

In October 2017, Columbia University Mailman School of Public Health in New York City, New York, and the International Rescue Committee published A Toolkit for Integrating Menstrual Hygiene Management (MHM) into Humanitarian Response, hereafter the Toolkit. Researchers Marni Sommer, Margaret Schmitt, and David Clatworthy collaborated on the Toolkit to benefit women and girls in Lebanon, Myanmar, and Tanzania. The Toolkit serves as a guideline for humanitarian organizations to ensure better menstrual hygiene management, or MHM, in low and middle-income countries. MHM includes clean water, private hygiene facilities for women and girls, materials such as sanitary pads, and accurate literature on menstruation. The authors of the Toolkit provide ways in which humanitarian organizations can work in communities to address social and physical barriers to managing menstrual health in low and middle-income countries.

Menstruation is a process during which females expel blood and uterine lining from the vagina approximately every twenty-eight days. For menstruation to occur, the pituitary gland in the brain releases a hormone to cause one of the two ovaries to release an egg cell each month, which is called ovulation. Then, the egg cell travels from the ovaries into the uterus through the connecting structure called the fallopian tube. The uterus prepares for the possibility of the egg cell coming into contact with a sperm cell by developing a lining of soft tissue filled with blood inside of the uterus. If the egg cell comes into contact with a sperm cell after sexual intercourse and an embryo is formed, then the lining of soft tissue inside of the uterus provides nutrients for the embryo to grow into a fetus. However, if the egg cell does not come into contact with a sperm cell, the lining of the soft tissue and blood is shed and expelled through the vagina, which is called menstruation. To manage menstruation, women and girls must have access to materials and supplies such as disposable sanitary pads or tampons and clean water and sanitation facilities.

The Toolkit is a guideline for humanitarian organizations to help promote MHM in low and middle-income countries. Formerly known as third world countries and developing countries, low and middle-income countries are generally defined based on their overall financial status in comparison to other countries. While there is disagreement over the terms and contingencies of such labels, the overall label is oftentimes categorized based off of a country's overall market value and Gross Domestic Product, or GDP. The Toolkit is available as a ninety-six page guide in an online format to provide support and guidance for public health agencies among other organizations to learn how to implement MHM strategies for people in low and middle-income countries. According to the authors of the Toolkit, humanitarian organizations are the intended audience of the guide, and the publication is available in English, Arabic, and French. Through the publication of the Toolkit, Sommer and colleagues intended to improve humanitarian responses to MHM in Myanmar, Lebanon, and Tanzania.

In 2017, the authors published the article "Understanding the Menstrual Hygiene Management Challenges Facing Displaced Girls and Women: Findings From Qualitative Assessments in Myanmar and Lebanon" in the open-access journal, Conflict and Health. The team conducted interviews with women in Myanmar and Lebanon to determine how the Toolkit could best meet their needs and help them manage their menstrual cycles. The information that Sommer and colleagues collected in Myanmar and Lebanon for that article influenced the guidelines set forth in the Toolkit. The authors asked refugees in Myanmar and Lebanon a series of questions to assess the state of MHM in those locations. For example, Sommer and colleagues asked people questions on topics such as the types of products they used during menstruation, like pads or tampons. Those resources can become limited or excluded as unnecessary in certain crises. In the conclusion of that article, the authors indicated that an overall lack of humanitarian response to MHM existed in those locations and recommended that humanitarian organizations work to ensure access to proper sanitation facilities, sanitary pads, and educational resources on menstruation. Shortly after they published the Toolkit to provide guidelines as to how humanitarian organizations could adequately adopt those recommendations.

Sommer, Schmitt, and Clatworthy divide the Toolkit into fourteen chapters. First, in the introduction, Sommer and colleagues describe the critical resources that impact MHM, including WASH facilities, educational materials, and menstrual hygiene supplies. WASH facilities provide water, sanitation, waste management, and healthcare provisions. The next three chapters focus on how to train staff members of humanitarian organizations on MHM, how to conduct MHM-related needs

assessment, and how to source materials such as sanitary pads. The following nine chapters each provide specific guidelines for MHM in relation to topics such as transit, shelter, WASH facilities, disposal and waste management, hygiene promotion and health education activities, vulnerable populations, education, health, and protection. The final chapter provides the authors' concluding remarks on how humanitarian organizations can monitor and evaluate the implementation and effects of MHM-related interventions.

First, in the introduction, Sommer and colleagues indicate that social and physical factors impact many countries' menstrual health management. First, the authors indicate that social barriers include cultural taboos, shame, and embarrassment related to menstruation. For example, in many Nepali communities, women and girls experiencing vaginal bleeding from menstruation are forced to sleep in a hut away from their families and cannot touch communal water sources as many consider menstruation to be an impurity. Also, in emergency contexts like refugee camps, women and girls additionally face physical barriers. Sommer, Schmitt, and Clatworthy indicate that the most prominent physical factor impacting the management of menstrual health in those emergency contexts is a lack of clean, private WASH facilities.

Sommer and colleagues further indicate that health, education, and shelter are added factors that impact the ability for women and girls to adequately manage menstruation. The authors include a graphic in the introduction depicting the hierarchy of menstrual health needs in emergency contexts. The bottom of the hierarchy demonstrates the essentials needed during a crisis, which includes basic materials such as sanitary pads. Next, if resources permit in an emergency setting, the authors assert that access to educational resources regarding menstruation are in the middle of the hierarchy. At the top of the hierarchy is privacy and dignity. The authors indicate that cultural views of menstruation, which may cause females to feel embarrassed of their menstrual cycles, need to be addressed to ensure that women and girls are able to manage their menstrual cycles in privacy without shame or embarrassment.

Next, Sommer, Schmitt, and Clatworthy make some recommendations for staff members of humanitarian organizations on how to best address MHM in certain populations. First, the authors indicate that staff members should be knowledgeable about and feel comfortable with discussing menstrual health. In order to ensure that is met, the authors recommend staff members engage in sensitivity training prior to MHM interventions. Sommer and colleagues state that sensitivity training should include discussing the MHM-related challenges for women and girls in emergency contexts and how cultural views may impede MHM.

Then, in the following two sections, Sommer, Schmitt, and Clatworthy provide guidelines for conducting MHM needs assessments and providing materials such as sanitary pads. A needs assessment includes a series of questions and observations to determine the status of something, which in the case of Sommer and colleagues, was menstruation management. They also indicate that the questions of needs assessments may vary depending on the specific locations of the women and girls to promote cultural sensitivity. Many needs assessments include questions on materials and supplies, WASH facilities, and educational resources. For example, Sommer and colleagues advise that staff members ask women and girls about the type of materials they prefer for menstruation, which includes disposable or reusable sanitary pads and cloths or tampons. Also, the authors indicate that staff members should identify gaps in knowledge by asking women and girls if they are familiar with any educational resources on menstruation. Sommer and colleagues then explain how staff members can provide women and girls with the appropriate materials and supplies for menstruation. They indicate that it is important to refer to the needs assessment when providing materials and supplies, as women and girls may prefer different materials and supplies depending on the population or cultural context.

Sommer and colleagues then describe challenges for women and girls in transit in relation to MHM. For instance, the authors state that women and girls may lack clean, private WASH facilities when traveling for long distances. In response to that challenge, Sommer, Schmitt, and Clatworthy advise that humanitarian organizations provide WASH facilities at places such as border points in order to ensure that women and girls can adequately manage their menstrual cycles in transit. They also advise that materials such as sanitary pads and fresh clothes be available before, during, and after travel, because women and girls may feel embarrassed in transit if they have stained their clothing

with blood.

Then, Sommer and colleagues describe the unique challenges for women and girls managing their menstrual cycles in emergency contexts such as refugee camps that are distinct from those recommended in the preceding section on transit recommendations. The authors describe refugee camps as being overcrowded, so women and girls frequently may lack the privacy to manage their menstrual cycles. Because of that point, the authors of the Toolkit include recommendations for the construction of home shelter structures for situations like a refugee camp to ensure privacy for women and girls.

Next, Sommer and colleagues provide guidelines for how they recommend WASH facilities be constructed in emergency contexts and specific methods for the clean and discrete disposal of sanitary pads. First, the Toolkit highlights the importance of consulting with women and girls to construct WASH facilities in accordance with their specific needs. Second, the Toolkit suggests that WASH facilities include washing basins with clean water and soap so that women and girls can clean reusable sanitary pads or cloths. Then, the authors provide an illustration of an ideal WASH facility. The illustration includes a sign on the outside of the WASH facility in order to indicate that it is for females only. Also, a lock on the inside of the door, a light bulb, and a trash bin are located within the facility. The illustration also includes a water pump inside of the facility for cleaning reusable sanitary pads and a sink outside of the facility for washing hands.

Sommer, Schmitt, and Clatworthy then provide specific remarks on disposal and waste management with MHM. Sommer and colleagues indicate that communities often stigmatize menstruation, so women and girls may feel embarrassed by the need to throw away disposable tampons or pads. Thus, it is important that humanitarian organizations are able to ensure that women and girls can discreetly dispose of menstrual waste. The authors provide two examples of disposal solutions from WASH facilities in Nepal. Those examples include a waste bin within the facility or a waste disposal chute outside of the facility.

Then, the authors describe how humanitarian organizations can implement menstrual hygiene promotion and education interventions and how those interventions can be adapted for women and girls with disabilities. Sommer, Schmitt, and Clatworthy suggest that all interventions should include educational information on menstruation, appropriate hygienic practices, and how to use and dispose of materials such as sanitary pads. However, Sommer and colleagues place emphasis on the importance of consulting with women and girls in that specific population to determine the unique needs within that population.

Next in the Toolkit, Sommer, Schmitt, and Clatworthy discuss the importance of ensuring women's and girls' access to MHM materials and supplies in schools and health facilities. The Toolkit emphasizes the importance of providing WASH facilities, sanitary pads, and educational resources in schools, as the authors previously found many girls skip school during their menstrual cycles due to a lack of available materials and supplies. Also, the authors state that schools and healthcare facilities should ensure that girls are able to manage their menstrual cycles without shame or embarrassment. Additionally, Sommer and colleagues suggest that health facilities provide access to menstrual health educational activities, such as lessons and discussions.

Last in the Toolkit, the authors remark on how humanitarian organizations can monitor and evaluate the effects of MHM-related interventions. They advise that asking the people in the specific populations questions about their likes and dislikes could be most effective. For example, the authors advise staff members to ask if women and girls felt comfortable with managing their menstrual cycles given the available materials and supplies. Additional examples of ways in which staff members can assess the effectiveness of their interventions include discussions, interviews, and surveys.

In 2016, the authors piloted the Toolkit in refugee camps throughout Tanzania. The authors chose Tanzania as the location for the pilot because the country lacked policies on MHM. The authors conducted a health assessment within various refugee camps and invited various organizations to focus on providing materials and supplies such as clean, private WASH facilities, sanitary pads, and educational resources. In 2017, the authors analyzed the effectiveness of the Toolkit within Tanzania. The pilot revealed information on how women and girls manage menstrual health in transit and how women and girls with disabilities manage menstrual health. Sommer and colleagues then

added specific guidelines on those topics to the Toolkit following the pilot. The authors published the updated, comprehensive version of A Toolkit for Integrating Menstrual Hygiene Management (MHM) into Humanitarian Response in 2017.

Sources

1. Planned Parenthood. "Menstruation." Planned Parenthood. <https://www.plannedparenthood.org/learn/health-and-wellness/menstruation> (Accessed July 22, 2019).
2. Schmitt, Margaret L., David Clatworthy, Ruwan Ratnayake, Nicole Klaesener-Metzner, Elizabeth Roesch, Erin Wheeler, and Marni Sommer. "Understanding the menstrual hygiene management challenges facing displaced girls and women: findings from qualitative assessments in Myanmar and Lebanon." *Conflict and Health* 11 (2017). <https://conflictandhealth.biomedcentral.com/articles/10.1186/s13031-017-0121-1> (Accessed July 22, 2019).
3. Silver, Marc. "If You Can't Call It The Third World, What Should You Call It?" National Public Radio, 2015. <https://www.npr.org/sections/goatsandsoda/2015/01/04/372684438/if-you-shoudnt-call-it-the-third-world-what-should-you-call-it> (Accessed July 22, 2019).
4. Sommer, Marni, Margaret Schmitt, and David Clatworthy. A Toolkit for Integrating Menstrual Hygiene Management (MHM) into Humanitarian Response. (2017). https://reliefweb.int/sites/reliefweb.int/files/resources/mhm-emergencies-toolkit-full_0.pdf (Accessed July 22, 2019).
5. Sommer, Marni, Penelope Phillips-Howard, Therese Mahon, Sasha Zients, Meredith Jones, and Bethany A Caruso. "Beyond Menstrual Hygiene: Addressing Vaginal Bleeding Throughout the Life Course in LMICs." *BMJ Global Health* 2 (2017): 1-6. <https://gh.bmj.com/content/2/2/e000405.full> (Accessed July 22, 2019).
6. Sommer, Marni, Margaret Schmitt, Tom Ogello, Penninah Mathenge, Magdalena Mark, David Clatworthy, Samantha Khandakji, and Ruwan Ratnayake. "Pilot testing and evaluation of a toolkit for menstrual hygiene management in emergencies in three refugee camps in North-west Tanzania." *Journal of International Humanitarian Action* 3 (2018). <https://link.springer.com/article/10.1186/s41018-018-0034-7> (Accessed July 22, 2019).
7. World Health Organization. "WASH in Healthcare Facilities." Water Sanitation Hygiene, WHO. https://www.who.int/water_sanitation_health/facilities/healthcare/en/ (Accessed July 22, 2019).