstruation

98%

Girls who no longer miss school because of menstruation after project implementation

Outcomes

The programme reached over 2,400 direct stakeholders with education on sexual and reproductive health and life skills, including 1,000 girls with disabilities who received Huru reusable sanitary pad kits. Girls learned evidence-based and accurate information about menstruation and puberty, while gaining an understanding that menstruation is a normal, healthy experience for girls and women of reproductive age. Girls also gained skills in using, washing, and caring for Huru re-usable pads. A total of 1,220 boys with disabilities and 191 parents also participated in educational seminars about MHM, sexual and reproductive health, life skills and proper Huru pad care; the involvement of boys, men, families and the broader community is critical to creating a more gender-equitable environment that encourages a girl's health and school attendance. Huru has developed a plan to continue this work with girls with disabilities in additional locations throughout Kenya – as well as in the neighbouring countries of Tanzania, Uganda and Malawi.



Huru Kits are distributed during Huru educational seminars, a comprehensive approach to addressing the need for adequate menstrual hygiene management resources. © Huru International.

Huru considered this programme to be successful in the outcomes that were achieved. At baseline, 75 per cent of the girls reported that they were using un-hygienic methods like pieces of cloth, pieces of mattress and tissue paper to manage their periods. Of the 25 per cent who reported that they used disposable pads, less than 1 per cent always had enough sanitary pads to cover their entire menstrual cycle. After project implementation 100 per cent of the girls indicated that they were using Huru pads to manage their periods.

At baseline, 75 per cent of girls indicated that they were missing 3 or more days of school a month due to menstruation, while 25 per cent were missing 1-2 days of school a month. After project implementation, 98 per cent of girls indicated that they no longer miss school because of menstruation (self-reported).

At baseline, 88 per cent of the girls indicated that they 'don't know' if they would be willing to sleep with a man for favors like money for school fees,

pads, or other items; at endline 98.5 per cent of them indicated that they would say no to this situation.

Lessons learned and next steps

Not all girls were able to complete the Huru baseline and endline surveys on their own. Adjustments were made including one-on-one assistance from teachers during survey completion, and, where girls were unable to complete the survey, teachers submitted written observations separately, describing the girls' methods for managing their menstruation.

As girls approach puberty and menarche, they often report receiving increased attention from men – and this is no different for girls with disabilities. It is also true that when the topic of menstruation is introduced in a safe space where girls are encouraged to talk about it openly, this inevitably leads to discussions about sex – and even sexual violence, especially when this conversation is being facilitated by a trained and trusted teacher or Youth Facilitator. This is why

Huru International believes it is important to provide MHM within comprehensive sexual and reproductive health programming. During quality assurance visits, Huru staff were struck by the number of programme participants who reported experiencing sexual abuse. Huru staff are continuing to collaborate with teachers and school administrators to develop best practices for effectively addressing this issue with education and healthcare services. Lessons such as ‘Good touches versus bad touches’, and ‘Communication: saying no’ from the Huru curriculum have also proven to be useful in addressing these issues. Huru found that offering adapted sexual and reproductive health education, such as basic anatomy and explaining what sexual intercourse is, can help girls identify abuse if it happens.

We found that the total amount of time initially allotted for educational sessions was often too short, and the sessions were not frequent enough for this target population, because they often needed more time to understand concepts and required additional breaks due to the shorter attention spans of some students. Training local teachers as trainers in the Huru curriculum helped to make this programme developmentally appropriate and contextually specific through adapting methodologies.

Due to the success of this initial project, Huru International will continue this work by adapting our programming for special schools in Nyeri County and implementing lessons learned from this pilot. In partnership with the Ministry of Education, schools mapping and baseline data collection will begin before the end of 2017.

This project has also created the opportunity to uncover and begin to find ways to effectively address the issue of sexual abuse among programme participants, in collaboration with teachers, school administration and education and healthcare services.

Scale up

Future programmes will increase the involvement of parents and community stakeholders, further incorporating their feedback and knowledge. This programming will also be expanded to additional regions in Kenya and into the neighboring countries of Tanzania, Uganda and Malawi, while continuing to train locally-based trainers in small-group settings.

For both the educational sessions conducted with students and the teacher trainings, it was found that it was important to keep the group sizes small, so that participants are able to take the time and attention needed to fully understand and practice the material presented. In educational sessions, this intimacy allows girls to feel more comfortable participating in activities. In smaller group settings, teachers believe that the girls may also be more willing to report abuse if it happens. When scaling up, this means that many different trainings and weekly educational sessions will need to take place to keep the group sizes small – something which could put a large strain on Huru and local resources.

Monitoring and evaluation is also more complicated and takes more time with this target group. Huru has found that answering survey questions one-on-one with each girl is what works best. If scaled up, this would take a tremendous amount of staff time and resources. Huru has started conducting these surveys digitally using the KoboCollect application on tablets and smart phones, which should help with scale-up.

Recommendations

Huru suggests that other organisations begin by partnering with stakeholders who have experience working with girls living with disabilities, such as community-based organisations, teachers, parents and of course the girls themselves, in order to ensure they reach as many girls as possible, and to inform their programme design and curricula.

Huru would also suggest connecting with community-based organisations who have experience in providing healthcare services (especially post-abuse care) to young people with disabilities. This should be done at the very beginning of project so that a referral system is in place for teachers, parents and organisation staff to utilise.

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Lao PDR

Engaging Laotian teachers in MHM

Eau Laos Solidarité

MHM in Ten

Priority 5:

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

Introduction

Background

Eau Laos Solidarité (ELS) is a French-based NGO working in Luang Prabang Province in the Lao People's Democratic Republic (PDR). Since 2011, it has supported the WASH programme of LPB Library Outreach Programme, in which educators from the library travel to rural schools in Luang Prabang Province, and teach children key hygiene practices, supported with books in the Lao language, two of which were written by ELS.

In 2013, secondary-school teachers identified a knowledge gap that they felt they had around supporting adolescent girls, and asked ELS to look at ways to teach and advise on puberty and MHM issues. At this time, no teaching aids about menstruation existed in Lao PDR. The national curriculum includes information on reproductive health in year four of higher secondary school – when most 16 to 18-year-old girls have already reached menarche. Female teachers reported embarrassment at teaching this subject. They frequently instructed students to study the two pages of a biology text book on their own, which explained the female and male reproductive system, and managing menstruation

was not taught. Statistics are currently unavailable on the number of girls still attending school at this age.

A survey by ELS found that 97 percent of 150 girls questioned were unaware of menstruation before reaching menarche. Those girls who were menstruating reported fear, stress, food restrictions, and difficulties with hygiene and pain management. The teachers' requests for information and training around MHM gave the LPB library and ELS an opportunity to collaborate on an MHM book. After consultation with the authors, the Cambodian edition of 'Growth and Changes' was adapted for Lao PDR after suitable research.¹

The subsequent Lao book, 'I am a Teenager'², was approved by the Ministry of Information and Culture and certified as a science textbook in 2015. This illustrated book explains puberty and MHM in Lao and English. It also has sections with stories from Lao girls about menarche, a 'true and false' page, 'questions and answers', and instructions on how to make a washable menstrual pad.

At district level, the Ministry of Education gave permission for its distribution to girls in secondary schools. Five library staff were trained in MHM teaching. Between 2015 and 2016, the ELS team undertook 'The Laos Girls Teen Project', a puberty workshop programme in 34 schools. The ELS team provided 3,283 girls, aged from 10 to 16, with MHM information and the book. However, at this stage, the workshops gave little opportunity for teachers to collaborate due to their embarrassment and identified knowledge gaps

1 Sommer, M., Connolly, S. (2012). Growth and Changes - Menstrual Hygiene Education Books (Cambodia). Grow and Know, Inc., Cambodia http://www.growandknow.org/books_add.countries.html accessed August 2017

2 Sommer, M., Piper-Pillitteri, S. (2015). I am a teenager. Vientiane, Lao PDR. Uniprint Press.



A trained teacher leads a menstrual hygiene workshop at a school in Lao PDR.
© Eau Laos Solidarité.

in MHM. Stakeholders decided to initiate a two-day training in MHM for 60 teachers, which commenced in October 2016. The book, 'I am a Teenager', was used to develop materials for teacher training.

Context

Lao PDR is a one-party, lower-middle-income country, located between Thailand and Vietnam. In 2016, the population was 6.76 million³. Fifty percent of the population are under the age of 25. Estimates for 2020 put the under-15 population at 40 percent of the total, which suggests there is an urgent need for a national policy on MHM education, especially considering that (according to the most recent data) 1

³ The World Bank, Data <http://data.worldbank.org/country/lao-pdr> accessed August 2017.

in 10 girls marry by the age of 15⁴. In rural areas, the birth rate for girls aged from 15 to 19 was 114 births per 1,000 adolescents in 2014⁵. Some ethnic groups consider that menarche signifies that a girl is ready for marriage. A report in 2014 highlighted a lack of youth-friendly information on reproductive health, and that the needs of adolescents are not acknowledged⁶.

There are 49 major ethnic groups in Lao PDR. The

⁴ Lao Social Indicator Survey 2012, Ministry of Health and Lao Statistics Bureau, Vientiane, Lao PDR (2012)

<http://lao.unfpa.org/news/our-future-depends-how-well-we-invest-adolescent-girls-today?page=0%2C1> accessed September 2017.

⁵ Housing and Population census, Lao PDR 2015. (2015) United Nations Population Fund <http://lao.unfpa.org/publications/results-population-and-housing-census-2015-english-version> accessed November 2017.

⁶ Adolescent and Youth Situation Analysis. Lao People's Revolutionary Youth Union and UNFPA, (2014) <http://lao.unfpa.org/en/publications/adolescent-and-youth-situation-analysis> accessed August 2017.

majority of the population is rural (69 per cent), reliant on subsistence agriculture⁷. The mountainous terrain of Lao PDR makes transport problematic. Rural girls able to attend secondary school must lodge in dormitories or guesthouses. This means that family support is often lacking at menarche. Rural schools often combine lower secondary school, aged 11 to 14, and high school, aged 15 to 18. Gross enrolment for girls in secondary education in 2014 was 54.57 per cent⁸. There are 82 languages in Lao PDR, but Lao is the sole language permitted for education⁹. Quality of education varies greatly.

This MHM teacher training was held in the northern Province of Luang Prabang. First, 20 teacher-managers

7 Results of Population and Housing Census 2015, Lao Statistic Bureau and UNFPA, (2016) <http://lao.unfpa.org/en/publications/reports-population-and-housing-census-2015-english-version> accessed August 2017.

8 United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics. <https://www.indexmundi.com/facts/lao-pdr/school-enrollment> accessed August 2017

9 First Language First: Community-based Literacy Programmes for Minority Language Contexts in Asia (2005). UNESCO, Bangkok, Thailand <http://unesdoc.unesco.org/images/0014/001402/140280e.pdf> accessed August 2017.

from the district education offices were trained, followed by 40 teachers from 16 secondary schools in Nan and Pakou districts. All schools had at least two girls' toilets, but in four schools, there was no water for flushing or washing as it was the dry season. In 2015, 76 per cent of the population had access to improved sources of drinking water and 71 percent to improved sanitation¹⁰.

Stakeholders

The main stakeholder for the development of resource materials for the MHM teacher training, and initial outreach through the Laos Girls Teen workshops, was the LPB Library, which is overseen by the Ministry of Information and Culture at the district level. The district offices of the Ministry of Education authorised the teacher training to take place.

Since 2012, ELS has developed a working partnership with the library, and developed a solid network of rural secondary school teachers. From

10 The Millennium Development Goals and Lessons Learnt for the Post-2015 Period: A Summary Review (2015). The Lao People's Democratic Republic supported by the United Nations http://www.la.undp.org/content/lao_pdr/en/home/library/mdg/mdgs-summary-review.html accessed August 2017.



School girls participate in Girls Teen workshops.
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October 2016, ELS trained 60 secondary school teachers in MHM education. The 'Centre-Val de Loire' region of France maintains a relationship with LPB Province, and financed 40 per cent of the project. Remaining funds came from private donors. Local NGOs, the Swiss and Lao Red Cross, GIZ, Friends' Hospital and Save the Children were made aware of the training and the possibility of future teaching resources for their organisations.

Sixty teachers were trained. Twenty of these were teacher-managers from 12 district education offices and the remaining 40 were teachers from 16 secondary schools in the districts of Nan and Pakou, where they subsequently taught MHM to 2172 school girls, aged 11-16. Teachers and girls were from Lao Leum, Khammu and Hmong ethnic groups.

Description of intervention

The programme's primary objectives were to build capacity for 60 rural secondary school teachers, create and deliver sustainable teaching tools and support teachers in delivering MHM lessons. An independently funded side project taught 1,000 dormitory girls from participating schools to sew and use washable sanitary pads using local materials.

The Ministry of Education required ELS to first train 20 teacher-managers from 12 district education offices. They then highlighted a need for wider teaching of MHM issues, and facilitated the Laos Girls' Teen Project teacher training programme for all secondary schools in LPB Province over a five-year period.

As there were no existing suitable MHM resources for Lao teachers, the book, 'I am a Teenager' was used as the foundation for training, developing MHM teaching material and a lesson plan, with additional input from diverse literature^{11,12}. The resulting training manual also doubled as an MHM reference book for participants.

The Laos Girls' Teen Project MHM teacher training began with a 'Johari Window' exercise on menstruation, which enabled participants to explore their own and others' relationships with the secrecy surrounding MHM. Other subjects covered included MHM misconceptions

and facts, menarche, female anatomy and functions, emotional and physical changes at puberty, personal hygiene, infrastructure required for MHM, and menstrual products. Quizzes, confidence-building with MHM terms and words, personal questions, the creation of menstrual cycle bracelets, and exercises for menstrual pain were presented at intervals throughout the training.

Participants received a teaching pack, produced and tested by ELS, library staff and teachers. It contained a training manual, a workbook with a lesson plan, games, and a flipbook of 24 laminated pages, with teaching notes on the back. Posters of the female reproductive system and the menstrual cycle were also provided. Teachers adopted these resources in a practice MHM lesson, followed by group appraisal and support. They learnt to sew and care for washable cotton pads, and were given the sewing pattern and materials to take home.

The Ministry of Education encourages Lao teachers to adopt the 'learning by doing' process. During the training, teachers practiced participatory methods of teaching MHM to girls in class, and were recommended to develop further MHM activities after training. They chose 'strong teachers make strong girls' as their slogan.

Trainers visited each school after a month and observed a MHM lesson given by the trained teachers. Indicators chosen by trainers and from existing assessment guidelines were measured¹³. Teachers self-reported on observed improvements in girls' behaviour and concentration. Each school principal was questioned about actions to improve school MHM, and 10 randomly selected girls per school were questioned to verify MHM facts and hygiene practices. The district education officers track progress with yearly visits.

Objectives

The main objective was inspired by 'MHM in Ten' Priority 5: 'To integrate MHM and the capacity and resources to deliver inclusive MHM into the education system'¹⁴. The initial goal of this project was to hold a two-day MHM training, to engage and build capacity in teachers, enabling them to deliver inclusive MHM

11 House S., Mahon T., Cavill S., (2012). Menstrual Hygiene Matters, Training guide for practitioners. WaterAid.

12 Irise International, Menstrual Hygiene Project Training Resource available at: http://www.irise.org.uk/uploads/4/1/2/1/41215619/menstrual_hygiene_project_training_resource.pdf accessed August 2017

13 Caruso, B. (2013). WASH in Schools, Tools for Assessing Menstrual Hygiene Management in Schools, UNICEF

14 MHM in Ten': Advancing the MHM Agenda in WASH in Schools (2014). Columbia University, Mailman School of Public Health, UNICEF <https://www.mhmvirtualconference.com/mhm-in-ten/>

to their respective schools. As part of this teacher training, a practical goal was addressing the need to identify and develop comprehensive teaching tools, teacher support and resources for providing continuing information for girls and teachers.

A wider objective that flowed from this initial objective was advocacy – persuading stakeholders and funders of the importance of MHM resources in schools, including MHM promotion.

The long-term goal is to train teachers from every district in LPB Province, for teachers to become engaged in promoting MHM as an integral part of school learning, and to encourage other stakeholders and NGOs to improve MHM WASH infrastructure and explore pad provision. Ultimately ELS aims to help make inclusive school MHM a social norm in the Lao PDR education system.

Outcomes

The main project outcomes include the support provided and lessons for girls from trained teachers on MHM, as well as the distribution of the ‘I am a teenager’ book to each girl who has received at least one MHM lesson. Of the 40 secondary school teachers trained, 37 are now actively supporting girls in their MHM, teaching them about puberty and MHM, and providing support and advice for the girls on any MHM-related anxieties and pain relief. For example, one teacher reported that she had noticed a girl who was having trouble concentrating, and that she now felt confident enough to enquire about menses and pain, and to propose solutions.

Each secondary school in Nan and Pakou district now has one or two teachers trained in teaching girls MHM. They have given at least one lesson on MHM to a total of 2,172 girls, aged 11 to 16, who also have received a personal copy of the book, ‘I am a Teenager’. Girls reported sharing the information in the book with an average of three people not attending school, such as female relatives. Each year, for the next five years, first year students (age 11) will receive a lesson and the ‘I am a teenager’ book. The book has also been made available in 10 school libraries.

Over a thousand girls in dormitories now know how to make, use, wash and dry washable sanitary pads made from locally available materials. However, the unavailability of waterproof polyurethane laminate

in Lao PDR means washable pads made from cloth only, tend to leak if used over several hours, which diminishes their use to outside school. Nevertheless, rural girls appreciated having an alternative to rags, or as a backup to disposable pads.

Teachers and principals in five schools used their initiative in improving school-based services, encouraging ‘girls’ days’ of MHM activities, pad-making, games and songs. They also supported toilet repairs, bin provision, and materials for pad making, aided by the parent teacher association. Of the 10 randomly selected girls aged 11 to 16 from each of the 16 schools, 160 girls understood the basic facts about menstruation, and described effectively managing their menses. However, they said that soap provision and use, both for handwashing and body washing, was problematic at times. ELS is approaching a local NGO to discuss soap provision.

The training sessions were a safe space for female teachers to find answers to their own personal MHM issues. They highlighted participants’ lack of knowledge about basic female reproductive health, such as the menstrual cycle, fertile periods, recommended diet, and especially what normal vaginal discharge or ‘the white period’ is. The time making a menstrual bracelet provided an opportunity to share and discuss new knowledge.

Lessons learned

The previous lack of MHM teaching and general unfamiliarity in Lao PDR about MHM has meant that diplomacy and creativity has been required in order to introduce MHM into schools. Advocacy from a small organisation has less authority, but a bottom-up approach can often nevertheless give results.

We also found that if encouraged, the ‘novelty factor’ of MHM can stimulate learning, ownership, and action. The 20 trained female district education officers, all former teachers, said they got involved and promoted MHM because it was innovative, informative, and important.

The MHM teacher training engaged Laotian teachers because it was relevant to their requests and requirements. It was accessible in the Lao language, and the content was broken down into enjoyable, manageable sections to maximise engagement. This new knowledge was



Secondary school teacher leading a lesson on MHM in Lao PDR.
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pertinent and enabled them to teach MHM to their students. Inventive methodology permitted female teachers to take ownership of MHM lessons.

However, these committed and dedicated secondary school teachers do not have the power or the resources to scale-up. Higher up the decision ladder, lack of awareness about the importance of MHM education impeded policy decisions in certain organisations. The lack of understanding on MHM severely hampered decisions on project advancement in some instances, showing how important effective advocacy is at an early stage in an MHM project. To this end, ELS continues its advocacy efforts with relevant stakeholders on the importance of mainstreaming inclusive MHM within the national education system.

The demand for knowledge on MHM is great; health workers as well as teachers are eager for information. Teachers spread information within their communities, but demands for training and workshops currently exceed resources. Activist teachers in several schools inspired male principals, willing and honoured to promote MHM. Five organised a 'girls' day' for activities around MHM, including pad making, sport and entertainment. They collaborated with the parent teacher association to repair WASH MHM infrastructure

and provide materials for pads, helping to increase awareness of the importance of MHM to communities.

Lao cultural shyness about the body makes educating males about MHM problematic. Lao female teachers expressed reluctance to have males in the training. Undeniably, this would have hampered the frank discussions that took place. There is an ongoing debate between ELS and stakeholders on how to include boys in MHM education, without embarrassing girls to such an extent that they would not participate. It is currently a cultural requirement for Lao students to stand when addressing teachers in class. Girls who are menstruating may be reluctant to do this and fully participate in a lesson.

The experience of ELS shows that the actions of a small NGO can facilitate discussion about MHM as a social norm – using a bottom-up approach, and social pressure, ultimately to help MHM education become national policy.

New opportunities

The Laos Girls' Teen Project has helped start an open discussion on a subject that according to the teachers was long overdue, and helped create opportunities for action elsewhere, more training

and the circulation of teaching tools. Implementing the MHM training in Luang Prabang Province has provided opportunities for discussion with other actors, as well as the possibility of scaling up the work in other districts. Discussion is pending with United Nations Population Fund on a project around the Sustainable Development Goal for Adolescents¹⁵.

The Lao and Swiss Red Cross requested training for its educators, and the provision of 5000 books and training materials. It aims to reach 5000 Lao girls over three years. This endorsement of the MHM programme of a small NGO by a major actor has led to increased interest from other actors in the programme and potentially available teaching resources. The district office of the Lao Women's Union has requested MHM training for representatives of ethnic minorities, in order to inform non-Lao speakers in mountainous regions of Northern Lao PDR. This will take place in November 2017.

Scale-up

In the next five years, ELS will train teachers from 12 districts in LPB Province, ensuring that each secondary school has at least one teacher who is a champion for MHM. ELS will also explore options for including boys and training male teachers, and will continue to advocate along with other NGOs for the inclusion of MHM in national education policy with the Ministry of Education.

A key challenge for scale up is that in Lao PDR, there is currently no representative for youth in local or national policy¹⁶. MHM has been discussed at local NGO meetings in Luang Prabang, with interest in MHM training. However, each organization has its own programme, and funders and stakeholders are sometimes reluctant to adopt part of another's programme.

Recommendations

Approval for the book, 'I am a teenager', from a significant authority at the beginning was essential. New knowledge can be stimulating but also intimidating. The book was a key element in this project; a visual, tangible factor in persuading stakeholders that

MHM education would not shock sensitivities.

Lao rural society is accustomed to a cautious 'step-by-step' approach to projects, rather than taking a long-term view. A small NGO and a sensitive bottom-up approach can, therefore, successfully influence outcomes. It is anticipated that the continuing activities and initiatives of teachers to improve MHM and puberty knowledge will 'filter up' to policy makers as the MHM movement in Lao PDR grows.

Stakeholders appreciated being at the forefront of an innovative project. The training directly improved conditions and understanding for female teachers, who felt a sense of ownership of the project and felt able to initiate changes within their area. District teacher-managers received credit from their supervisors at the Ministry of Education for introducing new knowledge.

A soft approach can be employed to involve culturally shy girls. For example, some girls were uncomfortable with a prominent role in the project as peer educators. After the lesson, however, girls were encouraged to choose a 'period buddy' amongst their peers, which ensured constant, yet discreet, support. Individually, girls used the book to share new knowledge with family, and as a reference in the dormitory, where girls often find themselves alone at menarche. Older girls happily assisted younger ones in sewing pads, and supported girls at first menses.

Having limited access to policy makers should not necessarily be a deterrent to producing results and moving a project forward. Cultivating a strong local network of influential partners can lead to unexpected and effective developments. A Lao pop star has approached ELS to create a song around menstruation, which will be diffused at concerts, on television and presented on social media. Many rural teenagers have access to smart phones, so this is a novel step towards addressing the cultural silence around menstruation in Lao PDR.

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¹⁵ Sustainable Development Goals for Adolescents, Lao PDR <http://www.sdg4a.org/> accessed August 2017.

¹⁶ Adolescent and Youth Situation Analysis. (2014). Lao People's Revolutionary Youth Union and UNFPA: available at <http://lao.unfpa.org/en/publications/adolescent-and-youth-situation-analysis> accessed August 2017.

Uganda

Menstrual Health Interventions and School Attendance among Ugandans (MENISCUS-2)

London School of Hygiene and Tropical Medicine, MRC/UVRI Uganda, and WoMena Uganda

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

Background

Poor management of menstruation affects many girls in low- and middle-income countries. In Uganda, the Government has prioritised the need to improve MHM, as indicated by the 'Menstrual Hygiene Charter' in 2015, in which the Government and civil society organisations committed to work together to promote MHM.

Our recently completed, mixed methods, feasibility study (known as the Menstrual Hygiene and Safe Male Circumcision in Ugandan Schools study, or 'MENISCUS-1') suggested that menstruation is an important 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 effective materials for MHM, led to girls staying away from school during menstruation. In a small 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 has highlighted the importance of including the whole school community (i.e. boys and teachers as well as girls) in the intervention and of engaging parents in improving menstrual management.

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 to eliminate leakage of menstrual blood, 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 provide an evidence-based intervention package to improve MHM management among school girls. The current study, MENISCUS-2, is-2 study is pilot testing a comprehensive school-based MHM intervention package delivered to schoolgirls, schoolboys, teachers and parents. The primary objective of the MENISCUS-2 study is 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.

Context

The MENISCUS-2 study is taking place in two secondary schools in Entebbe, a peri-urban sub-district

of Wakiso District. The Entebbe Municipality where the two schools are located is positioned within one of the peninsulas of Lake Victoria, the largest lake in Africa. It includes fishing communities and has a comparatively high HIV prevalence within Wakiso District. There are also four control schools, which were enrolled during MENISCUS-1 and will act as historical control groups.

We will build on existing relationships with the District Education Officer established during MENISCUS-1. The study will be conducted in one private school and one government school, both of low socio-economic status, and hence where the intervention may be most effective.

We will deliver the intervention to all students in class Secondary 2 ('S2'). Students in this class typically range in age from 13-17 years. This was shown in the feasibility work to be an appropriate class for receiving the intervention as almost all girls have started menstruating 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. Preliminary data collected in September 2016 indicated that there were 83 female students and 92 male students in S2 at the private school and 199 female students and 206 male students, in 3 streams, in S2 at the Government school. The median age in S2 is 16 years at the private school and 15 years at the Government school.

Stakeholders

Direct stakeholders are the students (both boys and girls), as well as their parents/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 Unit on AIDS /Uganda Virus Research Institute (MRC/UVRI), Makerere University, the World Health Organisation and the London

School of Hygiene and Tropical Medicine (LSHTM).

Research methods / intervention description

The MENISCUS-2 study/intervention package includes:

- 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.
- Supplying analgesics (paracetamol) for menstrual cramps using a voucher scheme.
- Basic improvements to school sanitation facilities (providing soap, disposal bins, toilet paper, locks) to improve girls' privacy.

This study includes i) a stakeholder's workshop to finalize the intervention package; ii) cross-sectional surveys for both girls and boys at baseline and endline to assess knowledge, attitudes and perceptions of menstruation and the intervention package; iii) in-depth interviews and participatory group discussions with girls, teachers and parents to assess perceptions of the intervention; and iv) unannounced visits to check the maintenance of the WASH component of the intervention.

Each intervention will have an evaluation indicator to monitor progress and assess how the programme implementation is being achieved. The outcome of school attendance will be 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 are collected using electronic data capture (self-completed questionnaires entered on tablets using Open Data Kit software). We will measure retention in school as an estimate of loss-to-follow-up of participants in the future trial.

Objectives

The goal of MENISCUS-2 is to assess whether progression to a Phase 3 cluster randomized trial is justified in terms of pre-specified criteria. Phase 3 would



Group activity during a MHM workshop in Uganda: "one word about menstruation".
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deliver a menstrual hygiene intervention package to improve psychosocial outcomes, school attendance and performance in secondary schools in Wakiso District.

The objectives are to: i) pilot a combined package of MHM intervention elements developed in MENISCUS-1, delivered to a whole secondary school year for nine months; ii) measure the uptake and assess perceptions of each element of the intervention package, and the package as a whole; iii) pilot the use of daily diaries to estimate school attendance, and compare attendance with estimates using registers, observation visits and retrospective self-report; and iv) estimate the sample size required for a future trial.

Ultimately, the longer-term goal is 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).

Outcomes and Evaluation Plan

The MENISCUS-1 study was completed in September 2016, and two papers have been submitted for publication. For MENISCUS-2, the intervention schools have been selected and information shared regarding the packages the project will implement and the data on WASH facilities that has been collected.

An initial stakeholders meeting was held to finalize the 'Theory of Change' related to the study, engaging teachers, parents, students, representatives from the ministries of education and health and Entebbe Municipality, as well as NGO and research actors. The project started in August 2017 following approval from the Ugandan National Council of Science and Technology, and the consent process is underway. Each component of the intervention will be monitored and evaluated. For example, we will document the number of teachers trained and delivery of puberty education sessions, performance and attendance at the drama skit, a 'feelings diary' to monitor usage of the menstrual management kit, vouchers to monitor analgesic use, and observation checks to monitor WASH improvements. The relationship between school attendance and menstruation will be evaluated using daily diaries over nine months.

Lessons learned and next steps

The main challenges and lessons learned from those challenges were:

- Delayed national ethics approvals, and a general lack of familiarity with the menstrual cup as a

menstrual management option for schoolgirls has been a 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. Despite evidence provided to address these concerns, we did not receive approval to use the cup in the menstrual kit. However we plan to continue to liaise with the ethics board and hope to introduce the cup later in the study following further engagement with students and parents.

- 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. We anticipate this will also affect the collection of student diaries at the end of term and plan to start collect diaries a few weeks prior to the end of term.
- Lack of updated class registers has affected the programme. It has been addressed by encouraging the MENISCUS-2 'focal teachers', chosen to support



MHM workshop demonstrating AFRipads.
© WoMena Uganda.

project-based school activities on the basis of their interest and availability, to register students. Registering students means conducting a roll call, where S2 students are given a piece of paper to write their names during spot checks, which are compiled and compared to the S2 lists that we used for baseline. This enables us know class attendance in relation to diaries. However, we are not confident that the class registers provide accurate data on school attendance, and are using daily diaries instead which worked well in MENISCUS-1.

- Poor attendance at parents' meetings that involve information sharing and obtaining consent for students has also been an issue. This has meant inviting parents to schools more than once, which increases the project cost since each parent receives a transport subsidy every time she or he is invited to school. Sometimes, parents can be spoken to during other school activities, but still the turn up is poor. For purposes of information sharing and consenting process, the low turn up affects the timely completion of the consenting process and leads to more meetings being organised.
- As a next step, the MENISCUS-2 team will be hosting 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.

Scale up

The scale-up will be the cluster randomised trial involving 30 schools from Entebbe. The principal aim of a future trial would be to consider the effectiveness and cost-effectiveness of a comprehensive school-based MHM intervention. It would consider effects on reducing school absenteeism, improving school performance, menstruation knowledge, attitudes and management practices, psychosocial outcomes, prevalence of bacterial vaginosis in the schoolgirls, and the cleanliness and functionality of school WASH facilities.

Challenges

We anticipate ongoing challenges with liaising with the schools in terms of timing of activities. We also anticipate that the number of 'train the trainer' days per school may need to be increased, to enable

schools to conduct student training in a more proactive and independent manner; providing support by an implementing partner for schools individually could well be too costly. Obtaining and maintaining sufficient numbers of electronic tablets to enable self-completion of surveys by students is also an ongoing challenge.

Facilitators

Mass procurement of WASH facility hardware and analgesics may enable savings, which could be re-directed. In addition, training a larger number of teachers and prefects across the district may enable the building of a support network across schools, both for puberty education and Training of Trainers for menstrual health.

Recommendations

Our experience to date with MENISCUS-1 and MENISCUS-2 has highlighted a number of practical steps needed to ensure smooth running of an MHM project in schools. Some of our main recommendations would be to:

- Allow adequate time to obtain the necessary ethical approvals prior to start of the project. In our case this meant additional information and time was needed attempting to gain approval for the menstrual cup.
- Identify committed school administrators and contact teachers to keep the research team updated on school programme changes, and the coordination of student activities.
- Enable good coordination and involvement of parents, teachers, students and high-level stakeholders, which include NGOs, district leaders, the relevant ministries and community leaders.
- 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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Global

Integrating MHM into an Education in Emergencies response: learning from the development of a cross-sectoral toolkit

Columbia University Mailman School of Public Health
and International Rescue Committee

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.

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.

monthly menses.² Privacy is often non-existent while in transit, in camps or informal settlements. They often lack easy access to toilets (at households or at schools), which if available may lack doors, locks and lighting and are inadequate to manage menses. Access to spaces for washing and drying reusable materials or methods for disposal of used materials are scarce.³ These factors heighten the risk of exposure to violence, and are compounded by societal taboos and perceptions of shame around menstruation.⁴ As a result, women and adolescent girls are often inhibited from engaging in basic activities essential for survival and wellbeing, such as collecting food and water, engaging with social support networks or attending school.

Prior research has identified a range of challenges in MHM emergency response efforts, including a lack of documentation, guidance, and poor coordination across sectors.⁵ A lack of uniform guidance was also identified for incorporating MHM into various sector responses, including the types and timing of programmatic activities. Furthermore, the majority of

Introduction

Background

Over 30 million adolescent girls and women are currently displaced due to conflict and disasters across the world.¹ In many emergencies, girls and women lack access to basic materials needed to manage

2 International Federation of the Red Cross and Red Crescent Societies. "Menstrual Hygiene: What's the fuss? Piloting menstrual hygiene management (MHM) kits for emergencies in Bwagiriza refugee camp, Burundi," Geneva: International Federation of the Red Cross and Red Crescent Societies; 2013.

3 Parker, A, Smith, JA, Verdemato T, Cooke J, Webster J, Carter RC, "Menstrual Management: a Neglected Aspect of Hygiene Interventions," *Disaster Prev. Manag.* 2014. 23(4): 437–454.

4 McMahon S, Winch PJ, Caruso B, Obure A, Ogutu E, Ochari I, Rheingans R. "The girl with her period is the one to hang her head" Reflections on menstrual management among schoolgirls in rural Kenya. *BMC Int. Health Hum. Rights*, 2011.11 (1): 7.

5 Sommer M. Menstrual Hygiene Management in Humanitarian Emergencies: Gaps and Recommendations. *Waterlines*. 2012. 31 (1-2) 83–104.

1 UNHCR, Trends At a Glance: Forced Displacement in 2015. Geneva: UNHCR; 2016.

guidance that was available generally targeted WASH sectors but not the range of other sectors critical for providing a complete response, including the 'Education in Emergency' (EiE) sector. The research agenda outlined in this paper was introduced to generate improved evidence and understanding on the needs of girls and women living in emergencies. It also aimed to provide clarity on the roles and responsibilities for a range of sectoral actors needed to provide a complete response, including actors from the WASH, EiE, health, protection, non-food items, shelter, and 'Camp Coordination and Camp Management' (CCCM) sectors.

Context

The research was conducted in several diverse global humanitarian contexts in order to capture a wide range of experiences and learning. In each setting below, adolescent girls were interviewed through both focus group discussions and participatory mapping exercises (excluding Tanzania). This included in the following three emergency settings:

- Internally displaced persons (IDPs) living in camps in Rakhine State, Myanmar, which included both Buddhist- and Muslim-populated camps.
- Syrian refugees living in host communities and informal settlements across Lebanon, including in Beirut, Tripoli and Bekaa Valley.
- Burundian and Congolese refugees living in three camps located in the Kigoma Region of northwest Tanzania.

In addition to conducting research directly in emergency contexts, a global qualitative review was also conducted in which 28 cross-sectoral response practitioners from headquarters or regional humanitarian organisations were interviewed via phone, Skype and email survey to gather learning from their extensive experience, including advice on introducing MHM into response operations and the challenges they've met. A desk review of existing documentation (grey and scientific literature) was also performed.

Following these assessments, a toolkit was drafted and a consultation workshop was conducted for review/input.

The research was conducted with adolescent girls and took place in a variety of locations, given the contextual differences of each of the emergency

setting. For example, in Tanzania, the research with girls took place in either schools or other child-friendly spaces, while in both Myanmar and Lebanon, the research took place at women's protection centres. Schools and designated protection spaces were selected as the preferred location for these sensitive discussions as they were considered to be private, safe and convenient spaces, especially given the limited space and resources available in many emergency contexts. In addition, the adolescent girls were already utilising these spaces through attending school or adolescent girls' groups, which increased their comfort interacting with each other and the research team.

Stakeholders

The key stakeholders for this research included:

- Displaced adolescent girls and women living in emergency contexts: Girls and women living in emergencies have critical and unique menstrual needs. Considerations need to be made to ensure that they are able to access appropriate menstrual materials and supplies, female friendly toilets (safe, private spaces with water and a disposal option), and information (on menstrual hygiene and health).
- Frontline cross-sectoral programme staff directly delivering services to adolescent girls and women. These actors need to be familiar and comfortable directly supporting girls and women in addressing MHM. From the EiE sector, this includes all education staff, including teachers, school staff and other relevant actors.
- Programme supervisors and country-level staff responsible for designing, co-ordinating and monitoring field activities. In order for MHM to be effectively operationalised across EiE programming, programme supervisors need to be aware of the range of activities involved in an MHM response to ensure they are addressed across work plans, budgets, and trainings.
- Technical staff, including at cluster and inter-agency levels, providing technical support, co-ordination and developing standards. As the senior thought leadership and advisors, it is essential that MHM programming is clearly understood and prioritised, including in global budgetary, planning and monitoring operations.
- National governments hosting or supporting displaced populations. As country-level governments are often involved in providing support and



A health sector staff member providing emergency MHM supplies for Burundian adolescent girls and women arriving at the border points in Tanzania.
© Columbia University; International Rescue Committee.

protection to displaced populations, they must be engaged on the value of incorporating MHM as a vital component of service provision.

- The international donor community that provides financial assistance to these various organisations and agencies. To ensure that these organisations and actors are able to react rapidly and provide girls and women with support in addressing MHM, both financial resources and donor expectations need to incorporate the importance of MHM as a vital component of routine emergency response operations.

Research Methods / Description of intervention

The research activities conducted for this project can be separated into two phases

Phase 1: involved better understanding the ways in which humanitarian emergency organisations respond to adolescent girls' and women's MHM needs in humanitarian emergency contexts.

Phase 2: involved conducting a process evaluation of the MHM in emergencies toolkit pilot in Tanzanian refugee camps. This was to assess several factors: the extent to which the toolkit was implemented as designed; the factors that support (or prevent) its uptake; its influence on the provision of MHM programming; and how the toolkit guidance was modified during implementation. This activity sought to generate insights into the feasibility and appropriateness of the toolkit across a broad range of sectoral actors.

Specifics on the methods utilised for each phase have been defined below

Phase 1: There are significant gaps in the evidence on the MHM challenges faced by girls and women in emergencies and on appropriate response approaches. Formative research was conducted to begin filling these gaps, including three components:

- Global desk review of existing documentation on MHM in emergencies (grey and scientific literature);
- Key informant interviews of cross-sectoral staff from headquarters and regional humanitarian organisations; and
- Qualitative assessments with girls and women (aged from 14 to 45 years) and response staff

in two contexts (IDP camps in Rahkine State, Myanmar and Syrian refugees living in host communities/informal settlements in Lebanon).

Phase 2: The toolkit was piloted in three refugee camps in northwest Tanzania, with the aim of generating insights into its feasibility and appropriateness for its broader use in humanitarian response settings. This included two components:

- Process evaluation, including longitudinal monitoring of implementation efforts and documentation of barriers to usage, implementation challenges and successes, and other practical learning.
- A final evaluation was conducted at the conclusion of the pilot utilising qualitative and observational methods to assess uptake and implementation efforts.

Objectives

The key objectives included the following:

To contribute to the evidence base around MHM in humanitarian contexts. This includes generating improved learning on the specific needs of girls and women in a range of contexts. Furthermore, the project sought to expand on the role of response actors in addressing these needs, and create dialogue on the barriers to introducing MHM across several sectors (including the EiE sector) and on practical strategies for generating consensus and buy-in across actors and stakeholders.

To develop effective cross-sectoral MHM guidance for humanitarian programming to improve MHM outcomes for girls and women. The MHM in emergencies toolkit was developed to provide practical support for a range of relevant emergency sectors, on how to introduce MHM, sustain it across activities and ensure that effective monitoring and evaluation activities are introduced.

To develop evidence-based monitoring measures for MHM in humanitarian response. This project has developed a range of sample indicators for response actors to integrate into their existing monitoring and evaluation frameworks. However, practical learning and testing of these measures is essential to ensure they are appropriate to the context.

Outcomes

The MHM in emergencies project has achieved the following key outcomes:

Generation of new learning and evidence on MHM in emergencies: The project generated a great deal of new learning on the scope of MHM in emergencies from a range of new contexts and actors. This included exploring MHM from the perspective of numerous response actors rarely engaged on MHM during emergencies, including the EiE sector. The practical learning was utilised to inform the development of the MHM in emergencies toolkit, which is comprised of best practices and implementation strategies, challenges identified and practical case studies from around the world. In addition, the learning was also analysed and used to develop three publications^{6,7}

6 Sommer, M, Schmitt ML, Clatworthy D, Bramucci G, Wheeler E, Ratnayake R. What is the scope for addressing menstrual hygiene management in complex humanitarian emergencies? A global review. *Waterlines*, 2016. 35 (3): 245–264.

7 Schmitt, ML et al. Understanding the menstrual hygiene management challenges facing displaced girls and women: findings from qualitative assessments in Myanmar and Lebanon. *Conflict and Health*, 2017. 11 (19): 1-11.



A sample of a female toilet in a school in Nyaragusu Camp including a water source, mirror, shelf and hook for hygienically storing menstrual materials and supplies while in use.
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which aim to share this learning with a wider audience of stakeholders and to develop the evidence base further.

Development and dissemination of a cross-sectoral toolkit for integrating MHM into humanitarian response:

The MHM in emergencies toolkit was finalised in August 2017. The toolkit packages included: a full guide; a mini guide; training resources; and two infographics. The guide included a specific chapter targeting the EiE sector that provides strategic advice for integrating MHM into response activities, case studies, and monitoring tools. The toolkit, co-published by 27 organisations, is now being widely disseminated across platforms.⁸

Toolkit piloted in three refugee camps and learning integrated into toolkit:

The toolkit was piloted in three camps in Tanzania. The learning generated in the pilot enhanced the toolkit and expanded upon the evidence available on MHM strategies during emergencies.

Some of the key activities and assessments initiated as part of the pilot included:

- The provision of translated puberty books to Burundian and Congolese girls and boys in the camp schools;
- Improvements to female toilets at schools, and protection spaces to be more supportive to MHM needs;
- Provision of emergency menstrual materials and supplies to menstruating girls at schools and girls and women who had just crossed over the border (and were often in dire need of support);
- MHM training undertaken with staff and with caregivers of girls and women with special needs.

Lessons learned and next steps

As common in emergency-focused research, circumstances relating to the project research locations shifted throughout the project. Safety concerns, worries about over-burdening programme staff, country-office capacity given competing demands, and obtaining ethical clearance required flexibility when determining appropriate research locations. In addition, the selection and recruitment of safe and private spaces for conducting the research with girls and women proved

8 To download the toolkit, visit <https://www.mailman.columbia.edu/research/gate-program-gender-adolescence-transitions-and-environment/menstrual-hygiene-management-emergencies>



Humanitarian staff in Tanzania being trained on the basics of MHM, including the challenges girls and women face in being able to wash and dry menstrual materials.
© Columbia University; International Rescue Committee.

challenging at times. However, despite such logistical challenges involved in this type of research, it was found that girls and women in all of these locations were willing to engage honestly on the topic of menstruation, and they were extremely appreciative to be able to voice these often secretive and stressful concerns.

Moving forward, we advocate for direct qualitative consultations like this to be routinely conducted in more emergency contexts with adolescent girls and women. The success of these methods is also largely dependent on the adoption of a variety of sensitivity safeguards including ensuring that all research occurs in safe, private locations with trained female facilitators (preferably from their culture), stratified into appropriate age breakdowns (adolescent girls separated from older women), and properly assured that their confidentiality and privacy will be maintained.

Challenges were also identified in the uptake up MHM across educational activities. Key barriers identified included discomfort by teachers and programme staff in discussing MHM (including local programme staff of both genders) and a lack of direct or written guidance describing the MHM activities and strategies they should be introducing. In addition, there was a lack of clarity on sectoral roles and when MHM programming should be introduced (the acute versus chronic period of a response), a concern voiced by several EiE

actors. The gender of programme staff, especially senior leadership, was also often found to influence both the breadth and timing of an MHM response.

Additional research into key intervention approaches for integrating MHM into EiE response operations is still needed despite some recent growth in guidance now available.⁹

While the project contributed to the evidence base around MHM in emergencies, there is more work needed to implement and test promising approaches to MHM provision, including the design and operations of sanitation facilities and waste disposal systems in school settings, strategies for engaging boys and males, and MHM co-ordination mechanisms (especially between WASH and EiE actors). This work will help to provide further guidance for humanitarian responders, and more effective services to women and girls living in humanitarian emergencies.

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⁹ Inter-Agency Network for Education in Emergencies (INEE) (2010) INEE Minimum Standards for Education: Preparedness, Response, Recovery, 2nd edn, New York: INEE.

Eritrea

“Breaking the Taboo”: male perceptions of menstruation in Eritrea

Ministry of Education, Ministry of Health, National Union of Eritrean Women 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

Background

Few studies to date have explored in depth the specific knowledge and attitudes of men and boys towards menstruation and MHM. An accurate understanding of men’s and boys’ knowledge and attitudes towards menstruation is particularly vital in contexts such as Eritrea, where men almost always control decision-making; around the allocation of financial resources within households, within institutions such as schools, and within wider communities, where men often exert control over women and girls’ social behaviour.

To explore these themes and others related to girls’ experiences of MHM in Eritrea, the Ministry of Education carried out formative research in 2017. The research was part of the UNICEF’s global WASH in Schools for Girls (WinS4Girls) project, funded by the Government of Canada. The overall objectives of the research were to:

- Identify and understand the range of personal challenges and needs girls have during menstruation in the school setting;

- Identify the determinant causes of these challenges;
- Provide recommendations on improving school environments to address girls’ challenges related to menstrual hygiene management (MHM).

Within this overall framework, the researchers examined the specific knowledge and attitudes of men and boys around menstruation and MHM, and the impact that these factors had on adolescent girls.

Context

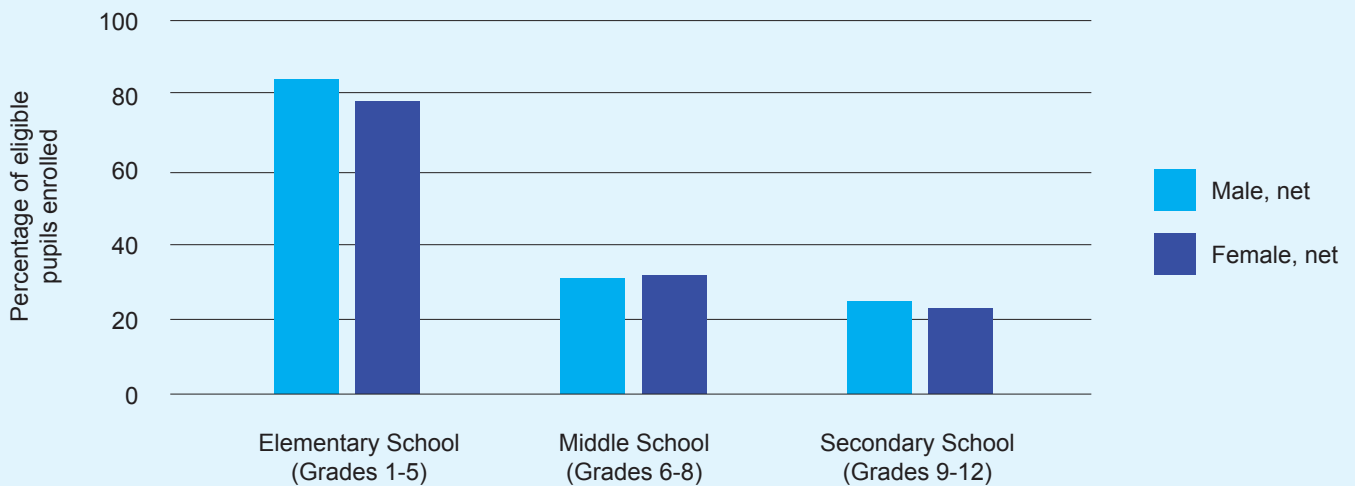
Eritrea is situated in the Horn of Africa on the Red Sea and is bordered by Sudan, Ethiopia, and Djibouti. It has an area of about 124,000 square kilometres. Eritrea is divided into six administrative regions, or ‘Zobas’ (Anseba, Debub, Gash Barka, Maekel, Northern Red Sea and Southern Red Sea), 59 sub-

Table 1:
Educational statistics, Eritrea, 2014-2015

	# public schools	% female enrollment
Elementary school enrollment (grades 1-5)	871	45.3%
Middle school enrollment (grades 6-8)	321	45.0%
Secondary school enrollment (grades 9-12)	93	45.4%

Source: Eritrea: Essential Education Indicators 2014-2015 (p. 12)

Figure 2: Net enrolment in basic education



Source: Eritrea: Essential Education Indicators 2014-2015 (p. 12)

regions ('sub-Zobas'), 704 local administrative areas, and 2,580 villages. It spreads across three distinct geographic zones: the Western Lowlands, the Central and Northern Highlands, and the Eastern Lowlands.

The educational system in Eritrea consists of primary schools (grades 1-5), middle schools (grades 6-8), and high schools (grades 9-12). Ninety-one percent of schools are government schools, administered and financed by the Ministry of Education. Education is compulsory until grade 8 and enrolment in government schools is free, although schools charge nominal registration fees to cover operational costs. Enrolment in first grade usually occurs at age six/seven. Lessons are taught in local languages in primary school, but from grade 6, all instruction is in English.

Stakeholders

There are a range of different government institutions, civil societies, academia and international community organisations which contribute to addressing the challenges girls are facing in managing their menstruation in school. These interventions often utilise a holistic approach, addressing the attitudes and perceptions of boys and men on menstruation and menstrual hygiene management. The key stakeholders can be summarised as follows:

- Male and female students are the primary stakeholders in the formative research.

- School management, including teachers, directors and parent teacher associations.
- The Ministry of Education helps create a conducive school environment by incorporating gender-sensitive MHM into existing national WinS programming, so that girls are better able to manage their menstruation with dignity. This involves the development of policies and guidelines, revision of the curriculum, and capacity development activities for teachers and students.
- The Ministry of Health plays a major role by including MHM in current sanitation and hygiene, adolescent health, and health promotion programmes. Health facilities are the main source of information to the community, through hygiene promotion campaigns and programmes. The ministry plays a great role in enhancing health literacy of mothers and fathers in the community.
- The Ministry of Information supports MHM in raising the awareness through broadcasting messages on the radio and TV, increasing the national understanding of current MHM practices and the barriers faced by girls in schools.
- The National Union of Eritrean Women reaches the community through representatives at the community level, a structure which enables the scaling up of interventions. The organisation's representatives play a key role in raising awareness of MHM issues among mothers and girls, in

addition to advocating for girls' empowerment in managing their menstruation in schools.

- Religious groups can help to address religiously-informed belief and restrictions related to menstruation and MHM.
- Academia and research institutions will contribute to further research and evidence generation.
- The Ministry of Finance will be a key stakeholder for the successful allocation of budgets supporting MHM interventions.
- Donors and international development agencies are crucial for the raising of funds, and for support advocating for girls and MHM initiatives within government and civil society programmes and interventions.

Research methods

For this study, UNICEF and Emory University reviewed methodologies and tools exploring the issue of MHM in other country contexts globally and adapted them for the Eritrean context. The current analysis was part of a larger study that also included interviews with girls, mothers, teachers, members of parent teacher associations, and health centre staff.

The research was conducted in 11 schools covering all of Eritrea's six administrative regions. Schools were selected from urban, semi-urban, and rural communities. In each school, focus group discussions were conducted with boys attending middle school and with fathers of girls attending middle schools. A total of 105 boys and 94 fathers participated in the study. All the interviews were conducted in middle schools.

A qualitative approach was employed to identify the range of knowledge, attitudes and practices among participants. Tools were based on a social-ecological framework that examined issues at different levels within participants' lives and the broader societal context. A number of societal factors were considered, such as traditions and cultural beliefs, as well as interpersonal factors such as communication with wives, daughters, sons, and peers – and personal factors including knowledge and beliefs.

Objectives

There several objectives of the research: to identify

men's and boys' current knowledge about menstruation; to gauge their awareness of girls' and women's MHM practices, needs, and challenges; and to understand their beliefs and attitudes regarding menstruation and menstruating women. Based on these findings, the research project intended to provide recommendations on how to overcome the negative effects that men's and boys' knowledge, awareness, beliefs, and attitudes can have on girls' and women's capacity to confidently manage their menstruation, and to participate fully in society while menstruating.

Outcomes

Findings from the research suggest that fathers tended to have a limited understanding of the biology of menstruation and often had a limited understanding of MHM practices and requirements. This included being unaware of the possible benefits of disposable pads over cloths or how many pads were needed for a menstrual period. Although fathers were typically responsible for providing financial support for MHM materials, they infrequently spoke with their wives about their daughter's' menstrual hygiene needs. They spoke with their daughters even less, and felt that it was the mother's responsibility to do so.

Men were typically aware that their daughters faced difficulties related to menstruation, including missing class. Many fathers said that it was acceptable – or indeed preferable – for girls to stay at home during their periods to avoid the shame of a potential blood stain. Fathers also commonly felt that women should avoid contact with boys and men during their periods because they were not 'clean'. Men reported more cultural taboos and restrictions related to menstruation than did mothers and girls. Fathers frequently associated menstruation and menstruating women with concepts of shame and dirtiness. In most communities, fathers said menarche signified that girls were ready for marriage. Boys tended to have a better understanding of menstrual biology than the fathers due to information learned during 7th and 8th grade science classes. However, their knowledge of biology and MHM requirements remained limited and some boys had not heard about menstruation prior to the interview. Most boys had never discussed menstruation with a parent. Boys were largely aware that menstruation causes changes in girls' behaviour, including isolation, stress, embarrassment, shyness, decreased participation in class, and decreased attendance.



Eritrean school girl.
© UNICEF

Many boys expressed negative attitudes towards menstruation, especially feelings of disgust, which was often associated with a lack of knowledge about menstruation. Boys in several schools reported teasing as a problem and said that teasing is done by “boys who do not know” about menstruation.

Lessons learned and next steps

The topics discussed during this study were extremely sensitive for many of the study participants, and many participants had never spoken about menstruation openly. Although interview facilitators strived to maximise the willingness of participants to engage in the conversations, at times it was not possible to fully explore all of the topics in the discussion guides and follow up on all issues and ideas that emerged during the interviews. This was particularly challenging for interviews with boys.

The research has greatly increased the policy visibility of menstruation and menstrual hygiene management

in the Ministry of Education. It was appreciated that this research uncovered the challenges and barriers girls face in managing menstruation, as well as the impacts these have on girls' lives. The evidence gathered on the attitudes of boys and men towards menstruation, and on traditional beliefs/restrictions surrounding it, has inspired various organisations to address the issue, laying the groundwork for different interventions.

The research has been used to design an intervention package for girls and boys in schools. The intervention will initially focus on raising awareness of the challenges girls face managing their menstruation in schools. The target groups will be girls, boys, mothers, fathers, teachers, school management, policy makers and WASH practitioners. Awareness-raising interventions will include seminars, training, workshops, health education, campaigns, and media broadcasting. Once awareness of MHM issues has improved, MHM interventions and programming will be introduced.



Group of Eritrean school girls.
© UNICEF.

The main challenges that could arise in scaling up will be budget constraints and the ability to monitor the quality of interventions accurately. For this reason close attention to monitoring and quality assurance is recommended from the start of scaling up. The ability to continuously review interventions and implement corrective measures will also be crucial.

Recommendations

Evidence generation is a crucial first step for the successful implementation of MHM programming, and it is important to include groups that have direct and indirect contribution to the issue. Research amongst those directly and indirectly involved will help to address gaps at a societal level.

It is also vital not to forget to include fathers and boys as key research participants. Understanding their knowledge, perception and attitude helps to design interventions that address MHM with a broader societal perspective.

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Two middle school girls in Eritrea.
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Kenya

Improving MHM in Schools to enhance learning for adolescent girls in Kenya

Kenyan Ministry of Education and Ministry of Health and UNICEF Kenya

MHM in Ten

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.

Introduction

Background

The health and education sectors in Kenya are key components of the social pillar of the Government's 'Vision 2030' initiative, with the goal of developing a population that is healthy, productive and able to fully participate in and contribute to other sectors of the economy. According to Vision 2030, Kenya's vision for health is 'to provide equitable and affordable, healthcare at the highest quality standards'. Several articles of Vision 2030 underpin the right to health¹. To realise Kenya's vision for health, the 'National Health Sector Strategic and Investment plan' was developed, with a specific focus on reducing health inequalities.

The 2010 Constitution of Kenya states that all citizens have a right to education and health. Specific pieces of legislation also help enshrine various rights to health and education in Kenya, including sexual and reproductive health.

The gender parity index in education in Kenya declines as children advance towards adolescence, from 1.05 at early childhood to 0.97 at primary and 0.92 at secondary level² (where 1 represents parity); implying low transition and completion rates at school for girls. Poor MHM in schools has been shown to cause adolescent girls anxiety and low self-esteem, contributing to absenteeism and leading to poor performance in schools³. There are multiple reasons for this MHM-related social

1 Government of the Republic of Kenya, social pillar (Kenya Vision 2030, A Globally Competitive and Prosperous Kenya) 93.

2 Ministry of Education Science and Technology, Enrolment by Gender and Level of Education (Basic Education Statistical Booklet 2014) 7.

3 UNICEF. 2012. Raising Even More Clean Hands: Advancing Health, Learning and Equity through WASH in Schools. New York, UNICEF.

impediment for girls. There is a lack of existing policies and guidelines, including no set standards on re-usable MHM products, a physical lack of adequate MHM products, inadequate options for proper disposal of used sanitary products, as well as existing cultural practices, taboos and myths surrounding MHM⁴. In short, a girl's ability to participate in society during menstruation is being hampered on several fronts.

Kenyan primary schools (particularly those in rural areas) often have no drinking water, sanitation or hand washing facilities. Even where such facilities do exist, they are often inadequate in both quality and quantity. The available data provided by the Ministry of Education, indicates that access to drinkable water in public primary schools is 42.8 per cent, while access to improved sanitation stands at 69 per cent⁵. Girls are particularly affected by a lack of private sanitation facilities, leading to absenteeism during menstruation, and in some cases even dropping out altogether at puberty.

Context

Since 2013, UNICEF has been working with the Government and other partners in Kenya on MHM in schools to improve the learning environments for adolescent girls. At a national level, the focus has been on strengthening policy frameworks, generating evidence, documenting best practices, and integrating of MHM indicators into the national monitoring system. This includes review of the existing school health policy, which was undertaken to ensure it includes a component of MHM.

UNICEF has also supported the MOH in development of a new MHM policy. The policy has been finalized and shall be implemented beginning in 2018. The aim of the new national MHM policy is to enhance the MHM status of women and girls in Kenya and contribute towards realisation of their full potential in national development. The policy frames MHM squarely as a human rights issue, bringing it into the mainstream policy sphere of health and development. The MHM policy examines the prevailing social, economic, cultural and demographic context of MHM of women and girls, including its implications for their health and development. As a complement to sector-specific

policies and programs, the policy clearly defines structures and key components of MHM to facilitate their mainstreaming in all sectoral planning activities. In addition, the policy has outlined principles, objectives, priority areas and actions for MHM in Kenya.

The policy implementation framework details the management and coordination, and provision of MHM services, the roles and responsibilities of various sectors and stakeholders, researching and utilisation of evidence-based interventions as well as monitoring and evaluation. The central focus of the MHM policy is to help provide all Kenyan women and girls with rights and freedoms to dignity, health, education and decent work. The policy aims to break the social and policy silence around the natural phenomenon of menstruation, to enable Kenya's women and girls to access information, make informed choices and participate fully in all walks of life – every day of the month.

The MHM policy is guided by the following overarching principles, which aim to ensure that the objectives are met:

- The right to sanitation (and its corollary hygiene) is the critical pillar of survival and good health.
- The right of girls and women, boys and men to understand and know their bodies is important, so that they can manage the different stages of life and the linked biological functions with safety, dignity and pride.
- There should be respect for diversity and difference: women are not a homogenous group but have different needs based on their age, physical and health conditions and stage of life. They include severely disadvantaged girls, girls who are out of school, working girls and young mothers.
- The right of women and girls in humanitarian conditions (drought, refugees, other) to manage their menstruation with safety and dignity is important, as a part of Kenya's commitment to humanitarian binding policies and frameworks.
- The rights of women and girls with disabilities should be respected; they have different menstrual hygiene management needs which will vary from individual to individual and according to their disability.

At county level, the MHM programme (as part of WASH in schools) has been implemented in 17 out of 47 counties in the country. The country has had

⁴ Sommer, Marni, Emily Vasquez, Nancy Worthington and Murat Sahin, WASH in Schools.

⁵ Ministry of Education Science and Technology, pupil toilet, Access to water and sanitation (Basic Education Statistical Booklet 2014) 23, 25

a devolved system of government since 2010, with power devolved to these 47 counties. The education sector, however, is not devolved, and is managed by the national Government under the Ministry of Education. Health and water policy, management and delivery have been devolved to the counties.

The MHM programme was mainly implemented in rural and peri-urban schools. Capacity building, advocacy and awareness creation have been critical components in both national and sub-national levels, with a broad focus on:

- Changing perceptions on menstruation;
- Influencing behaviour change; and
- Increasing access to MHM facilities, by supporting the construction of gender-friendly WASH facilities with MHM components for hygiene management and disposal in schools.

Kenya has an '8-4-4' education system (8 years in primary education, 4 years in secondary education and 4 years in the university). Menstruation is taught as part of science lessons under body changes and development, as a biological process. This perspective often means

lessons lack guidance on effective menstruation and safe hygiene management. However, the education system in the country is currently undergoing reforms and will move to include MHM under the health education component of the new curriculum. Piloting of the new curriculum is currently underway, and will be fully implemented in 2018 if accepted. This will greatly help the sustainability of MHM education in Kenya, as it will be a continuous part of the school curriculum.

Stakeholders

Key stakeholders for the programme include the Ministry of Education, the Ministry of Water, and the Ministry of Health. NGOs are also key and include WASH United, Africa Medical and Research Foundation (AMREF), World Vision, Caritas, Care, Save the Children, Sustainable Aid in Africa (SANA), Netherlands Development Organization (SNV). Direct stakeholders for the programme are the school communities, including the school children themselves.

The WinS sector is coordinated through the school WASH technical working group, which sits under the umbrella coordinating body known as the 'Environmental Sanitation Inter-Agency Coordinating Committee'. The



Girls being trained on Menstrual Hygiene Management.
© Pamela Koskei/2017/UNICEF Kenya

90,000

Girls

335

Schools

17

Counties

ministries of education and health chairs the school WASH technical working group, with the participation of the Ministry of Water, the NGOs and private sector partners (including Afripads and Transformational Textiles). This technical working group co-ordinates WinS work (including MHM), which helps to avoid the duplication of resources. Academic partners are also involved, including Maseno University, the Liverpool School of Tropical Medicine, county governments, and the council of governors. The sector receives financial support from the Government of Kenya, Government of Netherlands, World Bank, the UK Government, Unilever, UNICEF, WASH Alliance and the Water Supply and Sanitation Collaborative Council (WSSCC).

The Ministry of Education has demonstrated great commitment to MHM work by providing sanitary pads to girls. Section 88 of the 'Principal Education Act' was amended in June 2017 and now states that the Government will provide free, sufficient and adequate quality sanitary towels to every girl registered and enrolled in a public basic education institution who has reached puberty. The Act also commits the Government to provide a safe and environmentally sound mechanism for disposal of the sanitary towels.

The use of various actors and stakeholders ensured that there was adequate representation and participation

in the MHM programme at the national, county and school levels. This has ensured ownership of the project by the Government and schools – increasing the sustainability beyond the official project period.

Description of intervention

The development of the MHM policy took a comprehensive and holistic approach to move towards achieving good menstrual health for all women and girls in Kenya. The implementation of MHM in schools included extensive consultations with many different stakeholders at the different levels and stages of developing the national policy, including discussions with the primary direct stakeholders in schools.

Before the launch of the MHM policy, there were a range of interventions on MHM as part of WASH in Schools programmes that have informed the development of the policy. Key interventions on MHM include:

- Providing gender-sensitive WASH infrastructure in 335 schools in 17 counties and benefiting 90,000 girls. The sanitation facilities being provided include a girl-friendly bathroom for use during menstruation. The WASH component has provided a sustainable, safe, dignified and environmentally friendly solution to assist girls with their MHM. The intervention introduced reusable sanitary towels which are environmentally friendly, and MHM 'dignity kits' which contain sanitary towel, soap, bucket, and underwear.
- Sensitising communities, teachers and government partners to de-mystify menstruation, and to allow discussion of how taboos and cultural beliefs can hinder safe, dignified MHM practices.
- Influencing development of the new MHM policy and delivery work, and revision of the school health policy to include a component of MHM in schools. MHM has been mainstreamed into other related policies such as the Kenya Environmental Sanitation and the Health policy, Education Act and School Health policy.
- Advocating for diversification of menstrual products and for budget allocation for MHM programming and resources.
- Providing information on and advocacy for MHM through public health officers and education officers. These officers have been trained and mobilised to enhance the dissemination of MHM information. Men and boys have also been part of MHM education, and were involved in distribution of the dignity kits, to help

encourage support for girls during menstruation.

- Training trainers such as patrons and teachers at schools and health clubs, who then help to form MHM peer support groups for the girls.

The monitoring and evaluation of programme implementation has been through reports and field visits. It is encouraging that the Ministry of Health has taken the lead in ensuring that MHM indicators have been developed; the ministry is currently working towards integrating them into Kenya's Demographic & Health Survey and related online management information systems.

Objectives

The broad policy objectives include

- To improve the enabling environment of MHM work in Kenya; and
- To de-mystify prevailing myths, taboos and other cultural practices associated with MHM among school-going pupils.

The programme's objectives include

- To increase knowledge and create awareness on MHM for school-going pupils;
- To increase access to sanitary towels for adolescent girls in schools; and
- To increase access to gender-friendly WASH facilities.

Outcomes

The main outcomes of this initiative include

- Kenya's environmental sanitation and hygiene policy has been revised to include a component of MHM.
- The national MHM policy and strategy has been developed, to address MHM issues in Kenya.
- MHM has been incorporated into the new school curriculum
- The national school health policy has been revised to include a component of MHM.
- The UNICEF effort has meant that 90,000 girls in 335 schools have been provided with safe and hygienic bathrooms with MHM facilities (water supply, soap, hand washing facilities, and girl friendly latrines) and reusable sanitary towels. This contributed

to reducing absenteeism and facilitating regular school attendance and improved performance⁶.

- Standards and guidelines for WASH infrastructure have been revised to ensure they are gender sensitive and have disposal options for menstrual waste.
- Capacity has been built around 76 MHM Trainers of Trainers, comprised of public health officers, education officers, NGO staff and county level quality assurance officers.
- The wives of 15 county governors have been recruited as MHM champions and trained, to raise awareness and understanding on MHM advocacy.
- Sanitary towels were provided to a cumulative 11,225,053 girls by the Ministry of Education between 2011 and June 2017.
- A national MHM-Day has been held on 28 May each year since 2013 to raise awareness of MHM and that it matters to all.
- Teachers, boys and girls in schools have been trained on MHM. This has helped to de-mystify menstruation.

Lessons learned and next steps

A main challenge remains improving access to MHM in schools. This is primarily due to the low prioritisation given to WASH in schools by Ministry of Education, which is not decentralised to the counties, and has very limited budget for WASH infrastructure in schools. This leaves the financial burden for construction of WASH facilities resting on parents of students. This challenge is being addressed through advocacy and lobbying of the county and national government to set up coordination mechanisms, and to increase the allocation of budgets for WASH in schools. First steps towards this include the Ministry of Education committing part of its budget to the provision of sanitary towels for all adolescent girls, and the county governments of Kisumu, Migori, Trans-Nzoia and Kitui committing kshs 70 million (approximately USD 700,000) to leverage WASH in schools interventions.

Another persistent challenge is the taboo nature of MHM. There are also issues even where WASH facilities have been provided in some schools, because disposal facilities for menstrual waste are lacking;

⁶ UNICEF 2016: Exploring impact of WASH services on school enrolment, retention, and transition and learning achievements in Kenya's Primary schools. (Unpublished)

many schools resort to dumping the used sanitary towels into the pit latrine, or to burying and burning.

The MHM programme in Kenya has also not been designed to adequately address MHM issues for girls with disabilities. Girls growing up with disabilities can have even more difficulty on their MHM in school, potentially leading to early drop out.

Overall the programme has created new opportunities, such as creating an enabling environment for MHM in schools and communities, the use of a wider variety of menstrual products and establishment of standards for reusable sanitary towels. It has also widened inter-sectoral linkages in the implementation of MHM in schools.

Scale up

In 2018, the MHM policy will be disseminated at the national and the sub-county levels, and within the schools themselves. At the policy level, partners will continue to advocate to the Ministry of Health and the Ministry of Education, to improve MHM awareness and generate further budgetary allocation for capacity building and for construction of girl-friendly WASH facilities in schools. UNICEF and other NGOs should also advocate for inclusion of all components of MHM (provision of sanitary towels, MHM Education, WASH infrastructure) in Ministry of Education, Ministry of Health, Ministry of Gender and Ministry of Water to view MHM as a priority area to attract funding from the government.

Capacity building of Trainers of Trainers, including governors' wives as MHM champions, in the remaining counties will also be carried out, in partnership with the relevant ministries.

The quality of the programme may be influenced by factors such as the lack of tools for data collection and analysis, and the lack of buy-in from some of the stakeholders. Common standards and indicators for data collection, and the integration of MHM into emergency response situations will also need to be implemented. Inadequate funding for scaling up of WASH infrastructures in schools is also a major challenge.

Recommendations

The development of the MHM programme (including policy development) should be an all-inclusive process whereby the line ministries and stakeholders actively participate in developing the policy. There should also be an enabling environment that provides for the integration of MHM with other policies. This helps provide a holistic approach so that MHM issues can be adequately addressed.

Students, teachers and parents should be fully involved in the planning, monitoring and implementation; this can generate a sense of ownership and therefore promote the sustainability of the programme. Conducting solid research is also crucial, creating a strong evidence base for the MHM policy and programme. There should also be a strong coordination and leadership mechanism in place from a lead agency (for example a designated MHM desk officer at the relevant ministries).

Conclusion

Overall, MHM programming especially in schools is gaining momentum in Kenya, with the Government and communities as key drivers. There are already early indications of the benefits of MHM interventions since 2009, with monitoring data showing that in schools where UNICEF was implementing the programme, girls' enrolment increased by 7.4 per cent and their performance improved by 5.4 per cent as compared to where no intervention of MHM has taken place⁷. Although there is much more work to do, the new policy frameworks and structures that have been put in place will help ensure the successful scaling-up and sustainability of the programme – ultimately contributing to keeping more adolescent girls in school and improving their performance.

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⁷ UNICEF 2016: Exploring impact of WASH services on school enrolment, retention, and transition and learning achievements in Kenya's Primary schools. (unpublished)

Zambia

Rolling out the MHM programme through the Zambian Ministry of General Education

UNICEF and the Zambian Ministry of General Education

MHM in Ten

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

higher than that for boys at 1.3%. Similarly, in grades 8-12, the female dropout rate is more than two and a half times that of boys at the national level.¹

Several actions were undertaken in order to identify, understand and address the main challenges related to WASH in schools. In 2012 the Ministry of General Education, with support from UNICEF, conducted a bottleneck analysis. The ministry conducted an MHM pilot study in 2013, again supported by UNICEF, together with the SNV and WaterAid, to look at MHM among girls in primary schools and its effects on school attendance in Zambia. The study showed that most girls do not know how to manage their menstruation, and as a result sometimes drop out of school. In order to improve the coordination between the ministry, partners and other relevant ministries², a WinS 'National Technical Committee' hosted by the Ministry of General Education was set up in 2014. The technical committee has contributed to a coordinated approach for the major WASH/MHM in school programmes funded in recent years by the Government of the Netherlands, USAID and the UK government. The coordinated approach has also formed the basis for the current national MHM programming by the Zambian Government.

Context

During the last five years, with partner support, the Government has equipped more than 2000 schools with segregated and girl-friendly toilets, reaching approximately 870,000 school-going children. Since

¹ In 2016, grades 8-12 female dropout rate was 1.8% and male dropout rate was 0.7% (Source: Education Statistical Bulletin 2016. Ministry of General Education, Directorate of Planning and Information, Zambia.)

² The Ministry of Health, the Ministry of Local Government, the Ministry of Gender, and the Ministry of Water Development, Sanitation and Environmental Protection.

Introduction

Background

As of 2016, Zambia had a total learner population of 4,025,380 in 8,823 primary and 851 high schools. The Ministry of General Education conducts a dropout analysis annually, in order to identify and address factors that lead to school dropout. The analysis consistently finds that more female learners drop out in comparison to their male counterparts. This is attributed in part to early marriage and inadequate support to the transition to adolescence, including biological changes such as menstruation. In 2016, the female dropout rate in grades 1-7 at 1.8% was

2014, the Ministry of General Education has led the implementation of the 'WASH in Schools for Girls: Advocacy and Capacity Building for MHM through WASH in Schools' programme' (WinS4Girls). The Zambia Wins4Girls programme is part of a UNICEF-supported and Canadian Government-funded MHM project, covering 14 countries. WinS4Girls has contributed to the development of tools and recommendations for incorporating MHM in national programming. At the beginning of WinS4Girls, a formative research study was conducted to understand factors affecting MHM practices among adolescent pupils, boys and girls, in six schools in rural areas in Rufunsa and Mumbwa districts. The research findings have led to the development of national MHM guidelines, and a toolkit for the implementation of the guidelines at school level. The MHM toolkit was piloted in 30 rural and urban schools in 7 districts between June and August 2016.

Stakeholders

The Centre for Infectious Disease Research in Zambia, together with a Zambian research NGO and the University of Zambia's Department of Gender Studies carried out the assessment process, with technical support from Emory University and UNICEF, and under the leadership of the Ministry of General Education. The study research protocol was commissioned by the ministry, then reviewed and approved by an independent ethics committee. Further approval was provided by the Ministry of Health to conduct the study with human subjects. The district education officers in the study districts (i.e. Mumbwa and Rufunsa) also provided their approval to work with the schools.

Key informants included government officials, community leaders, pupils (both girls and boys), as well as the pupils' parents. Online support (through a web-based course) was provided by Emory University and Columbia University. Emory University also provided short-term in-country technical assistance. The education ministry led an MHM 'thematic working group' as part of the WinS national technical committee, with periodic consultative meetings held between other responsible ministries, cooperating partners, NGOs and community-based organisations.

The piloting of the toolkit and the scaling up of the basic MHM package has been supported through the DfID-funded 'Sanitation and Hygiene Programme', with the

participation of the NGOs World Vision and VAREN.

Research Methods / Description of intervention

Once the research protocol was validated, Zambian research partners conducted the formative qualitative research study between 2015 and 2016. In parallel, the research partners and key stakeholders participated in a 12-module web-based course on qualitative formative research methods specifically on MHM and how to put the findings into practice.

The research study utilised qualitative methods of data collection: focus group discussions with girls and boys; in-depth interviews with girls and boys; and key informant interviews with school administrators, teachers, traditional leaders and mothers. Only girls that had already attained menarche were considered for the study. Structured interview forms were used to conduct the assessments. Data was collected in the local languages in six schools located in rural areas in Rufunsa and Mumbwa districts, and was then transcribed and analysed. Schools with and without sanitation facilities were included in the study, in order to investigate challenges faced by girls in different situations.

Objectives

The objectives of the research project were to:

- Generate evidence for advocacy to integrate MHM in national programming and policy;
- Develop national guidelines to support the policy framework of the Ministry of General Education; and
- Develop an MHM toolkit reflecting these national MHM guidelines into activities that can be implemented at school level.

Outcomes

The research study was concluded in 2016. The national MHM guidelines and the toolkit have now been developed. The MHM toolkit is intended for the implementation of MHM education at school level through the provincial and district education offices. The toolkit translates the national guidelines into 21 tools, addressing key barriers to MHM within the school environment, which were identified during the formative research.



Hon. Dr. Dennis Wanchinga, MP, Minister of General Education at the 2017 Global Menstrual Hygiene Day visiting a stand with locally produced washable pads.
© UNICEF.

The four tool modules

‘Getting Started with Menstrual Hygiene Management in School’ is an introductory and assessment module that aims to identify the MHM ‘Focal Point Person’ and assess whether the school is MHM-friendly. It also introduces MHM in the school WASH clubs.

‘Knowledge on Menstruation’ aims to provide basic information on puberty and menstruation and to challenge potentially harmful myths and taboos on MHM.

‘MHM-Friendly Toilets and Washing Areas’ highlights the key elements required for MHM-friendly facilities.

‘Materials and Disposal’ aims to improve girls’ access to appropriate, affordable, hygienic materials and teaches how to manage stains and leaks. This module also includes a manual for production of washable sanitary materials and addresses the issue of the disposal of disposable sanitary towels.

The national MHM guidelines and toolkit have been endorsed by the Ministry of General Education and were officially launched by Zambia’s education minister in May 2017. Latrine standards are currently under review in with a view to including privacy for MHM and a water point in a private setting. The annual work plan for the Ministry of General Education and budget has included MHM activities since 2016. Since the beginning of 2017, the ministry has created a role for (and appointed) a national MHM focal point person. Strong advocacy by the MHM partners has led to a policy pronouncement on supporting 14,000 girls from vulnerable households with the provision of menstrual materials.³

The national ‘Education Management Information System’ now includes key MHM indicators in the annual school census, providing information on the girls’ toilet privacy, the provision of sanitary towels, the inclusion of a MHM in the education programme and the disposal options for used sanitary towels. Zambia is also envisaging the transition of the current paper-based education management information system to a more cost effective ‘mobile-to-web’ platform, including a monthly data entry of a limited number of

data elements – including on MHM – at school level or zonal level. This work is currently in pilot phase.

Lessons learned and next steps

As the national MHM programming requires a multi-stakeholder approach. It is also important to plan for sufficient time for each step of the implementation, including the time required for the identification of research partners, contracting processes, acquisition of ethical and other study approvals and the mobilisation of key stakeholders. With regard to the research carried out in schools, the planning has to take school holidays into account.

In order for Zambia to adopt a sustainable and scalable MHM approach in the future, MHM must be integrated with other cross-cutting programmes, such as keeping girls in school and preventing child marriages and teenage pregnancies. The supply chains for menstrual materials should also be strengthened.

For the Ministry of General Education to improve the service delivery related to MHM, the education management information platform needs to be upgraded, to allow for more regular and reliable monitoring, including on key WASH/MHM indicators. In order to effectively scale up MHM

³ See Zambia’s 2017 budget speech. Available at: http://www.parliament.gov.zm/sites/default/files/images/publication_docs/2017%20Budget%20Speech.pdf. [Accessed 10 November 2017]

programming, it should be mainstreamed within the education system through its inclusion in pre- and in-service teacher training, and the inclusion of MHM materials in the pupil curricula. However, a major challenge for the successful nationwide scale-up of MHM remains a lack of resources.

Recommendations

Evidence generation through research, capacity building of key stakeholders and technical assistance are the key elements of the advocacy required to persuade a Government to adopt MHM programming. Government leadership and ensuring that the Government has a sense of ownership of the project is critical for successfully integrating MHM issues within broader national programming, and should be considered and nurtured throughout the process.

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Adolescent girls at Kamwala South Secondary School commemorating the Global Menstrual Hygiene Day.
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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.

	Organisation	Country of Focus	Contact
Unpacking a Nesting Doll: The Layered Challenges of introducing Menstrual Hygiene Management to girls' schools in Afghanistan	UNICEF Afghanistan	Afghanistan	Zahida Stanakzai, zstanekzai@unicef.org
Men's and Boys' Attitudes toward Menstruation and Factors that influence these attitudes	Catholic Relief Services	Benin and Democratic Republic of Congo	Ghislain Mukuna, ghislain.mukuna@crs.org , Christopher Seremet, Dina Rakotomalala
MHM and WASH: Supporting a gender responsive learning environment	UNICEF Pacific and Emory University	Fiji	Carmelita Francois, mcfrancois@unicef.org , Amber Lauff, Mamita Bora Thakkar
WinS4Girls	UNICEF	Global	Brooke Yamakoshi, byamakoshi@unicef.org , Nasratullah Rasa
A systematic review of Menstrual Hygiene Management interventions in populations comparable to students of Chicago Public Schools	Feinberg School of Medicine	Global	Sydney Doe, sydney.doe@northwestern.edu
Implications of the Global Early Adolescent Study's Formative Research Findings for Action & for Research	World Health Organization	Global	Marina Plesons, m.plesons@gmail.com , Dra. Venkatraman Chandra-Mouli
Countering the Mother Myth: Negative Attitudes of Female MHM Educators Towards Girl Students	Columbia University	Global	Emily S. Bishop, esb2162@tc.columbia.edu
Padding up for Life: Knowledge, Behaviour & Practices surrounding menstruation in Telangana, India.	UNICEF India	India	Salathiel Nalli, snalli@unicef.org , Niharika Singh
A Reason to Smile Paving a way for the new dawn! (Government led initiative on MHM and WASH in Schools in Indian State of Maharashtra)	UNICEF India	India	Pratibha Singh, prsingh@unicef.org , Yusuf Kabir, Bharathy Anand Ghodke

All posters can be viewed at <https://www.mhmvirtualconference.com/>.

	Organisation	Country of Focus	Contact
Population-level Assessment of Menstrual Hygiene Management Practices in Rajasthan, India	Johns Hopkins University	India	Alexandra Shannon, ashannon@jhu.edu, Natalie Exum
Menstrual Hygiene Management for the visually and hearing impaired	Water Supply and Sanitation Collaborative Council (WSSCC / UNOPS)	India, Kenya, Cameroon, Niger and Senegal	Irene Gai, ajurgai@gmail.com, Virginia Kamowa, Patricia Mulongo, Kamini Prakash, Archana Patkar
Advancing the MHM Agenda in Partnership with School-Based Personnel: Describing MHM Familiarity and Engagement in Rural Kenya	Northwestern University	Kenya	Leah C. Neubauer, leah.neubauer@northwestern.edu
Promoting girls education through WASH and MHM in Schools	UNICEF Malawi	Malawi	Christobel Chakwana, cchakwana@unicef.org, Clara Chindime, Patrick Okuni, Dearbhla Egan, Violet Tembo
Menstrual Hygiene Endeavors: Journey from breaking silence to period power	WaterAid Nepal	Nepal	Thérèse Mahon, theresemahon@wateraid.org, Shikha Shrestha
Breaking taboos and strengthening partnerships to influence national strategies for inclusive MHM in schools in Niger	UNICEF Niger	Niger	Sanoussi Dodo Natatou, sdodonatou@unicef.org
Creating a menstruation friendly school package in Uganda	The University of Sheffield	Uganda	Emily Wilson, emily@irise.org.uk
Girl Talk: Bridging the gap between MHM education and menstrual product distribution	AFRIpads and WoMena Uganda	Uganda	Katy Lindquist, Laura Hytti, hyttilaura@gmail.com
A pilot project: Training of trainers for girls' and women's health empowerment in Kasese District, Uganda	Wandering Minds LLC	Uganda	Elizabeth Becker, elizabethannebecker@wanderingmindsllc.com

Conclusions

2018 will mark the halfway point in the MHM in Ten agenda (2014-2024) aimed at transforming menstruating girls' lives in schools. Global, national and local efforts continue to be needed to strengthen the evidence base for effective action; moving towards more integrated and scalable solutions at a national level. For the first time, this year's presentations and posters specifically marked progress on the MHM in Ten agenda, with each submission indicating how their work was contributing to advancing one or more of the five priorities. The MHM in Ten agenda is – crucially – a cross-sectoral effort (education, WASH, gender, health), and this year's conference demonstrated how MHM is moving into more established WASH in Schools programming, and helped to highlight the gaps across and between sectors in policy, programming approaches, and research.

Policy

A common theme coming out of the conference presentations was the need to go beyond evidence generation, to evidence-based action and policy. Certainly, it is important to keep in mind that evidence gathering is not an end itself, but the means to achieve truly effective and sustainable change – something tangible for girls in schools that will improve their lives. However, representatives from government ministries responsible for health and education illustrated well how robust evidence and contextual analysis were critical to the development of policy and programming in their respective countries.

The presentations and posters at the conference showed that while approaches and programming vary across the world, a common element of success was national programmes and policies where there was clear and strong sector coordination, with line ministries convening a cross-sectoral and multi-agency working groups.

However, conference presentations also highlighted how only a handful of governments (for example the Philippines) are currently able to monitor MHM in national education management systems. As the questions for such management systems are reviewed through national processes, there is clearly an opportunity here for us in the sector to advocate for the adoption of the WHO/UNICEF Joint Monitoring Programme 'Core questions and indicators for monitoring WASH in Schools', which include expanded indicators on MHM.

The overall sense from the conference presentations was a clear impression that MHM is at the beginning

stages of evidence-based incorporating in national WASH in Schools strategies, standards, and guidelines in countries with strong government leadership and civil society support. However, there is much work to be done. As a sector, we must continue to highlight more evidence of effective and well-costed approaches, to advocate for robust and healthy cross-sectoral co-ordination, and to push for effectively managed monitoring systems. It is through these areas that we can best pursue our goal for MHM to be fully integrated into national policy frameworks across the world.

These themes coming out of the conference echoed findings from a recent systematic review conducted of education policies in 21 low- and middle-income countries, which assessed MHM-related progress or its proxies (such as gender segregated toilets). Although many of the policies were drafted before the increased attention to the MHM challenges facing girls, it is still relevant to note that the majority lacked mention of the importance of WASH facilities and other MHM related improvements in school settings that can serve as an indicator of gender equitable learning environments. The new WASH in Schools policies being developed may serve as useful examples for future education policies of the types of interventions needed to adequately address MHM in schools.

Programming approaches

Conference presentations illustrated how MHM programming does not have to be a standalone project. MHM can be integrated into existing curriculum for girls and boys, and linked to wider school and community programmes to address and challenge potentially harmful gender norms.

Importantly, this year's presentations also demonstrated the promise of partnerships beyond WASH to increase programme effectiveness and inclusion. A presentation by Huru International and a poster by WSSCC both focused on reaching girls with disabilities in MHM programmes – a much overlooked topic. The Government of Eritrea focused on the perceptions of boys and men, while presentations from Lao PDR targeted the specific demographic of female school-teachers to improve programme effectiveness. Programming targeting girls' influencers such as boys and teachers, developed through local consultation and the tailoring of the global body of learning to address contextual needs, is an important step forward. These small-scale but pioneering MHM programmes will be critical to the wider success of MHM policy and programming, and further examples would be useful for the sector to learn from.

Research

The research agenda on MHM in Schools continues to expand, innovate, and gain in rigor. Moving beyond formative research, the conference heard about new

approaches that are being introduced to assess a range of interventions being piloted or introduced in schools and across countries as national plans. Previously unexplored areas, such as MHM experiences for girls in conflict settings and girls with disabilities, have now been added to the growing body of evidence for MHM.

The conference also saw how new assessment methods and measures are being developed and tested, such as self-efficacy scales and data collection tools, that will help to capture outcomes outside of health and education that are related to inherent human development and rights.

It was clear, however, that significant evidence gaps remain. These include larger-scale trials to assess the impact of MHM interventions in schools, detailed analysis of the cost-effectiveness of MHM interventions, and identification of culturally appropriate methods for menstrual waste disposal – as well as research and evidence to help improve and develop better strategies for the engagement of boys and men.

Conference recommendations

Next year, 2018, will mark the mid-way point in the ten-year agenda. Below, four key recommendations for continuing to make progress on the MHM in Ten five priorities and transforming schools by 2024 emerged from the conference:

Recommendation 1:

Improve the evidence base on effective MHM programming and the cost of such interventions.

Recommendation 2:

Support better outcome measurement by developing robust measures related to education, health and participation.

Recommendation 3:

Encourage cross-sectoral partnerships aimed at supporting menstruating girls in school.

Recommendation 4:

More effectively translate MHM research into national policy.

2017

Menstrual Hygiene Management in Schools Case Studies

Bangladesh	Bangladeshi schoolgirls' self-efficacy in managing menstrual hygiene: Conceptualization and development of a novel measurement tool
Eritrea	"Breaking the Taboo" Male Perceptions to Menstruation in Eritrea
Kenya	Improving MHM in Schools to enhance learning for Adolescent Girls in Kenya
Global	Integrating MHM into an Education in Emergencies response: Learning from the development of a cross sectoral toolkit
Kenya	Strategies for inclusive MHM for girls with disabilities
Lao PDR	Engaging Laotian teachers in MHM
Philippines	Mainstreaming MHM in Public Basic Education in the Philippines
Uganda	Menstrual Health Interventions and School Attendance among Ugandans (MENISCUS-2)
Zambia	Rolling out the MHM Programme through the Zambian Ministry of General Education

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