In “Beyond Menstrual Hygiene: Addressing Vaginal Bleeding Throughout the Life Course in LMICs,” Sommer and her team state that they were motivated to assess the topic in order to better understand how issues concerning the health of women and girls are managed in limited-resource contexts. In “Beyond Menstrual Hygiene,” the authors assert that females in LMICs need access to better resources, education, and supplies to manage menstruation.

Beyond Menstrual Hygiene” is a review article in which Sommer, Phillips-Howard, Mahon, Zients, Jones, and Caruso summarize the evidence that existed at the time of the article’s publication regarding the barriers to managing normal and abnormal vaginal bleeding in LMICs. Each of the authors worked in the general research area involving menstrual hygiene management and reproductive health. Menstruation is a process during which women and girls expel tissue and blood from the uterus approximately once per month. During pregnancy, an embryo implants into the tissue that lines the uterus, known as the endometrial lining. The endometrial lining grows and sheds each month that there is not a pregnancy, resulting in vaginal bleeding. Sommer and colleagues specifically look at how females manage normal and abnormal forms of vaginal bleeding. They define normal vaginal bleeding as being associated with monthly menstruation, and abnormal vaginal bleeding as being associated with any excessive bleeding that occurs during pregnancy, childbirth, miscarriage, and certain reproductive disorders such as endometriosis, which is the growth of the tissue that lines the uterus outside of the uterus.

Beyond Menstrual Hygiene” is a literature review divided into seven sections. The article begins with an introductory section, in which the authors provide important definitions related to menstruation and discuss the current conditions of menstruation management in LMICs. In the next section, Sommer and colleagues describe various types of normal and abnormal vaginal bleeding. Then, the authors outline the various barriers women experience in managing normal and abnormal vaginal bleeding in LMICs. Specifically, Sommer, Phillips-Howard, Mahon, Zients, Jones, and Caruso describe how access to water and sanitation may impact women’s management of vaginal bleeding. Additionally, the authors discuss barriers to education regarding vaginal bleeding and present the social challenges to managing vaginal bleeding in LMICs. Lastly, the authors provide their concluding remarks regarding the management of menstruation in LMICs and discuss how researchers can help women overcome those barriers.

In their introductory section, Sommer and colleagues discuss their research objective, define adequate menstrual hygiene management, and differentiate between normal and abnormal vaginal bleeding. First, the authors state that the goal of their article is to review existing literature concerning the various types of normal and abnormal vaginal bleeding. Sommer and colleagues also aimed to address any disparities in water, sanitation, and education that could affect the management of vaginal bleeding for women living in LMICs. According to the authors, organizations and researchers had become increasingly aware of certain health problems that females in LMICs experience. However, Sommer, Phillips-Howard, Mahon, Zients, Jones, and Caruso indicate that water, sanitation, and education needs are largely unmet in those countries for women and girls to adequately manage their menstrual cycles. For example, they assert females need access to clean menstrual supplies such as sanitary pads and sanitary, in addition to safe facilities to change and dispose of menstrual supplies discretely.

Also in the introductory section, Sommer and colleagues indicate the importance of education in understanding the difference between normal and abnormal vaginal bleeding, which may help manage monthly menstruation or disorders like endometriosis. According to the authors, people in LMICs tend to associate vaginal bleeding with misinformation and taboo. Specifically, the authors indicate that women and girls may be ashamed of their monthly episodes of vaginal bleeding, which Sommer and colleagues report is often due to societal norms and stigma.
In the next section, the authors further analyze the various types of normal and abnormal vaginal bleeding. For instance, they indicate that most women and girls around the world experience monthly menstruation\(^5\), but episodes of abnormal vaginal bleeding may occur outside of a woman’s normal menstrual cycle for many reasons. Sommer, Phillips-Howard, Mahon, Ziets, Jones, and Caruso include a table to define the causes of abnormal vaginal bleeding. For example, endometriosis\(^9\) may cause abnormal vaginal bleeding, heavy and painful menstruation\(^5\), and missed menstrual cycles. The authors estimate that five to fifteen percent of women and girls around the world experience abnormal vaginal bleeding associated with disorders such as endometriosis\(^9\), but the authors state that minimal data exists to fully estimate how many women and girls the disorder affects.

Furthermore, according to Sommer and colleagues, despite the fact there are minimal statistics on how many women are affected by abnormal vaginal bleeding in LMICs, females may actually experience higher rates of abnormal vaginal bleeding in such areas. Specifically, many women in LMICs have high fertility rates, which means that women and girls may experience multiple pregnancies and miscarriages. Abnormal vaginal bleeding associated with childbirth lasts approximately four weeks after birth, and abnormal vaginal bleeding associated with miscarriage\(^8\) lasts approximately four to six weeks. So, the researchers assert there may be an increased need for clean water and sanitation facilities for managing episodes of vaginal bleeding and supplies such as sanitary pads and cloths in areas with high fertility rates.

Somer and colleagues highlight the barriers to managing normal and abnormal vaginal bleeding in the third and fourth sections. The researchers indicate that women and girls in LMICs do not have access to resources and factual information to fully understand their monthly menstrual cycles. The authors assert that norms including shame and stigma regarding monthly menstruation\(^5\) impact the availability of education. Sommer and colleagues state that limited access to clean water, private and clean toilets, and menstrual supplies such as sanitary pads are prevalent in LMICs. According to Sommer and colleagues, government officials in LMICs should prioritize increasing access to clean water and sanitation facilities for women to change disposable sanitary pads or wash reusable sanitary cloths to manage vaginal bleeding.

Somer and colleagues also describe additional barriers women experience in accessing clean water, sanitation facilities, and sanitary pads or cloths to manage vaginal bleeding. The authors express that women rarely have access to facilities away from men with clean water and soap for washing hands or sanitary cloths. Moreover, cultural practices may restrict the management of monthly menstruation\(^5\) in many LMICs. For example, in many Nepali communities, women and girls experiencing vaginal bleeding related to menstruation\(^5\) are forced to sleep in a hut away from their families and cannot touch communal water sources. According to Sommer and colleagues, in those communities, many consider menstruation\(^5\) to be an impurity. Additionally, displaced women and girls like refugees face additional challenges for managing their menstrual cycles as such people often live in overcrowded areas, where clean water and sanitation may be scarce. Also, the authors assert that women and girls in countries such as Ethiopia and Ghana often avoid expressing their concerns about abnormal vaginal bleeding they experience because they worry it may make them seem unfit for marriage or childbearing. As a result of that stigma, fewer women might report and receive treatment for such conditions. Sommer and colleagues stress that stigma ultimately poses a significant obstacle for women and girls trying to manage menstruation\(^5\).

Following the publication of “Beyond Menstrual Hygiene,” the authors continued to contribute to research that addressed the barriers women and girls experience in managing menstruation\(^6\) in LMICs. For instance, Sommer developed what she referred to as a menstrual hygiene toolkit to help women and girls manage vaginal bleeding while living in various refugee camps in Myanmar and Lebanon. The toolkit includes instructions for humanitarian organizations describing how to help women and girls manage their menstrual cycles while in emergency settings like refugee camps.

"Beyond Menstrual Hygiene: Addressing Vaginal Bleeding Throughout the Life Course in LMICs," calls attention to various unmet needs regarding the reproductive health of women and girls in low-resource settings. Its authors promote the adoption of evidence-based policies to provide clean access to water, sanitation, and supplies for women and girls who menstruate and experience vaginal bleeding in LMICs.

**Sources**

5. Research for Health in Humanitarian Crises. “Building a Cross-Sectoral Toolkit and Research Foundation for the
In “Beyond Menstrual Hygiene: Addressing Vaginal Bleeding Throughout the Life Course in LMICs,” hereafter “Beyond Menstrual Hygiene,” Marni Sommer, Penelope A. Phillips-Howard, Therese Mahon, Sasha Zients, Meredith Jones, and Bethany A. Caruso explored the barriers women experience in managing menstruation and other forms of vaginal bleeding in low and middle-income countries, which the researchers abbreviate to LMICs. The medical journal British Medical Journal Global Health published the article on 27 July 2017. As little literature existed at the time concerning the topic of vaginal bleeding for women in LMICs, Sommer and her team state that they were motivated to assess the topic in order to better understand how issues concerning the health of women and girls are managed in limited-resource contexts. In “Beyond Menstrual Hygiene,” the authors assert that females in LMICs need access to better resources, education, and supplies to manage menstruation.