# Comfortably, Safely, and Without Shame: Defining Menstrual Hygiene Management as a Public Health Issue

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In recent years, the menstrual hygiene management challenges facing schoolgirls in low-income-country contexts have gained global attention. We applied Gusfield's sociological analysis of the culture of public problems to better understand how this relatively newly recognized public health challenge rose to the level of global public health awareness and action. We similarly applied the conceptualization by Dorfman et al. of the role of public health messaging in changing corporate practice to explore the conceptual frames and the news frames that are being used to shape the perceptions of menstrual hygiene management as an issue of social justice within the context of public health. Important lessons were revealed for getting other public health problems onto the global-, national-, and local-level agendas. (*Am J Public Health.* 2015;105:1302–1311. doi:10.2105/AJPH.2014.302525)

Menstrual hygiene management (MHM) has become a globally recognized public health topic. Around the world, a growing coalition of academics, donors, nongovernmental organizations (NGOs), United Nations agencies, grassroots women's organizations, multinational feminine hygiene companies, and social entrepreneurs are mobilizing to bring attention and resources to address the menstrual-related shame, embarrassment, and taboos experienced by many girls in low- and middle-income countries (LMICs).[1–4] This informal coalition is advocating the improved provision of puberty guidance, sanitary materials, and water and sanitation facilities for girls in school.[5,6] In least-developed and other low-income countries in 2013, the global average for school water coverage was 47% and for school sanitation coverage was 46%.[7] At the same time, the movement is generating interest in improving the often inadequate, unhygienic, and unsafe circumstances in which many women in low-resource contexts manage their monthly menses.

Just 10 years ago, there was little public discussion about the menstrual management–related challenges facing girls and women in LMICs. How did this singular aspect related to female physiology—the need for girls to have access to menstruation-related infrastructure and information that would enable them to successfully advance their education and subsequent development—become a globally recognized public health issue?[8] Why did this recognition lead to a growing global social movement on MHM management?[9] In this article we seek to analyze the various moments, events, players, and organizations that have contributed to the definition and articulation of menstruation as a globally recognized public health challenge. This analysis provides insights about what is involved in bringing attention and resources to other critically important public health issues. It also reveals gaps that remain in the menstruation-related agenda of the future.

We draw on Gusfield's sociological analysis of the culture of public problems to analyze the factors that have shaped and influenced the shifting of menstrual management from an individual-level experience to a political problem worthy of government-level attention.[8] Through this analysis, we seek to understand (1) the historical dimensions of the emergence of menstruation as a public problem, (2) the cultural and structural dimensions of changing the attribution of responsibility of menstruation from an individual experience to one with societal obligations, (3) the cognitive beliefs and moral judgments that have shaped the perception of menstruation as a public problem, and (4) the attribution of political responsibility for menstruation.

Our analysis suggests that interest and action on the issue of MHM had their initial origins in the global concern for narrowing the gender gap in education. Interest existed from the education perspective, which was aimed at keeping girls in school and improving their educational outcomes, and from the public health perspective, responding to the decades of evidence indicating that educated girls contribute to healthier population outcomes.[10] We will delineate the pathway from these origins up through today's global social movement, which is attracting stakeholders from a range of different sectors. The mobilization of interest represented the coming together of 2 constituencies—one (constituency) concerned about a possible "solution" to gender disparities in education completion, and another concerned about keeping girls in school for population health reasons. As will be discussed, the market constituency (i.e., global private-sector sanitary pad companies) also played a role in influencing the growth of the global social movement.

We also analyze the diverse messaging that the multiple players and sectors have used in taking up the issue of MHM. In applying the conceptualization by Dorfman et al. of the role of public health messaging in changing corporate practice, we discuss both the conceptual frames and the news frames that are being used to shape the perceptions of MHM as an issue of social justice within the context of public health.[11] The role of framing is particularly salient because of the taboo nature of the topic of menstruation in many contexts across the low-, middle-, and high-income world. For some players (individuals, organizations, institutions), the existence of strong taboos has required them to develop carefully worded messages on menstruation and MHM that take into consideration local cultural sensitivity. By

contrast, other players have tackled the taboo head-on, with more explicit, targeted messaging on menstrual blood. Understanding how different players have framed this issue, and the role that such framings play in building a growing global social movement on MHM, provides useful insights for public health professionals seeking to address other neglected or insufficiently recognized health concerns.

## THE HISTORICAL DIMENSIONS OF THE MHM AGENDA

Across diverse social contexts, the topic of menstruation has often been relegated to the shadows. Although the anthropological literature documents numerous societies around the world that have traditionally celebrated menarche (the onset of menstruation) as an important rite of passage,[12] menstrual blood itself (and its management) has frequently been perceived as polluting and taboo.[13] Secrecy abounds in both low- and high-income settings, with girls directly or indirectly taught a "menstrual etiquette" to adhere to after the onset of menstruation.[14] This etiquette encourages discreet management of blood flow and discomfort, communicating to girls the importance of keeping the experience of menstruation, and their status as a woman who is menstruating, hidden from boys and men. Throughout their reproductive years, girls and women in most societies strictly follow this etiquette. It is generally much easier to do so in contexts that have readily available puberty guidance, sanitary materials, and safe, clean, private, and accessible water, sanitation and disposal facilities.

Although menstruation remains a socially stigmatized condition in most contexts, and one that is infrequently discussed in coeducational (or even female-only) encounters, a girl or woman's menstruating status can easily be hidden in high-resource contexts.[15] By contrast, in many LMICs, where girls receive very limited puberty guidance, and the cost of mass-produced sanitary materials is high, the inadequacy (or complete lack) of safe, private, clean water, sanitation, and disposal facilities presents substantial additional environmental barriers to MHM. Until recently, however, many advocates in the fields of education and public health did not perceive this situation as relevant to their work.[16] Menstrual shame and the complexities of menstrual management were perceived as an inevitable part of the social order, and other priorities for the limited existing resources consumed attention.

Ten years ago, the scant references to MHM in the development literature included those of family planning advocates, who sometimes mentioned menstruation, primarily in reference to its relevance for contraceptive uptake among married women of reproductive age.[17] In most LMICs, the sexual and reproductive health community did not focus on the physiological and emotional transitions of early puberty for girls. They were primarily focused on girls aged 15 years and older because of their increased vulnerability to unwanted pregnancy and infection with HIV and other sexually transmitted infections. Global health priorities were aimed at reducing maternal morbidity and mortality, and the problematic feminization of the HIV epidemic.[18,19] These goals kept the focus of the existing limited global health resources on programming and policy aimed at what was perceived to be the most vulnerable age group (older adolescent girls).[20]

Similarly, water, sanitation, and hygiene (WASH) practitioners and policymakers did not give much attention to integrating girls' and women's menstrual management needs into either household or school-based programming.[21] One hypothesis is that this oversight may have reflected unintentional gender-related bias on the part of engineers (who were mostly men at that time) in the WASH sector. In addition, water and sanitation projects have never received the levels of funding of other global health issues, which made it less likely that research would have revealed the specific needs of schoolgirls.[22] Also, donors and global health experts may themselves have believed that the onset and management of menses was a private matter, to be taken care of within the family, and thus not a priority for the limited existing health and education funding. Finally, the overall taboo nature of the topic may have prevented a public response to this (in retrospect) seemingly obvious challenge for girls and women in LMICs.

Efforts to close the gender gap in education drove the initial formulation of MHM as a public problem.[23] The years 2004 and 2005 saw a strong global movement to close the gender gap in education. As part of their focus on girls in school, a small number of NGOs began to address the issue of menstruation in their girls' education programming. For example, in Eritrea, Catholic Relief Services provided improved latrines to girls in schools, and in South Sudan, the Basic Education Program provided comfort kits to girls that included sanitary materials and underwear.[24]

The role that the Rockefeller Foundation (an early key actor in MHM) played in supporting social science and technological research as well as civil-society building underlines the ways in which powerful institutions shape the policy agenda: the programmatic developments in Eritrea and South Sudan reflected differing responses to important findings from Rockefeller-supported case study research in multiple countries (e.g., Uganda, Kenya, Zimbabwe) in 2001 that explored the sexual maturation of girls in school, and documented the menstrual-related challenges girls were facing in classrooms and school environments.[25,26] Rockefeller also supported an engineer based at Makarere University in Uganda to develop a lower-cost sanitary pad made from papyrus leaves (Maka Pads),[27] and the Forum of African Women Educationalists, an organization that included political female leaders in African countries, which advocated the importance of addressing schoolgirls' menstrual-related needs and removing the value-added tax on the import of sanitary materials into African countries.[28]

The private sector also played a key role in raising awareness about menstrual hygiene management. Proctor & Gamble (P&G), which in 2005 was one of the leading global sanitary material producers with a presence in sub-Saharan Africa and other LMICs, collaborated with the Forum of African Women Educationalists on advocacy to remove the value-added tax for importing sanitary materials.[29] Proctor & Gamble engaged in a range of menstrual management-related activities for girls that reflected both instrumental and principled goals: expanding their markets, building their brand, and adhering to a social responsibility ethic that included a commitment to educating girls about their bodies.

Proctor & Gamble supported trainings for schoolgirls across a number of LMICs in

partnership with local institutions.[30] For example, in some countries, P&G partnered with the Ministry of Health to identify puberty trainers whom they then supported to conduct sessions for girls in schools that combined puberty guidance lessons with an introduction to their commercial sanitary products. This program served a marketing function but also produced social benefits.[31] Fieldwork by the first author (M. S.) with girls and teachers in Tanzania in 2006 found that the "Always" (the brand name) trainings were sometimes the only information available to girls about menstruation and menstrual management (field notes in unpublished dissertation, M. Sommer, 2008). Similarly, for teachers, the P&G puberty information leaflet, which provided factual content on pubertal body changes along with sanitary product information, was often kept on hand in the staff room because it was the only reference material about the topic. In an environment where pad absorbency was essential because of the lack of adequate sanitation in schools and other facilities, P&G attempted to produce the lowest-cost pad possible (multiple oral communications with different people, 2006–2007). Pad affordability helped to build P&G's market share but also benefited the girls who needed the pads.

In the years after these initial activities, however, the topic of menstruation as a barrier to schoolgirls in LMICs still failed to gain significant traction globally. The NGO activities were documented minimally and only in the gray literature, and the case studies published by Rockefeller could be purchased only in hard copy form in Harare, Zimbabwe. Although the Internet provided a means for identifying these projects in far-flung places, there was no significant public discussion about the topic, and social media had not yet become a means by which grassroots advocates could generate interest. Although the *New York Times* and other newspapers ran at least 1 article about the challenges of menstruation faced by schoolgirls in LMICs,[32] menarche continued to receive little attention in the public health arena. The menstrual management challenges facing girls in school were almost as invisible within the education arena as in the public health arena. Although the sexual and reproductive health community would have seemed a natural fit for addressing the onset of menstruation in girls, their focus, as mentioned, was primarily on girls aged 15 years and older (those who had begun menstruating) who were vulnerable to unwanted pregnancy and sexually transmitted infections.

The siloed nature of donor funding, with health and education supported through different funding streams, may have hindered action on this issue. For example, interventions that might have addressed an important though distal determinant of health vulnerabilities for girls, such as programs to improve the inadequate WASH school facilities, which were disrupting girls' participation in class and comfort attending school (and interrupting their education), were not part of the portfolios of public health donors.[33,34] So, despite the emergence of evidence about the MHM-related challenges faced by girls in LMICs, health programming for adolescent girls remained focused on targeting older adolescent girls with messages about family planning and contraceptive use, and training in life skills to enhance their capacity to negotiate with sexual partners regarding prevention.[35,36]

Similarly, the education advocates themselves continued to focus on improving access to education and increasing literacy. In the context of limited resources, many in the education sector perceived menstruation as less important than the shortage of resources for textbooks, classrooms, and other essentials. However, beginning in 2004–2005, the WASH community working in schools (a small sector representing the intersection of those concerned with WASH, education, and child health) did advocate menstrual hygiene–related interventions. For example, UNICEF, along with the NGOs mentioned previously and other organizations, supported a few small-scale projects in Bangladesh and other low-income contexts aimed at improving the sanitation and disposal facilities for schoolgirls. They, along with others in the WASH sector, began trying to quantify the implications of inadequate WASH facilities in schools for girls[37] and hosted an Oxford Roundtable to bring attention to the menstrual-related challenges facing schoolgirls.[21] Our hypothesis is that some of these efforts may have resulted from a small number of dynamic women engineers who joined the WASH sector at UNICEF and elsewhere and who were more focused on young women's needs. Important as these early efforts were, however, they still failed to generate global recognition of MHM as an important issue.

## CULTURAL AND STRUCTURAL DIMENSIONS OF ATTRIBUTIONS OF RESPONSIBILITY FOR MHM

To understand how an issue or problem such as MHM reaches the level of a government accepting responsibility for solving it, it is necessary to explore the cultural and the structural dimensions of that responsibility.[38] Gusfield set forth this framework in his analysis of drunk driving.[8] The cultural dimension represents the way that a phenomenon is perceived within the society. In the case of drunk driving, if excess drinking is seen as the chosen behavior of a willful person, then the responsibility for that behavior is placed on that individual, and the solution may be laws that prosecute the person for the behavior. By contrast, if the behavior is perceived as a medical condition, as alcoholism came to be seen over time, then the attribution of responsibility may be placed on the illness, with solutions that do not lie only, or even primarily, in prosecuting the individual.[8] The structural dimensions of a public problem relate to the successful attribution of responsibility onto institutions or personnel who may then see the designation as an obligation to society they are responsible to address or, alternatively, as an opportunity to solve a public problem.[8] In the example of drunk driving, the solutions to the problem over time began to be perceived as falling within the purview of the automobile industry (to design safer cars) and of governments (to design safer roads and enforce traffic rules).

Our observations of the cultural dimensions of MHM in LMICs suggest that menstruation was perceived 10 years ago as a personal issue that needed to be handled at the individual level by the family of the girl or woman concerned. We argue that these perceptions partly reflected, as noted previously, the gender-based biases of health, WASH, and education researchers and practitioners from high-income countries. In addition, we suggest that these actors' perceptions (perhaps drawn from the anthropological literature about societies across sub-Saharan Africa[39] and other

regions), contributed to the view that rites of passage existed that conveyed to girls whatever guidance they needed at this significant event in the life course.

Our analysis indicates that another factor relegating responsibility for menstruation outside the realm of a public problem was the history of education within some LMICs. Many school environments in LMICs were constructed at a time when girls were not permitted or encouraged to attend school.[40,41] The design and construction of water and sanitation facilities, if they existed at all, were oriented to the needs of students who were assumed to be boys, not menstruating girls. In addition, the majority of governments in LMIC had few women in leadership positions, and hence few powerful women who could advocate forcefully about a topic as taboo as menstruation and the importance of safe, clean, and private water and sanitation facilities in schools, households, and other locales.

## EVIDENCE AND ADVOCACY FOR BRINGING MHM INTO FOCUS AS A PUBLIC PROBLEM

Evidence about girls' lived experiences of menstruation in various LMICs was an important resource for those seeking to draw attention to this issue. It showed that existing perceptions about the cultural dimension were erroneous: girls were not necessarily learning the pragmatics of menstruation and menstrual management within the family, and girls were not necessarily being provided with either sanitary materials or underwear (for cultural or economic reasons).

The publication in the peer-reviewed scientific literature of new evidence about the challenges facing menstruating schoolgirls was seen from 2006 onward. Much of that research reflected the increased engagement in research on MHM of academics from the education and public health sectors.[11] Findings about schoolgirls' experiences with menstruation (including challenges related to menarche and the management of menstrual flow) were published in education, water and sanitation, development, and, more recently, public health journals.[42–44] This research drew upon participatory and feminist methodologies rather than the traditionally accepted gold standard of randomized control trials in public health, and upon the role of praxis in public health and education.[45,46] Girls' experiences and the potential to resolve their challenges with existing tools resonated strongly with the notion of primary prevention in public health: intervening early to prevent public health problems from developing (e.g., school dropout, lower self-esteem, negative sexual or reproductive health outcomes). The interdisciplinarity of this work, which crossed both topical and methodological boundaries, with public health academics using innovative methodological approaches and publishing in education and WASH-focused journals, helped stimulate greater awareness of the menstrual challenges facing girls across various sectors.[42–44,46]

A second, related factor was the growing documentation of changing family structures across LMICs resulting from urban migration and the impacts of the HIV epidemic.[47] The separation of extended families and the absence of parents contributed to a changing public perception, one that removed cultural responsibility from families for providing menstrual-related guidance, and recognized the growing need for schools to take on the role of providing such guidance.[48]

Simultaneously, or possibly consequently, NGOs began to implement menstrual-related projects in WASH and educational programming (e.g., Save the Children, WaterAid), and P&G (and other private-sector sanitary pad companies) supported researchers and practitioners to publish or to present findings on the topic of MHM and schoolgirls.[49] Several private–public partnerships emerged at this time between sanitary pad companies and NGOs or academic institutions, including Johnson & Johnson working with schools in Kenya, and P&G's partnerships with Save the Children in Nepal and Ethiopia.

Given the differing priorities of the various partners involved, such partnerships likely served multiple interests. All partners wanted to bring attention and resources to menstruating girls' needs around the world and thereby improve girls' lives. For the private-sector companies, the partnerships also built market share and brand awareness; furthermore, staff members of the private-sector companies felt increased job satisfaction from "giving back" to the global community of girls and women (multiple oral communications with different people, 2006–2007). For the NGOs, the partnerships brought needed resources to education- and health-related efforts in schools in LMICs. For the researchers, the effort brought visibility for their research through publications and conference presentations.

The increased documentation about menstruation and schoolgirls led to the coining and acceptance of the acronym "MHM" itself.[50] This labeling provided a framing for the concept, and a more solidified conceptualization of potential MHM interventions for schoolgirls.[51] One of the first formalized usages of the label "MHM" was at the Oxford Roundtable hosted by UNICEF in 2005. Archana Patkar (then the director of Junction Social in India) provided a talk entitled "Menstrual hygiene management: taking stock."[52] The inclusion of the word "hygiene" linked directly to the WASH sector's focus on water, sanitation, and hygiene in education and to public health. The MHM label, however, was not taken up broadly by others immediately; labels used over the past decade to refer to the menstrual-related challenges facing girls ranged from the "sexual maturation" of girls (the Rockefeller studies), to "menstrual management" (the education and public health writing), and "managing menstrual requirements" (others in the WASH sector). The MHM title resurfaced in conference papers presented in 2010,[26] and then increasingly in peer-reviewed publications and in the social media, the latter increasingly used by a diverse range of players. Perhaps this reflected the power of the word "hygiene" to neutralize the otherwise alarming reference to menstruation, or perhaps it reflected the predilection for people across sectors for acronyms.

Menstruation began to be perceived as an issue about which girls were insufficiently informed (at the time of reaching menarche), and for which school environments (often public institutions in the countries where the research was occurring), with their inadequate water, sanitation, and disposal facilities, were failing.[53,54] The research also revealed the complex cultural dynamics within families across various cultures and urbanizing societies, and the inappropriateness of depending solely on families for the provision of information, materials, and sanitation solutions.[55]

All of these shifts in the growing global understanding of and discourse about menstruation

represented a shift toward a structural response for the issue (identifying approaches that address the social, cultural, economic, political, or environmental factors that have an impact on population health).[18] The growing body of documentation about the inadequate information girls were receiving before menarche about their changing bodies and the insufficient school environments to enable the comfortable, safe, and private management of menstruation provided a strong platform for advocates to lobby for greater attention (i.e., institutional policy and response) from national governments and global donors to the MHM needs of schoolgirls. Such efforts have been used similarly in other public health advocacy efforts for the building of social movements for health, such as maternal mortality.[56,57]

The MHM advocacy was strengthened by efforts to highlight the voiced stories of actual girls in LMICs who were struggling to manage their menstruation[43,44,46]; it is worth noting that it was these first-person narratives generated through participatory methods, rather than the earlier efforts at quantification of the disease burden, that provided the key evidence at the moment that a global movement began to coalesce. This advocacy contributed to a shifting in expectations of responsibility for MHM away from families and onto schools (and governments as the providers of schools) for the provision of information to girls and the adaptation of school environments to better meet the needs of girls and female teachers. This reshaped the cultural dimensions of menstruation from being an individual experience (and problem) to one that had a structural dimension, placing responsibility on public institutions.

Other important influences at this time were framings generated by key social entrepreneurs. Charismatic individuals presented the challenges faced by schoolgirls managing their menstruation in LMICs as emblematic of the universal experience of gender inequality confronting girls and women around the world. Their efforts were picked up by (or intentionally targeted at) major news agencies and global figures. For example, the founder of the social entrepreneurial organization Sustainable Health Enterprises managed in 1 year to capture the interest of the *New York Times* columnist Nicholas Kristof, who recommended the NGO (focused on menstruation, sanitary pads, and girls) for Christmas-time donations[58]; Sustainable Health Enterprises (and sanitary pads) were also highlighted by Bill Clinton at the annual Clinton Global Initiative.[59] This news framing of the issue highlighted the inadequacy of existing family responses to menstruation and suggested the need for government or public ownership of the issue.

All of these efforts began to shift the structural responsibility for MHM from individuals to institutions. However, interest at this time remained confined primarily to the WASH sector working in education in LMICs. UNICEF in particular, as a globally recognized authority of policy in the child and adolescent space, increasingly began to push the WASH sector to engage in MHM in schools. By 2011, the organization had made the decision to support research in 4 countries on MHM in WASH with Emory University, which broadened the qualitatively based exploration (important given the sensitivity of the topic and importance of capturing girls' narratives) and documentation of the problem in additional regions (Bolivia, Philippines, Sierra Leone, Rwanda).[60–62] Soon thereafter, UNICEF provided support for a virtual "MHM in WASH in Schools" conference to be jointly hosted by Columbia University (as the academic evidence-based partner) and UNICEF for the first time in 2012.

## COGNITIVE BELIEFS, MORAL JUDGMENTS, AND ALTERNATE FRAMINGS OF MHM

By 2012, a growing chorus of social entrepreneurs, grassroots organizers, and United Nations agencies were turning their attention to menstruation and MHM globally, reinforcing the idea of societal ownership of the problem. Some of this activity resulted from the increasingly common characterization of poorly managed menstruation as a threat to girls' well-being, self-esteem, and schooling, reflecting the increasing empirical evidence about the problem (as cited previously). In addition, focusing on the challenge of menarche and MHM provided an opportunity to present prepubescent girls as a priority population for broad public health attention, with a focus that went beyond a narrow concern with educational outcomes or sexual and reproductive health risks.

Gusfield highlights the importance of the perceived alterability of an issue as part of the cognitive belief that provides an issue with the status of being a recognized public problem.[8(p91)] The framing of MHM as an alterable challenge that schools and the government could and should address contributed to the growing global interest in addressing it. The WASH sector played a crucial role in this framing, reflecting its interest in finding an effective way to raise awareness about the importance of water and sanitation systems. Given the years of inadequate funding and attention to these areas, the issue of MHM provided an opportunity to push for broader changes in water and sanitation. In parallel, growing attention to the "youth bulge" in LMICs,[63] increasing awareness of the vast absolute numbers of young people across many LMICs, and a subsequent concern about how this shifting demography might have an impact on future population health and societal well-being, made it all the more imperative to find innovative approaches to support young people's successful transition to adulthood.

Alternative explanations for the growing awareness of and action on MHM include the numerous framings of the menstruation issue that began to emerge from new players joining the menstruation scene. Their proposed approaches followed a parallel shift in recent years of using engineering and industrial design for designing solutions for low-income country contexts. Increasing numbers of social entrepreneurs, for example, were creating organizations focused on developing and distributing new types of reusable or environmentally friendly sanitary pads. The individuals initiating such organizations may have been motivated to identify—from an entrepreneurial perspective—market-based solutions to what others might perceive as a more complex cultural and structural issue. New players also included local and global girls' organizations (e.g., 50 Cents. Period.; Days for Girls International; Zana Africa) who championed the importance of addressing girls' menstrual-related needs in lower-income contexts. These efforts were frequently focused on making sanitary pads available for girls, and may have been motivated by the satisfaction of raising funds for a tangible solution to an issue that felt very

personal. Such efforts were often framed and spread through social media, news articles, or cause-related marketing campaigns (e.g., P&G's Always or FemCare campaign).

It is plausible to hypothesize that the increasing attention to the issue in various media began to reshape the cognitive beliefs and moral judgments made about menstruation among the global education and public health sectors, contributing to the exponential growth in attention that the issue has received. As Gusfield describes: "Without . . . a moral judgment of its character, a phenomenon is not an issue, not a problem."[8(p10)] The moral perspective on menstruation, and one frequently invoked through the social media, was that of the painful situation of girls around the world reaching menarche with inadequate information and experiencing fear, shame, and embarrassment. Similarly, descriptions of the challenges girls and women were facing with inadequate water, sanitation, and materials, were framed as human rights' violations, as immoral realities in need of intervention.[64] A framing of the universality of the challenge provided a way to connect to human rights language as has been used in strengthening social movements around other issues. Similarly, persuasive framing has proved centrally important in moving forward other agendas in global health.[65,66]

We propose that the use of girls' menstrual stories had a key role in generating the high levels of passion and energy among such a varied cast of characters. The universality of the experience of menstruation, with menarche and managing menses resonating among girls and women all over the world, may have also played a role. For feminists drawn to the issue of MHM, bodily self-management may have been perceived as a common concern that can be shared and acted upon collectively, less controversial than other topics in adolescent sexual and reproductive health and one that allowed feminists, whose approaches to other issues may not have aligned, to find an area of common ground.[67] It is also one that is deeply felt. Social movement theory, and the empirical work that draws on it in relation to HIV, sexual health, and rights more generally,[68–71] has shown that the emotional impact of an issue in people's lives is a strong impetus for passionate engagement in advocacy.

There have been a number of efforts to capture the stories of girls attempting to manage their menstruation in various contexts around the world. Such stories have been put forward in short films (e.g., BRAC's video on menstruating schoolgirls' needs for water and sanitation in Bangladesh),[72] in NGOs' reports in the gray literature, and in the mentioned cause-related marketing of global sanitary pad companies and social entrepreneurial organizations. For example, P&G produced a television advertisement showing girls in a sub-Saharan African country who were missing out on school because of inadequate supplies of sanitary materials. Such videos and similar efforts have been used to raise funds to support MHM interventions for school-going girls in LMICs. Another example emerged from the girl's puberty books that have been developed through participatory research with girls in 4 countries (Tanzania, Ghana, Ethiopia, and Cambodia).[73] The books are developed through research with girls in each country, a process that includes collecting girls' "menstrual stories," anonymous narratives that adolescent girls write to describe the experience of their first menstruation, including how they felt, how they managed the process, and their advice for younger girls. Stories from across all 4 countries indicated that many girls reached menarche with no previous guidance, and hence experienced fear and shame. Girls described seeing blood for the first time, and worrying that they have a terrible disease or are going to die.[74]

These framings of menstruation all played a role in influencing its construction as an issue of societal obligation and importance. Lakoff describes 3 levels of conceptual framing that can be used to influence perceptions about a public problem.[11] Level 1 includes messaging that presents the framing within overarching values that motivate a broad range of individuals in various contexts. We argue that this type of framing, which garners interest from a broad range of players, has been exceptionally important in generating social mobilization in relation to the issue of menstruation and the need for improved circumstances for girls' and women's ability to manage menses with dignity, safety, and comfort. Level 2 focuses on the general issue being addressed (for example, puberty or toilets) and level 3 pertains to the details essential for programs or policies (for example, specifications of the types of latrines needed in a particular environment). In the popular opinion, level 1 is the most important because it resonates with people deeply—and as Dorfman et al. describe in citing Lakoff, "frames trump facts."[11(p325)] The news frames about menstruation, and even some of the conceptual frames put forward by academics, presented the challenges of menstruation for schoolgirls as rooted in common values held by girls, women, families, and communities in a broad range of contexts from high- to middle- and low-income countries. Although families and school headmasters and WASH practitioners in each local context might not have conceptualized menstruation from a values perspective, the issue was one that garnered global-level interest and dialogue.

## POLITICAL RESPONSIBILITY AND OWNERSHIP OF THE MENSTRUATION AND MHM ISSUE

The last component of Gusfield's conceptual framework explores the "ownership" of a public problem.[8] Groups or institutions that "own" a problem are considered to have both the capacity and the responsibility to address the problem. In Gusfield's analysis of drunk driving, for example, churches owned the issue of alcohol use in the United States before the mid-20th century, with the medical societies too disorganized to take on ownership for alcoholism.[8] This situation shifted when alcoholism began to be framed (and perceived) as a disease. Also of importance is the disowning of responsibility for a public problem, with the alcohol and beer industries and the automobile industry originally disowning any sense of responsibility for the drunken driving. This has now shifted, with the automobile industry perceived as responsible for developing safer automobiles, and the government perceived as responsible for regulating alcohol sales.

In the case of MHM in LMICs, schools (or governments) did not until recently perceive menstruation or MHM as falling within the realm of their responsibility. Global sanitary pad companies have over the past decade assumed some level of responsibility for the problem, and have sought to build their markets in LMIC through lowering the cost of the

most absorbent materials they can produce for such contexts. Affordability has remained an issue, however, and this has put pressure on the industry to reduce their prices further, spurring widespread efforts to produce locally made, more affordable reusable or disposable products.

These "pad" efforts, although aimed at least in part at improving the lives of girls in school across LMICs (and now women as well), may in fact be hindering some of the efforts to adequately address this public problem. The reason lies in Gusfield's definitions of the importance of causal and political responsibility. Causal responsibility describes the power to define and describe the problem, answering the "who but not the what" of the issue.[8(p13)] In the academic literature, MHM for girls in school in LMIC has been defined as a problem in which families, communities, and schools have not adequately been providing guidance or sanitation facilities (or materials) for girls. It has been described as a problem with numerous facets, ranging from insufficient information to inadequately adaptive environments.

By contrast, the "pad" response has focused on sanitary materials as a "magic bullet" that will solve the MHM challenges facing girls (and women) in LMIC. Although having access to clean sanitary materials (be it a cloth or a pad) is of great importance, the narrow focus of this approach to causal responsibility absolves the public sphere of the political responsibility needed to solve the problem by turning attention away from government (or public) provision of puberty information and safe, private, clean, and easily accessible water, sanitation, and disposal facilities. Political responsibility specifies the "content of the description and the solution."[8(p14)] Constructing a case for both causal and political responsibility is necessary to create a sense of public responsibility for a public health issue.

As the evidence grew for the importance of providing guidance and facilities to enable MHM for girls attending school in LMIC today, ownership of the solution was framed from a pragmatic standpoint. Much of the academic writing on the existing MHM evidence has approached the issue as one of practical changes that can be made in the provision of information and facilities, placing ownership in the realm of national public policy (e.g., the realm of government agencies such as the Ministry of Education). Many advocates have intentionally refrained from suggesting that the goal should be to directly address the shame and stigma of menstruation (except in circumstances in which menstrual taboos appear to endanger the physical or emotional well-being of girls).

This avoidance of direct criticism of local cultural beliefs and social norms may explain, for example, why the Ministries of Education in Tanzania, Ghana, Ethiopia, and Cambodia have readily approved the girl's puberty books (which are very focused on pubertal body change and MHM guidance and not on challenging or changing local cultural beliefs) in all 4 countries where they have been developed as part of the national curricula for upper primary schools or lower secondary schools or both. Refraining from trying to overturn deeply rooted social beliefs (an approach that might offend constituencies) may have made it more politically palatable for national governments to assume ownership of the problem, as has happened by at least 3 countries to date (Kenya, South Africa, and India). All 3 have announced or launched efforts to subsidize the provision of sanitary materials to girls in need. A market-oriented technological approach, as discussed previously, is less politically charged, complex, and expensive than infrastructure-oriented approaches to MHM. It is, however, likely to be less sustainable than an approach in which governments are pressured to take responsibility for building adequate water, sanitation, and disposal facilities in schools, or to provide puberty and MHM guidance to girls.

The decision of the Joint Monitoring Program of the World Health Organization and UNICEF to add MHM in schools and health facilities as a global advocacy issue in the lobbying effort for the post-2015 sustainability goals was an additional important factor that has augmented the efforts to articulate and build support for public responsibility.[75] The Joint Monitoring Program expanded their previous hygiene-related efforts focused for decades on hand washing to include advocacy for MHM. The Joint Monitoring Program effort, which includes national- and global-level advocacy for the inclusion of water and sanitation goals, targets, and indicators in the post-2015 sustainability goals, included for the first time attention to MHM in schools and health care facilities as part of the lobbying effort. The numerous working meetings aimed at moving forward this agenda led to the creation of a formally recognized definition of MHM, and of what adequate MHM for girls and women should include (including details on the various components of MHM that are essential).[76] Having a viable collectively agreed upon global definition to complement the handy acronym is a powerful additional tool in the advocacy arsenal because it provides a center around which efforts can coalesce. In other words, the concept of MHM becomes institutionalized.

The education and public health sectors working in LMICs have generally avoided attributing (or assuming) causal and even political responsibility for the issue of MHM in development activities. However, this may be starting to shift because of both the efforts of charismatic individuals who have taken up the issue, and the continued role of the private sector (P&G in particular) in pushing for attention to the needs of the world's pubescent girls. Although sometimes there have existed perceived differences in the agendas of the public- and private-sector players, their collaboration has nevertheless produced some important results for advancing the global MHM agenda.

In the past year, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) conducted a review of the menstrual education and MHM literature and published a new puberty education policy in an effort to spur the global education sector, including national governments, to address menstruation and MHM.[3] Advocates have framed the effort, which received financial support from P&G, in multiple ways: meeting the needs of girls (and boys) for guidance about puberty, serving as an entry point to comprehensive sexuality education, and fulfilling a human right. Although multiple framings are present in the effort, level-1 framing, speaking to values, may be the most impactful one. The public–private partnership of UNESCO and P&G helped to raise global awareness of these rights and of these messages. UNESCO took responsibility for identifying the empirical evidence that substantiated the need for greater attention to MHM, and P&G used private-sector communication skills to attract media attention. Dynamic individuals at UNICEF and the United Nations Girls' Education Initiative did

their part by securing a large grant from the Canadian Government to advance the MHM agenda for schoolgirls globally.[77]

By contrast, the sexual and reproductive health community continues to largely refrain from exerting any ownership (or responsibility) for addressing menarche and MHM in their programming and policy. Likely the limited existing global health resources and the desire for immediate results continue to keep sexual and reproductive health efforts primarily focused on girls aged 15 years and older. This situation may be starting to change, however, with the World Health Organization and other organizations focusing on MHM for International Women's Day in 2013.[78] The World Health Organization has similarly engaged with its participation in and support for the newly launched Global Early Adolescent Study, which will focus on building the evidence based on the gendered socialization of urban very young adolescents globally.[79]

Ultimately, as Gusfield notes, even when public authority (or ownership) is exerted over a public problem, only so much control to change a situation can be exerted.[8] Individuals' private lives are shaped by powerful cultural and social norms that are only partially influenced by public authority. In the context of menstruation and MHM, there are many contexts in which girls reaching menarche are punished or experience tremendous shame upon beginning to menstruate. These are contexts that will take years if not generations for governments to change. Events such as the recently held inaugural global Menstrual Hygiene Day,[80] an event originating in the WASH advocacy sector in high-income countries, which brought together NGOs, donors, social entrepreneurs, and grassroots girls' and women's organizations from various regions across the globe, serve as important social mobilization efforts aimed at confronting the taboos and social restrictions placed on menstruating girls and women across LMICs.

## CONCLUSIONS

In reviewing our analysis of the relatively rapid advancement of the MHM agenda for schoolgirls around the world today, we conclude that persistent and skillful mobilization by individuals from the academic, NGO, and social entrepreneurial sectors, combined with leadership from select United Nations entities and important private–public partnerships, collectively raised awareness and instigated action on this issue. Of critical importance was the way that researchers and advocates leveraged the multisectoral nature of the public health problem, both in the players documenting the evidence and those advocating for the issue (e.g., WASH, health, education).

The WASH sector largely led the effort, but it has primarily done so from the perspective of "WASH in Schools," creating a natural role for allies in education. Although WASH fits within the public health framework, they have advocated the engagement of the education, gender, and sexual and reproductive health sectors, arguing that WASH cannot alone address all the needs of pubescent girls around menstruation. This willingness to share the global agenda and create a truly multisectoral response to the challenges of MHM for schoolgirls appears to have paid off in drawing in a growing number of global stakeholders.

Much work remains to be done on intervening on this issue, with 50% of schools across the low-income world lacking adequate water and sanitation, and an as yet unquantified number of girls lacking guidance before the onset of menstruation. And the numerous players involved in the global loose coalition pushing forward the MHM agenda have at times differing visions and motivations for its future that warrant further analysis to help strengthen the coalescing around the issue. Nevertheless, important public health lessons have been learned from the advancement of MHM thus far, and the recent global first-ever Menstrual Hygiene Day organized by WASH United and its numerous partners suggests that the social activism will continue for some time to come. Further advocacy and resources are also needed to obtain the quantitative data that will indicate the magnitude of the challenges for schoolgirls, and demonstrate the impact of MHM interventions (e.g., longitudinal studies that are necessary for causal inference and impact evaluation).

A number of broader lessons exist as well for those seeking to move forward other public health issues onto the global agenda, or even onto local and national agendas. First, despite the continued insistence of many in the public health arena that randomized controlled trials are the only valuable kind of evidence for creating policy, the process that served to define MHM as relevant within the public health agenda illustrates the power of stories in galvanizing action—indicating both the critical importance of narrative methodologies and qualitative research, and effective health communication as a core part of public health.

Second, the process of moving forward MHM as a public health problem represents a balancing act in terms of the politics of the advocates who have chosen to frame the issue as political in a way that generates public sector responsibility, but does not wade into the mire of local cultural politics. Third, there is revealed a lesson about the limits of market-based solutions in terms of how they can undermine public-sector responsibility, as well as the importance of the benefits of a focus on infrastructure rather than on beliefs. Fourth, one should never underestimate the power of a good acronym, combined with "institutionalization" in the form of a globally agreed-upon definition (exemplified here through the advocacy process for the post-2015 sustainability goals).

Framing is part of structural interventions—it would not have been possible to get governments to talk about MHM or to place MHM on the global agenda without it being turned into a social problem. Those working in public health might benefit from finding ways to focus on the social nature of the problems rather than solely focusing on the empirical evidence. This combined approach would be particularly important in applying some of the lessons learned from advancing the MHM agenda in relation to schoolgirls, to a global health effort to better understand and address the menstrual management–related challenges in both the public and private spheres that are facing grown women across low-income countries as well. ■


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M. Sommer, J. S. Hirsch, C. Nathanson, and R. G. Parker collectively conceptualized the article content. M. Sommer

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