Introduction

Fifty-one percent of the female population is of reproductive age, meaning that at least 1.8 billion women and girls around the world are in need of information, products, and private facilities to manage their monthly periods.¹² Having one's period demands access to affordable sanitary pads or other clean and absorbent products, a discreet place to change or dispose of them, and water sources to wash hands, sanitary products, and stained garments.³ Women and girls need to feel safe and comfortable to manage their periods while at work or school, and young girls need information about what menstruation is, what it signals about their fertility, and how to safely handle it each month.

To date there is no global estimate of the percentage of women and girls who lack the resources needed to manage their periods, but evidence from small-scale research studies suggests that many women and girls in developing countries struggle to access adequate information, products, and disposal systems. Silence and stigma around the topic of menstruation, paired with women's limited participation in policymaking, makes programs to support menstrual hygiene management (MHM) a low priority – but MHM can boost the health, comfort, and dignity of women and girls and support them to become active participants in society.

Range of Menstrual Hygiene Products

In developing countries, most girls and women repurpose cloths and rags, which they wash and dry during their periods. These materials are familiar, convenient, affordable and relatively comfortable. In some circumstances, women also turn to pieces of cotton wool or other natural materials that are absorbent, but may be uncomfortable and unsanitary.⁴

The most commonly-used products available on the market are reusable sanitary pads made out of soft cotton.⁵ Reusable pads are less expensive in the long-term and are more environmentally-friendly than disposable versions. The main disadvantage of reusable pads is that they can become contaminated if not washed and dried properly, so thorough instructions for cleaning and a reliable water source are essential.⁶

Menstrual products may be either locally or commercially produced, although local production is generally restricted to pads because tampons and menstrual cups are difficult to make.⁵ Commercial products tend to be more expensive, and are usually disposable versions that create waste.⁴ Local production can create jobs in the community but may have a limited reach to consumers.

In many contexts, tampons and menstrual cups are not culturally appropriate due to discomfort with insertion into the vagina and misconceptions about what it means to lose one's virginity.⁷ Women and girls may have a greater risk of infection if they don't know how to insert or when to change these products or do not wash their hands before doing so.⁵

A few studies have demonstrated a growing acceptance of menstrual cups.⁸⁹ Although cups can be difficult to insert and are initially expensive, they can last up to ten years, promising a significant reduction in menstrual waste and a low cost in the long run.⁶

The menstrual product category expands beyond just absorbent materials. Days for Girls manufactures a $10 “Hygiene Kit” which contains washable pads and menstrual cups, moisture barriers, underwear, zip-bags for used products, a washcloth and travel soap, and instructions. Because the kit lasts three years, it is a good option for women in areas with a limited supply of products.¹⁰ Women may be in need of pain relievers to help them perform daily activities while they have menstrual cramps; however, supplying medicine is a more difficult solution due to the need to strengthen distribution channels and finding funding to subsidize the pills.⁵

Programs that aim to make products accessible must consider the affordability and ease of use for the consumer. The choice between reusable and disposable products may depend on the available disposal and water facilities, and the model should be compatible with women's traditional undergarments. While products should be culturally acceptable, programs can look for opportunities to correct misperceptions about insertable products. When partnering with local producers, programs should ensure that products that can be made from readily available materials and distributed efficiently after production.⁴
Strengthening WASH Facilities

The stigma around menstruation means that the needs of women and girls for managing their periods are rarely incorporated into the design of sanitation facilities. In response, the current climate for MHM favors interventions that integrate menstrual hygiene with the improvement of WASH facilities. Often such interventions are delivered through schools in order to promote dual goals of improved hygiene and consistent school attendance by girls.

Many schools in the developing world do not have facilities where girls can change or dispose their materials or wash in private. WASH facilities in schools should have separate units for girls and boys, with lockable doors and high walls to ensure privacy and security. Facilities should have latrines and handwashing stations, as well as an in-unit incinerator or disposal pit for girls to dispose of sanitary pads. Installing mirrors can help girls feel confident that they have not leaked onto their clothes.

Additional challenges to MHM remain in emergency settings, where facilities may be connected to temporary waste collection and water systems, and women must manage their periods with limited products and in close proximity to others.

Delivering Information Through Puberty Curriculum

Curricula often focus on the basics of reproductive anatomy and fail to provide key information on how to manage menstrual periods. Girls often seek advice from older women, who may recommend traditional products and practices that may not meet the girls’ wishes for discretion and comfort.

UNESCO recommends that puberty education begin in primary school so that girls understand what is happening to their bodies and know what to expect before menarche. Given that the global dropout rate before the last year of primary school is 23% (as high as 42% in sub-Saharan Africa), it is especially important that menstrual hygiene education reach girls when they are young and still in school. For cultural reasons, schools may find it prudent to de-couple MHM from sex education.

Education about menstruation requires training teachers to comfortably teach the subject and making educational pamphlets available. In Tanzania, findings from a study on MHM knowledge and practices led to the creation of a book about puberty, which the Ministry of Education incorporated into school health curricula. To reinforce lessons from the classroom, schools can establish hygiene clubs for older students to teach younger students about MHM, handwashing, and other hygiene topics, or strengthen relationships local health workers who can regularly visit the school with information and products.

Puberty education can be an effective way to break the silence and change perceptions among boys, who often do not understand menstruation is and resort to teasing their female classmates. Co-ed puberty curricula generate understanding between boys and girls and encourage them to adopt respectful interpersonal behaviors.
Supportive Environment

In addition to creating a friendlier environment at school, interventions can work to engender support for MHM in the community. Some of the greatest challenges for women and girls are limited funds for products, embarrassment purchasing from male shopkeepers, and cultural taboos that force women to hide that they are on their period.\(^5\)

Increased access to information can challenge the myths that prevent women from interacting with men or performing household tasks while on their periods.\(^5\) It can also make others, especially men, aware of the needs of girls and women when they are on their periods. Male heads of households who understand the value of MHM are more likely to make funds available for their wives and daughters to purchase products, and teachers and employers can ensure that women and girls can access facilities when they need to.\(^4,13\)

International and government support can ensure funding and an enabling policy environment for facility improvements and supply of affordable products. The 2014 “MHM in Ten” meeting led UNICEF, UNESCO, WaterAID, and Save the Children to prioritize MHM in their programming agendas for the next ten years. This global initiative has committed to achieving MHM in schools and building an evidence base for MHM to inform future interventions.\(^6\)

MHM programs should also engage with national governments from the start of their work to ensure buy-in and additional support for multi-sectoral involvement.\(^14\)

Impact of MHM

**ON HEALTH**

Further research needed on the impact of menstrual hygiene on women’s health. A review on the health impact of menstrual hygiene found that half of the 14 included studies demonstrated an association between poor MHM and reproductive tract infections, but the results were generally weak.\(^15\) Nonetheless, there is an understanding that practicing proper hygiene and using sanitary materials can reduce a woman’s individual risk of infection.\(^4,9\) Improved knowledge about menstruation may reduce the number of unplanned pregnancies that occur because girls are not aware that menstruating means they are fertile, or that they can still become pregnant if they have sex during their period.\(^13\)

**ON SCHOOL ATTENDANCE**

Many girls struggle to manage their periods while at school. It is difficult to measure school attendance, but studies have found that some girls miss up to 5 days a month due to menstruation, and UNICEF estimates that 1 in 10 girls do not attend school during menstruation.\(^12,13\) For those who do go to school, physical discomfort and fear of leaking distracts students from their lessons, while inadequate toilet facilities force girls to wear wet materials or carry used products until they can find a place to dispose them.\(^5\) MHM may have substantial implications for girls’ education by helping them to attend and actively participate at school.

Studies on the impact of MHM materials on attendance have been small-scale and report mixed results. There is no conclusive quantitative evidence that improvements in MHM reduce school absenteeism.\(^15\) On the other hand, qualitative interviews with girls indicate that girls feel more comfortable when using better-quality menstrual products because they do not worry as much about leaks or smells and they are able to participate in sports and games with classmates.\(^13\) Even with better products, however, girls’ attendance demands access to a reliable water source and private toilet facilities at school.\(^8\)

**ON THE ENVIRONMENT**

MHM interventions can play a critical role in environmental sustainability. In most settings, waste collection systems are not designed to accommodate solid waste like sanitary pads, and these materials pose a public health threat if they block sewers or end up in water sources. Improving WASH facilities permits the appropriate disposal of menstrual waste, and in turn, proper disposal can extend the life of sanitation systems.\(^16\) Programs that grow demand for reusable products like pads and menstrual cups reduce the overall volume of menstrual waste. Locally-produced options are more environmentally-friendly than commercial brands because they use fewer chemicals and non-biodegradable materials.\(^12\)

**AREAS FOR FURTHER RESEARCH**

In order to demonstrate its salience to governments and donors, additional research is needed on the impact of MHM. There is currently little rigorous evidence on the nuanced relationship between MHM and school attendance,
partly due to the difficulty in measurement. 6,9 A greater and more widespread effort is needed to research the effects of menstrual hygiene interventions on the health of women and girls, particularly in terms of reduced incidence of infection. 15 Quantitative methods will allow researchers to demonstrate the magnitude of the problem and the effectiveness of interventions, but studies should also use participatory and qualitative methods to understand the attitudes, perceptions, and barriers that shape current MHM practices and identify opportunities to intervene. 7

Players in MHM

LOCAL PRODUCERS
- AFRipads (Uganda)
- Technology 4 Tomorrow (Uganda)
- Sustainable Health Enterprises (Rwanda)
- Huru International (Kenya)
- Saathi Pads (India)
- OneGirl (Sierra Leone)

INTERNATIONAL IMPLEMENTING ORGANIZATIONS
- WaterAid
- Save the Children
- Iris International
- PATH
- Days for Girls
- International Federation of Red Cross and Red Crescent Societies
- Ruby Cup
- Simavi
- Plan International

DONORS
- BeGirl
- FHI360
- Procter & Gamble
- Johnson & Johnson
- Bill & Melinda Gates Foundation
- Waterloo Foundation
- Grand Challenges Canada

INFLUENCERS
- UNESCO
- UNICEF
- Stockholm Environment Institute
- Abdul Latif Jamal Poverty Action Lab
- WASH Advocates
- WASH United

Additional information about these and other actors in the MHM space can be found here.
References


