

# Monitoring Menstrual Health and Hygiene

Measuring Progress for  
Girls related to  
Menstruation

GENEVA, SWITZERLAND

MARCH, 2019

## GREEN PAPER

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**Acknowledgements:** Special thanks to the Water Supply & Sanitation Collaborative Council for handling all the logistics related to the Geneva meeting, to Aja Weston, MPH Candidate at the Mailman School of Public Health, Columbia University, for all of her analytic support in preparing the content of the meeting, and to Michael Randel for his support for designing the meeting structure and activities.

**Recommended Citation:**

Sommer, M., Zulaika, G., Schmitt, M., Gruer, C. (Eds.) Monitoring Menstrual Health and Hygiene: Measuring Progress for Girls on Menstruation; Meeting Report. New York & Geneva: Columbia University and WSSCC. 2019.

This meeting was co-convened and funded with generous support from the Water Supply & Sanitation Collaborative Council (WSSCC)

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## EXECUTIVE SUMMARY

There is growing global momentum around addressing menstruation as an important health, education and gender equality issue. However, a critical barrier to making progress on addressing menstruation and the range of girls' needs around this issue, is the lack of adequate validated measures related to measuring menstruation within global health and development. Measures are most needed that are aligned to five priority areas (sexual and reproductive health, psychosocial health, education, WASH, gender). The absence of measures as standards by which to assess progress on addressing menstruation-related interventions, limits both assessment of important outcomes and the creation of programs to change them. Further, menstrual health and hygiene<sup>1</sup>-related indicators have yet to be incorporated within these five areas, despite the potential influence of menstruation on their respective outcomes, including reaching associated Sustainable Development Goal (SDG) targets.

In March 2019, a multi-sectoral group of researchers, practitioners, and monitoring and evaluation specialists convened to identify priority indicators across key sectors (or priority areas) within global health and development, and assess alignment of the identified priority indicators with menstruation. The focus of the meeting was on the menstruation-related issues impacting girls in and out of school, as they represent the population for which there exists the strongest existing body of evidence. This *Green Paper* briefly details the meeting justification and background, key discussions, and proposed next steps. Similar approaches and analyses are needed in the future that engage a much broader population and realm of menstruation-related topics, particularly the needs of menstruators in workplace contexts, a significantly overlooked issue.

Overall, findings highlight the complexity of addressing menstruation in societies around the world that have ongoing menstrual restrictions and taboos that are relevant for the design of interventions. In addition, there continue to be significant gaps in what is known, such as an understanding of the bleeding patterns of adolescents in low-income contexts, including timing of menstrual onset, the implications of menstruation for anemia, and the existence and quality of teacher sensitivity training on the topic for girls' successful classroom engagement. Despite these gaps, participants underscored the critical role of menstruation influencing the five identified areas to achieve their respective goals. For example, to reduce child marriage, countries need to ascertain if the onset of menses increases girls' vulnerability to marriage at a young age. The analyses identified the important role of menstruation-focused interventions to influence outcomes and impacts across sectors but with contributions occurring lower down on the results chain. Hence, indicators may need to capture the availability of female friendly toilets in schools as a necessary input for improving completion rates. Or, examine if providing girls with adequate supplies of sanitary pads and information about their bodies during puberty reduces the likelihood of adolescent pregnancy, a priority for the sexual and reproductive health global agenda.

Although key priority indicators that align with menstruation were identified and analyzed across the five areas, further work is needed to move forward the measurement agenda. A key outcome of this initial effort was the consensus to submit a question during the open window of the Demographic and Health Survey (DHS) submission period that recommended data be captured at the national level about awareness of menstruation prior to the participant's first menstrual period. Recommendations for next steps include to create a knowledge-sharing platform; support the validation of key indicators of relevance to the five areas in relation to menstruation; improve tools available for countries to monitor menstruation and mark progress; and support translation of research findings for country uptake.

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<sup>1</sup> As the past nomenclature is evolving, for the purposes of this paper, we combine "menstrual health and hygiene", with prior studies using "menstrual hygiene management" retained.

## PURPOSE / FOCUS

In March 2019, multi-sectoral researchers, practitioners, and monitoring and evaluation specialists convened to identify priority indicators across key sectors (or priority areas) within global health and development, and assess alignment of the identified priority indicators with interventions addressing menstruation. This *Green Paper* briefly details the background, key discussions, and proposed next steps. The three-day meeting focused on the menstruation-related issues impacting girls in and out of school, as they represent the population for which there exists the strongest existing body of evidence. The latter is related to the limited funding that has been available to date to conduct research on the topic of menstruation, and early interest in the intersection of menstruation and girl's education. Future efforts are needed to expand this exercise beyond girls, using an intersectional lens, as the evidence of the impact of menstruation on women and all people with periods grows in the future. This should in particular include experiences of menstruation in workplace contexts, a critically overlooked area to date.

## BACKGROUND

There exists growing global momentum towards addressing menstruation as an important health, education and gender equality issue.<sup>1-4</sup> This effort originated through research and programming in low- and middle-income countries (LMIC) within the WASH sector,<sup>5</sup> and included studies examining how menstrual onset (menarche), menstrual management, and menstrual stigma create challenges and inequalities in girls' education experiences.<sup>6-14</sup> This was conceptualized early on as MHM, with new terms, as noted, now emerging. The literature has expanded to explore other areas in which menstruation impacts lives, giving attention to psychosocial wellbeing, sexual and reproductive health,<sup>8,15-19</sup> vaginal bleeding beyond menses<sup>20</sup>, in humanitarian emergencies<sup>21-24</sup>, in the workplace,<sup>25,26</sup> and broadening the scope to include all people with periods,<sup>27</sup> and attention to those with disabilities.<sup>27</sup>

There has also been increasing menstrual advocacy and action in high-income countries (HIC), including campaigns raising awareness about "period poverty" and "menstrual equity,"<sup>28-30</sup> and legislation removing taxes on menstrual products and providing free menstrual products in schools,<sup>31-33</sup> for the homeless and incarcerated.<sup>34,35</sup> Responding to the growing advocacy, researchers are beginning to focus on menstruation in HIC,<sup>36-40</sup> seeking to update the rich body of literature from prior decades.<sup>41-44</sup>

Efforts have arisen to bring cohesion, enhanced collaboration, and strategic synergy to the menstruation-related activities happening around the world, including global advocacy and networking organizations (Menstrual Hygiene Day, Menstrual Hygiene (MH) Alliance, Menstrual Health Hub), the African Coalition for Menstrual Health Management, the Global Menstrual Health and Hygiene Collective, a WHO review meeting, and MHM in Ten, a ten-year strategy aimed at transforming schools for menstruating students (2014 – 2024).<sup>2</sup> Key priorities of MHM in Ten, which is the only one specifically focused on girls, include building the evidence on effective interventions to address menstruation-related barriers in schools, and establishing global indicators and standards to measure progress within and across countries.<sup>2,45</sup>

The current 'menstrual movement', or the expanding advocacy, research, program and policy responses at local, national, and global levels, is rapidly evolving and gaining momentum.<sup>29,46</sup> There is an urgency to ensure collaboration and consensus around how to best assess progress being made to improve the circumstances surrounding menstruation and associated life outcomes, and to understand opportunities for linking with other sector and SDG agendas, priorities, measurement and monitoring efforts at national and global levels. For girls in particular, there is a need to align menstruation with the priority areas of

education, gender, WASH, and health (SRH and Psychosocial)<sup>5,47–49</sup>, and to assure attention to inclusion of the most marginalized; the latter of which requires the disaggregation of collected data.

### **Lack of measures for monitoring progress on menstruation-related interventions**

A significant challenge impeding investment on menstruation-related issues by donors and governments is the lack of adequate, rigorous impact measures within the most relevant **priority areas** (education, WASH, gender, sexual and reproductive health, psychosocial health) where we hypothesize that outcomes are related to menstruation and menstrual hygiene management (MHM). We use here the global definition of MHM as established by the Joint Monitoring Program (WHO/UNICEF) within the Water, Sanitation and Hygiene (WASH) sector in 2012 (see Box 1) as part of its advocacy to incorporate MHM into the Sustainable Development Goal (SDG) for comparative measurement at national and global levels. This definition is not intended to exclude more recent terminologies being used to bring attention to menstruation more broadly (e.g. menstrual health, menstrual health management, menstrual health and hygiene management, period poverty, menstrual equity), and there is a need for agreed definitions of more menstruation related terms. Expanded or updated definitions may, for example, engage with menstruation from both a clinical and public health lens, address on-going pervasive menstrual stigma, address socioeconomic aspects of menstruation, or the critical intersection of gender and menstruation. For the purposes of the remainder of this paper, we use **menstrual health and hygiene (MHH)**.

#### **Box 1: Definition of MHM\***

Women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, which can be changed in privacy as often as necessary for the duration of a menstrual period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials. They understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear.

*\*Note: Future iterations of the definition are recommended to utilize more inclusive language.*

A growing number of menstruation-related interventions are being delivered, ranging from governments or non-governmental organizations (NGOs) subsidizing menstrual products and reproductive health information distribution,<sup>50,51</sup> to infrastructure upgrades in schools such as female friendly toilets.<sup>52–54</sup> Yet existing impact measurements of interventions are inadequate and lack a clear “fit for purpose” for uptake and use by NGOs, researchers, social entrepreneurs, the private sector, global monitoring bodies, and governments to assure impactful investments are being made with the limited available resources. While rigorous quantitative assessments of some intervention impacts are underway, such as a trial exploring the impact of menstrual cups versus conditional cash transfers on schoolgirls’ sexual and reproductive health and educational outcomes in Kenya,<sup>55</sup> the evidence to date remains limited due to the time and resources needed to conduct such trials, the lack of investment in the development of measurement tools, the minimal experience on translation to scale, and the continued narrow scope of sustainable investment on MHH. These however are the types of outcomes that we expect to see shifted with improved investment in menstrual health and hygiene, including the further testing of associations.

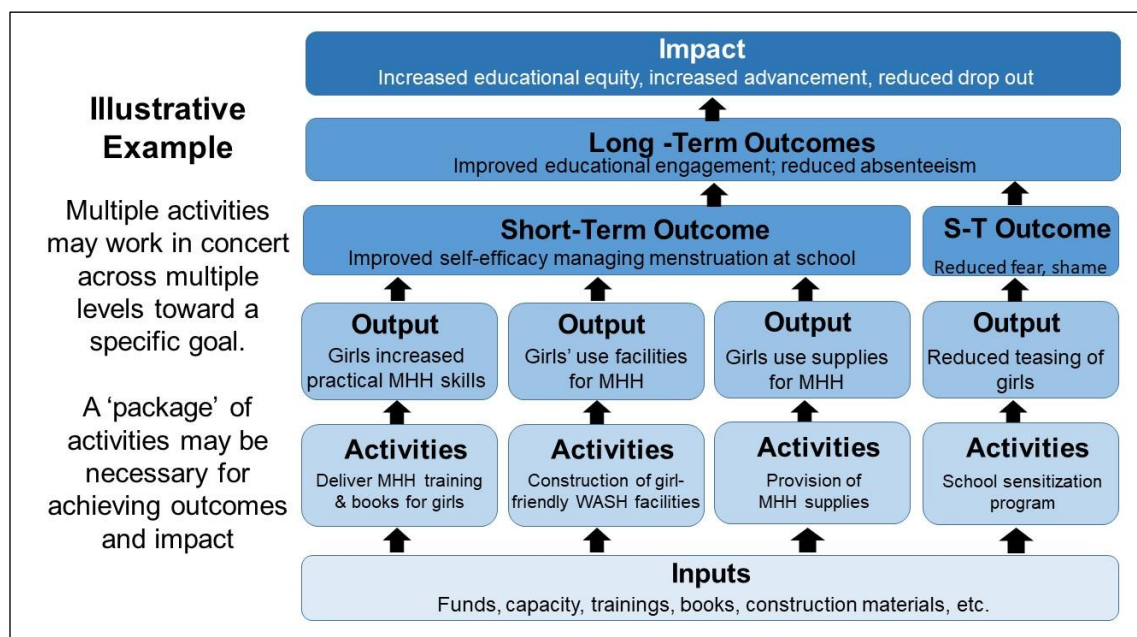
### **Rationale for reviewing progress on measuring menstruation**

There currently exist inadequate validated measures in research and practice related to measuring menstruation that are aligned with the identified priority areas (sexual and reproductive health, psychosocial health, education, WASH, gender). Meaning, we lack measures as standards by which to

assess progress on addressing menstruation-related interventions; and, MHH-related indicators have yet to be incorporated within these five areas, despite the potential influence of menstruation on their respective outcomes, including reaching their SDG targets. This has implications for the health and educational outcomes of girls. Without appropriate measures, circumstances are not monitored or assessed, and action is stifled; and without data, women and girls' health, including menstruation, can be far too easily ignored.<sup>56</sup> Validated, rigorous measures with a defined fit for purpose, be it for government monitoring, an NGO program or other usage -- and recommended methods for data collection -- are needed at different levels of the results chain of MHHM-related intervention investment across the five areas, from assessing program inputs and outputs, to evaluating outcomes and impacts.

As a starting point, priority outcomes and impacts, both for MHH and across the five areas, were identified for exploring if and how MHH-specific outcome and impact measures aligned with those of the five areas, if validated measures exist, and what measures still need to be developed to make progress on menstruation and enable comparability within and across countries. An illustrative example explains why measurement in relation to all of the levels of the results chain of intervention is needed (Figure 1).

**Figure 1: Example of MHH in relation to education impact** [prepared by B. Caruso]



Critical to this analysis was the realization that menstruation may impact the achieving of impact within a key priority area such as education, but requires measurement of its influence lower in the results chain. Also of importance, cross-sectoral inputs are needed to achieve impact; female friendly toilets (or WASH) in schools may be an essential input to meet education outcomes and have broader impact, while health interventions (e.g. iron supplements for menstruating girls) may improve health or educational outcomes.

### Inadequate multi-sectoral engagement on menstruation

Menstruation is a multi-sectoral issue. Yet despite the increasing engagement of actors in the menstrual movement, there exist limited cross-sectoral initiatives, and a lack of multi-sectoral buy-in. Even where multi-sectoral platforms exist,<sup>57</sup> there are often not clear roles and responsibilities to identify effective ways to address menstruation-related barriers faced by those who menstruate in societies. For example,

the menstruation agenda in LMIC was until recently led primarily by the WASH sector in schools.<sup>5,58–64</sup> The WASH in Schools for Girls (WinS4Girls) program led by UNICEF, the UN Girls Education Initiative (UNGEI) and Emory University, funded by the Canadian Government, promoted engagement by the Education sector in partnership with WASH across 14 countries.<sup>65–67</sup> However, a recent review of education policies from twenty-one LMICs for inclusion of menstruation (or its proxies, such as gender-specific toilets), found that overall national education policies have inadequate inclusion of menstruation-related improvements in schools.<sup>68</sup> Little mention of menstruation surfaces in global and national agendas focused on sexual and reproductive health,<sup>10,19,69,70</sup> and only recently has menstruation been noted in the gender arena.<sup>71,72</sup> Thus, opportunities for synergy, more impactful investment, and meaningful progress on menstruation are hampered at local, national and global levels.

## BRIEF MEETING OVERVIEW

The primary objective of the meeting was to identify and prioritize a selection of critical measures for monitoring MHH progress in relation to the five key thematic (priority) areas. Sub-objectives were to explore each thematic area in order to:

- Identify the current state-of-the-art in quantitative MHH outcome and impact measurement;
- Prioritize what issues need to be monitored and assessed; and
- Determine next steps to move the agenda forward to harmonize indicators and tools.

To achieve these objectives, experts specializing in measurement from the WASH, education, gender, sexual and reproductive health and psychosocial health fields, with varying levels of previous MHH expertise, were invited to participate in person (Appendix B). A **Global Advisory Group** (Appendix C) provided inputs regarding key measures/indicators for selected priority areas of expertise. One overarching aspirational goal provided the vision of aligning the priorities and menstruation (Box 2).

### Box 2: Overarching Aspirational Goal

Girls live in societies that enable them to be confident and knowledgeable about their menstruation, and able to manage it with dignity, safety, and comfort, thereby promoting their health, wellbeing, and ability to realize their potential and equitable role in society.

### Process for Identifying Alignment of Menstruation with Key Priority Areas

To achieve the primary objective, six phases of review and analysis built upon each other to produce a list of key measures/indicators relevant to each priority area. Brief details of the phases are described in Table 1. Priority area experts were separated into “area teams” to engage with the analysis activities.

**Table 1: Process of identifying alignment** (see Appendix A for meeting agenda)

Phase Aim	Activities	Product/Result
<b>Phase 1:</b> To recognize the link between MHH and each thematic area	Foundational presentations and discussion	Common understanding of MHH perspective on links
<b>Phase 2:</b> To identify key outcomes/impacts influencing policy in each thematic area	Breakout groups plus sharing back	List of priority outcomes
To identify top 3-4 indicators or measures for each thematic areas	Break out groups plus sharing back	List of key indicators or measures



<p><b>Phase 3:</b> To map out where MHH aligns with priority impacts desired by policy makers in each key area</p>	Breakout groups plus sharing back	Mapped out alignment of MHH with thematic area impact measures
<p><b>Phase 4:</b> To review existing MHH outcome measures relevant within each thematic area and whether they align with commonly used MHH measures across areas and gaps</p>	Presentations and discussion	Common understanding of MHH impact measures in relation to the five areas
<p><b>Phase 5:</b> To review and score top 3 indicators that are ready to use in each area</p>	Breakout groups plus sharing back iteratively	List of 3-4 impact measures in each area with scoring details

## KEY LEARNINGS FROM THE DISCUSSION AND ANALYSIS

Below we briefly map out the key learnings, beginning with:

- (I) discussion of the foundational aspects of MHH across the five priority areas/sectors;
- (II) identification of priority indicators influencing policy and practice across the five priority areas;
- (III) identification of MHH alignment within each of the five priority areas, and
- (IV) an analysis of the top three MHH and area aligned indicators.

There was insufficient time within a three-day meeting to recommend a set of indicators for immediate uptake, along with insufficient formative evidence to recommend one measure over another at this point; however, the five-year vision below identifies potential next steps.

### I. Foundational Aspects of MHH Across the Five Priority Areas

Extensive work done on MHH over the last decade has demonstrated its alignment with the five thematic (priority) areas. Discussing this foundation at the meeting was essential for building a shared understanding among participants from a range of backgrounds of how addressing menstruation contributes toward the five areas. Below we discuss relationship between MHH and each area in brief. *The priority areas are presented alphabetically, with the exception of gender, which cuts across all areas and is best described last.*

**EDUCATION:** Schools need to provide gender-sensitive learning environments for menstruation and MHH, including the provision of adequate school WASH facilities, for female students and teachers, and curricular content and teaching methods that raise awareness and destigmatize menses for girls, boys and teachers. A supportive education environment for MHH includes female and male teachers who are trained in gender issues and have confidence and adequate information to equip students with the knowledge and skills to manage their puberty effectively, challenge gender norms, and correctly teach comprehensive sexuality education or MHH and puberty education; provides the school policies aimed at protecting girls from bullying and harassment (e.g. when they leak menstrual blood), including sexual harassment and violence; permits girls and all people who menstruate to have extra bathroom breaks to manage menstruation; and provides resources to girls, such as emergency menstrual products or pain killers. Inadequate school environments can hinder girls' abilities to manage menstruation in school, which in turn can lead to reduced participation and difficulty concentrating during menses, and potentially contributing to absenteeism, drop out, and negatively impacting learning outcomes.<sup>2,45</sup> The provision of adequate MHH is suggested to improve girls' self-esteem, autonomy and confidence, and to increase

their ability to concentrate and work. These factors support girls' ability to reach their potential and remove the stress of falling behind, and associated teasing and bullying, and improve learning outcomes.

*“When schools ignore MHM, they are not responding to the education needs of adolescent girls. Full stop.” (Academic, citing Nora Fyles, UNGEI).*

**PSYCHOSOCIAL:** Psychosocial factors focus on the potential impact of menstruation on psychological and social well-being. Important factors that might impact psychosocial wellness include individual normative and societal expectations, such as internalized menstrual stigma and negative attitudes towards menarche and menstruation; gender norms along with social and descriptive norms (such as restrictions during menstruation, expectations of cleanliness); access to social support, such as the provision (or lack thereof) of emotional and practical support, advice, assistance in providing resources, teasing and bullying and girls' perceived support; self-efficacy for MHH tasks; experienced distress and shame; menstrual-related pain and other health issues, and resource provision.<sup>9</sup> The experience of MHH, and the WASH, education and psychosocial environments in turn may have impacts on participation in school and other activities of daily living and societal engagement. Overall, menstruation may have impacts on mental health and well-being, including psychological, emotional, and social well-being,<sup>14</sup> and participation in other activities of daily living and social engagement.

**SEXUAL AND REPRODUCTIVE HEALTH (SRH):** Limited SRH (and menstruation-related) knowledge and related social norms around SRH can constrain girls' ability to make decisions about sex resulting in sexual risk behaviors.<sup>49</sup> Girls who have few resources and are obligated to use makeshift materials, and girls who lack the ability, knowledge, resources or physical environment to hygienically wash and dry the materials they are using, which includes the physical spaces in which they manage blood flow and frequency that they are able to change menstrual materials, may suffer discomfort and could be at higher risk of urogenital and bacterial vaginosis (BV) infections.<sup>18,19</sup> The most impoverished girls and/or those prone to peer pressure may be vulnerable to sexual coercion, e.g. sexual favors in exchange for menstrual products, making them more vulnerable to pregnancy and infection with sexually-transmitted infections (STIs).<sup>73</sup> This in turn may reduce their ability to engage in school due to pregnancy status or being sick. Thus improvements in the availability and use of hygienic products can contribute toward decreased rates of STIs, including HIV and AIDS, and decreased vulnerability to unintended adolescent pregnancy which may lead to school dropout. As pregnancy is a primary reason that many girls dropout or are expelled from school, the provision of adequate MHH can thus potentially lead to decreased school dropout. Together these have the potential to contribute towards increased educational equity and economic potential, reduced stigma, violence and morbidity and mortality among adolescent girls.

*“For us in sexual and reproductive health, there is a lot of interface with MHM, whether the intersection is with contraceptives or other issues” (NGO, SRH expert).*

**WASH:** Girls, women and all individuals who menstruate must have an enabling environment for managing menstruation. This includes the provision and maintenance of the required infrastructure and services for managing menstruation. Specifically, this includes the provision and maintenance of water at hand-washing and bathing facilities, and sanitation facilities that are private, accessible, clean and safe; and accurate and pragmatic menstrual hygiene behavior change communication delivered, for example, by hygiene promoters. The enabling environment may include having sufficient numbers of female-friendly and sex- (or gender-) separated toilets in schools, situating water points close to toilets

for washing hands, body and stains from clothes, ensuring adequate privacy for changing and washing menstrual cloths and pads, supplying adequate soap and hand-washing facilities, and investing in culturally appropriate disposal mechanisms, including systems of waste management that are environmentally-friendly, for used menstrual products and materials. A poor WASH environment can negatively impact school participation, increase vulnerability to urogenital infections, increase blockage of sanitation systems, and reduce safety.<sup>19,74,75</sup>

**GENDER:** The challenges girls face in school are grounded in systems that are gender unequal and perpetuate girl’s disempowerment. Thus, the various aspects presented in the above priority areas, such as a lack of access to resources for MHH, compromised health and wellbeing, harmful gender and social norms, stigma and lack of agency, and biased laws, policies and environments, contribute to disempowerment, gender inequality and discrimination. This in turn compromises the dignity and rights of girls, and all people who menstruate. Changing institutional structures and systems, and engaging girls and women, men and boys, and other gender minorities through education, interventions and policy is essential, recognizing that menstruators (girls and all individuals who menstruate) exist within a societal framework, and without doing so, we risk inadvertently creating or exacerbating a gender gap.<sup>48,56</sup> Policies must explicitly commit to promoting gender equality, including providing a safe environment to/from and within schools, promoting girls in sports, and working with families and communities to provide gender enabling environments beyond schools.

## II. Indicators Influencing Policy and Practice Across Sectors

In reviewing the five areas in relation to MHH measures being used, we provide some *illustrative* examples of measures currently being used (see **Table 2**). We do not include the measures of other sectors that are currently used within priority areas, and we do not in this table delineate between those which are more and less robust, or those which are relevant in multiple areas.

**Table 2: Illustrative measures currently being used for MHH in priority areas**

Priority Area	<i>Illustrative Measures in MHH (both robust and those needing further work )</i>
<b>Education</b>	<ul style="list-style-type: none"> <li>• Grade repetition</li> <li>• School completion</li> <li>• MHH knowledge, attitudes, practices</li> </ul>
<b>WASH</b>	<ul style="list-style-type: none"> <li>• Hardware constructed (including disposal)</li> <li>• Handwashing stations (with water and soap)</li> <li>• Training for management</li> </ul>
<b>SRH</b>	<ul style="list-style-type: none"> <li>• Reproductive health (e.g. observed pregnancy)</li> <li>• Sexual Health (e.g. HIV, age of sexual debut)</li> </ul>
<b>Psychosocial</b>	<ul style="list-style-type: none"> <li>• Mental health and wellbeing</li> <li>• Confidence</li> <li>• Stress or insecurity (sanitation)</li> <li>• Menstrual attitudes</li> </ul>
<b>Gender</b>	<ul style="list-style-type: none"> <li>• Inequality across sectors (e.g. lack of resources for products)</li> <li>• Gender norms</li> </ul>

*“Having worked in a number of places in Africa, you find that [the researcher or organization] talks to one person, in one community, and then extrapolate it all over the world...we need to be careful.”*  
(Researcher, WASH expert)

### III. Identification of MHH Alignment with the Five Priority Areas

An alignment analysis was conducted to examine if and how MHH monitoring and evaluation efforts contribute or could contribute to the priorities within each of the five areas, and to map out where connections or overlaps exist.

### IV. Analysis of Top Three MHH and Area Aligned Indicators

Each “area group” selected the impact indicators they perceived (from their expertise) to be of the greatest priority for the sector/area. They then assessed each indicator based on the criteria in Table 3.

**Table 3: Criteria Definitions**

Criterion	Definition
<b>Impact for sector</b>	How important is this measure for your sector? Is this something that motivates donors and policymakers?
<b>Strength/Rigor</b>	How rigorous is this measure? To what extent is it valid, reliable, used by other studies, etc.?
<b>Ease of Use</b>	Is this measure easy or difficult to implement? Consider ease of use for both data collection and data analysis.
<b>Availability of tools</b>	Do tools exist for this measure? If so, are they finalized and fit for purpose or do they need to be adapted?
<b>Lack of limitations</b>	Are there additional limitations that should be considered? For example: potential for reporting bias, cost of administration, burden on the respondents.

Below we present the results. All indicators identified, in addition to the top three, are listed in Appendix E. Not all thematic priority area indicators clearly aligned with MHH, however for all areas there exist important synergies for addressing MHH that are critical to acknowledge.

The indicator analysis importantly revealed that MHH measures are generally lower down the causal chain. In other words, addressing MHH may occur through inputs and outputs, but ultimately influence the outcomes or impact. As such, their aggregate does not visibly or easily feed into the higher-level measures leading to the SDGs. Yet addressing menstruation is critical in terms of contributing to the ultimate goals, and ignoring the relevancy of MHH may have implications for achieving the goals. For example, if the onset of menstruation is perceived as a sign that a girl is ready to become sexually active, and influences adolescent girls’ vulnerability to being married as a child, measuring menstrual onset is important even if it is not the only influence impacting marriageability.

Below, findings from the indicator analysis are explained by area. “Foundation” section above provides insights into understanding the linkages between MHH and the priority indicators identified and analyzed.

**Education & MHH:** The top four priorities identified for alignment between Education and MHH included: gender sensitive teacher training; increasing the proportion of schools with providing sexuality education; improved transition rates; and greater learning achievement/outcomes. *Important to note, attendance and absenteeism did not arise as the priority indicators for the sector, as further explicated below.*

Note: There was discussion around how including comprehensive sexuality education (CSE) poses challenges for many national governments, so it is important to separate out what is important to donors versus policy makers, or potentially use alternate language in sensitive, more conservative contexts, such as “MHH/puberty education.”

**Table 4: Analysis of Top Education & MHH Aligned Indicators**

<b>Top Priorities</b>	<b>Perceived impact</b>	<b>Rigor</b>	<b>Ease of use</b>	<b>Tools</b>	<b>Limitations</b>
<b>Availability and quality of gender sensitive teacher training</b>	Strong, measurement feasible but little existing data.	High if based on assessing presence of trainings; quality of training is more complex to assess, rigor strength depends on context capacity to assess.	Easy to measure presence or absence, however assessing quality of training is more challenging.	Available at national level mostly to assess yes/no if some kind of training is offered.	High cost of conducting quality assessments.
<b>Proportion of schools with sexuality education</b>	Importance of determining proportion of schools is perceived to have stronger value from a donor than policy maker perspective (e.g., conservative governments may resist including, thus reducing impact).	High if only measuring presence or absence but does not capture quality or inclusion of content within curricula (e.g. life skills) which lowers the rigor of the measure.	Easy to ask yes/no but to capture quality is harder.	Available, with some governments including this measure in education monitoring information systems (EMIS).	Does not capture quality or behavior change.
<b>Transition rates (grade)</b>	Important as an output, links to outcome. Limited strength-measurement often lacks denominator (age of pupil) data, and household surveys do not capture variation at sub-national level.	Variable as depends greatly on government capacity and the context of the data collection	Relatively high.	Exist even if countries may lack capacity to use them.	Lack of systems to collect data, and rigor issues.
<b>Learning achievement</b>	High and a very important measure overall.	Variable, and depends on what curricula are being assessed (national, regional, international), and whether assessment is also trying to capture learning.	Low for NGOs due to time consuming nature of assessments, high for researchers.	Relatively available.	Limitations related to rigor of data, time and expense to assess, varying definitions using for learning.

The group working on education identified missing measures, or those in need of further development, including: a concept of gender friendly school rules and policies; teachers knowledge of menstruation issues; school physical environment issues.

A note on attendance/absenteeism: Although attendance/absenteeism did not emerge as a broadly-used outcome/impact measure for analysis during this meeting due to the difficulties in data availability (e.g. typically undertaken only at the school-level and not aggregated further and the concept of attendance used in household surveys as not able to capture daily attendance).

**Psychosocial Health & MHH:** The top three priorities identified for alignment between psychosocial health and MHH included the following: psychological distress, well-being, and stigma.

**Table 5: Analysis of Top Psychosocial Health & MHH Aligned Indicators**

Top Priorities	Perceived impact	Rigor	Ease of use	Tools	Limitations
<b>Psychological distress</b>	Low due to studies assessing generalized distress rather than clinically significant diagnosable conditions.	Rigorous tools exist (see “tools” cell).	Low given the length of training needed.	Rigorous tools exist, but generally not validated for use with girls in low-income countries, requiring adaptation to context and sufficient psychometric evaluations.	Cost of administration and burden on respondents.
<b>Well-being</b>	Low- not well-defined; is a broader construct of interest with a more recent body of research and potentially less compelling in terms of impact.	Validated tools exist but are very context dependent and adaptation to culture and language would be required, along with psychometric analysis.	**	See “rigor” cell. Some tools exist but are not very available.	Cost and burden on respondents
<b>Stigma</b>	Lower as an outcome in terms of reflecting mental health, but potentially important as a mediating factor.	Low because MHH stigma tool does not currently exist. However, rigorous tools for stigma relating to HIV/mental health and sexual behavior exist, and these tools can be adapted	Low- similar to the other psychosocial measures above.	See “rigor” cell.	Cost and burden on respondents.

The group working on psychosocial identified missing measures, or those in need of further development, include self-efficacy and stress related to menstruation of girls in school (efforts for the former are underway). This includes exploring the extent to which menstruation serves as unique stressor above and beyond others, such as poverty. Measures of received and perceived social support may be advantageous in understanding the contribution of support to MHH and outcomes, as may improved assessment of social norms and restrictions and the ways in which these contribute to MHH.

The discussion also noted that the participants were academics, and that NGO and other psychosocial experts have indicated an interest in assessing on self-efficacy in relation to MHH. There was also discussion around the need to not further stigmatize menstruation in the measurement of it and exploring the role of hormonal fluctuations and other physiological changes related to the menstrual cycle in psychosocial measures.

**SRH & MHH:** The top four priorities identified for alignment between SRH and MHH included: adolescent pregnancy, anemia, modern contraception and child marriage.

**Table 6: Analysis of Top SRH & MHH Aligned Indicators**

Top Priorities	Perceived impact	Rigor	Ease of use	Tools	Limitations
<b>Adolescent pregnancy</b>	High, given its role as a driver of morbidity and mortality; very relevant given menarche signals marital readiness and unintended pregnancy.	High in terms of tests available. Low for actual monitoring, which uses fertility data (number of births rather than pregnancy tests).	Low, because you cannot use pregnancy tests to monitor (ethical considerations).	See "rigor" cell.	Ability to accurately measure using self-reported data, aside from the current use of fertility data.
<b>Anemia</b>	High because it is a major driver of morbidity and quality of life.	High given good diagnostic tests.	**	Cheap, reliable, and field-friendly tools are available.	Blood tests present challenges in terms of large-scale measurement (having the resources available to monitor).
<b>Contraception</b>	Relatively high-given protection that all methods afford against pregnancy, and condoms against pregnancy and STIs; strong contribution to many SDGs.	Low- current measure is self-report and often limited to 15 to 19-year olds, and some settings to only married girls of this age group, which misses unmarried girls and younger adolescents.	Relatively strong	**	Social desirability bias in self-reporting contraception use.
<b>Child marriage</b>	Strong interest among donors in assessing this	**	**	**	Definitions are context specific (ex- early marriage)

	measure nested in SRH due to its strong association with fertility, maternal health, and neonatal and child health outcomes.				in perceived as protective for girls in some societies); cultural laws and sensitivities lead to misreporting or underreporting, and challenges around data validity and reliability.
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The group working on SRH identified missing measures, or those in need of further development, include “what is normal” in relation to adolescent bleeding patterns, what is menstrual health for girls (frequency, duration, regularity and volume), and the cost of heavy menstrual bleeding (health care visits, treatment, and indirect costs). A limitation was the insufficient time available to explore indicators relating to menstrual bleeding patterns, symptoms, and related reproductive disorders (e.g. endometriosis).

**WASH & MHH:** The top three priorities identified as aligned between WASH and MHH included: availability of female friendly WASH facilities in schools (enabling MHH); ability to manage MHH specific needs at home; and acceptability of WASH MHH facilities in institutional settings. Boxes with an (\*\*) did not have notes completed for the content.

**Table 7: Analysis of Top WASH & MHH Aligned Indicators**

Top Priorities	Perceived impact	Rigor	Ease of use	Tools	Limitations
<b>Availability of female friendly WASH facilities in schools (enabling MHH)</b>	Strong, indicator aligns with other sectors.	Strong where standards exist yet challenging to measure because of variability by context.	**	Tools exist, but multiple components pose challenges for data collection.	Cross-sectoral confusion over ownership and accountability in terms of who is responsible to measure (education and WASH).
<b>Ability to manage MHH specific needs at home</b>	Strong, very relevant to the SDGs.	Limited due to subjective responses.	Low- challenges given the composite nature of the measure.	May work in household surveys but need an MHH module to capture all the relevant components.	Potential for bias, too many variables, frequency of measurement needed.
<b>Acceptability of female friendly (enabling MHH) WASH facilities in institutional settings</b>	Stronger impact for education than WASH since the aim is to keep girls in school (e.g. acceptability and use measures).	Limited due to a lack of reliable measures, and the need for context specific adaptation.	Challenging since it is a more subjective measure than assessing infrastructure.	No tools are available.	Not feasible to measure at national levels, perceived high costs of assessing.

The group working on WASH identified missing measures or those in need of further development, as capturing confidence using facilities during menstruation.



**Gender & MHH:** The top four priorities identified for gender alignment with MHH included: gender norms; child labor; empowerment; and child marriage. Time did not permit analysis of the empowerment and child marriage indicators.

**Table 8: Analysis of Top Gender & MHH Aligned Indicators**

Top Priorities	Perceived impact	Rigor	Ease of use	Tools	Limitations
<b>Gender norms</b>	Medium impact as governments tend to not invest in gender norms and prefer to see harder outcomes (e.g. change in violence, improved equality).	Low, given few existing validated tools for use with adolescents. However, there are some measures (e.g. Gender Equitable Men Scale (GEM), Global Early Adolescent Study (GEAS) Gender Norms Scale and Vignettes-Based Measure of Gender Equality).	Low- training is needed for conducting assessments.	See "rigor" cell; Available tools are limited.	Very context specific measure and adaptations needed for each use.
<b>Child labor</b>	High impact- it is an SDG specific measure.	Low- needs contextual adaptation.	Low- there may be bias in reporting.	May not be adequate because existing tools are targeted at an older age group, and there are varying definitions of child labor.	Hidden nature of child labor makes it hard to assess.

The group working on gender identified missing measures, or those in need of further development, including: the gender specific pathways in relation to menstruation that pertain to gender equity; and cost and financing, such as from the perspective of household expenditures (but also relevant for schools).

### **Challenges to monitoring and a need for collaboration and translation**

A key issue is the "fit for purpose" of the varying measures for actor groups engaged in measuring progress on MHH, including NGOs, researchers, national governments, UN agencies and/or global monitoring bodies, meaning how data is taken up or not by various actors in countries, what types of data generate action, and what constraints and enablers influence how actors utilize data.

Insights about fitness for purpose, including the opportunities and challenges for usage of collected data in relation to MHH, are described below. However, it is important to note that multi-sectoral collaboration is a challenge at all of the levels, and some identified points are relevant across additional categories:

**Table 9: Fit for Purpose Needs of Key Actor Groups**

<b>The needs of NGOs and /Researchers:</b>
<ul style="list-style-type: none"> <li>• The varying nature of needs for data by different actors;</li> <li>• The differing capacities within actor groups to collect valid and rigorous data and to undertake data analysis and assess the quality of measurement tools;</li> <li>• Funding shortages limit the ability to build capacity for improved measurement, and to demonstrate impact and thus mobilize resources to address MHH in countries.</li> <li>• Small-scale but high-quality studies can provide important insights on MHH within a country; however, there is a need to ensure that research translation (uptake by governments and programs) occurs.</li> <li>• Data communication is just as important as data collection, and for varying audiences. Photo-voice and other approaches can provide color and depth to complement other data.</li> <li>• The importance of capturing community voices and stories for influencing policy.</li> </ul>
<b>The needs of national governments:</b>
<ul style="list-style-type: none"> <li>• Lack of clear ownership of responsibility for collecting MHH data in national governments;</li> <li>• Data is generated (by various actors) that does not necessarily align with government sectoral needs, hindering the development and implementation of responsive policy;</li> <li>• Governments need collaborative approaches for collecting quality data that are aligned with their priorities;</li> <li>• Data should be shared back with governments for improving policies, with a strong need for research translation, both for policy purposes and to build trust.</li> </ul>
<b>The needs of UN agencies and donors:</b>
<ul style="list-style-type: none"> <li>• The absence of a clear international home for MHH hinders the ability to acquire resources to monitor progress at the global level;</li> <li>• There exists high demand for quantitative data, but governments that lack policy makers trained in the science of such approaches may distrust the data, limiting its usefulness.</li> <li>• Lastly, a lot of quality data is collected but not utilized or translated for government and programming, and important insights could be gained from existing data, some of potential relevance to MHH, if the existing global and national databases were better understood.</li> </ul>

*“Make it simple...not all data should be used to inform policy. Sometimes it’s important to just convince [the government] that they need to do something, or to improve a program.” (Govt expert)*

### **The linkage between menstruation, national and global monitoring, including the SDGs**

There exists a strong argument for producing MHH-related outcomes and impact data that are relevant for national level monitoring, which can be channeled into global level monitoring, including the SDGs.

For global monitoring of **adolescent health**, menstruation and MHH align well for inclusion within the Global Action for Measurements of Adolescent Health (GAMA Advisory Group). GAMA is an expert group advising the WHO and other UN agencies on defining a core set of adolescent health indicators.<sup>76</sup>

For global monitoring of **education**, the Global Education Monitoring (GEM) Report monitors progress towards SDG4 on education which has some bearing for adequate MHH in school, including target 4.7

with its gender equality and comprehensive sexuality education aspects, and 4.a on safe non-violent and gender-sensitive learning environments. The 2020 GEM Report will focus on inclusion and education.

For global monitoring of **WASH**, MHH is of relevance in households, schools, workplaces, and health care settings. Efforts are underway to include indicators in relation to MHH, and the possibility of including an additional requirement in relation to MHH for the WASH ladder.

*“The most important thing [to understand] is that academics look at indicators in a different way than the Government does.” (Government participant)*

A small number of **SDGs** are commonly cited in relation to MHH, particularly SDG 4 on inclusive and equitable quality education, SDG 5 on gender equality and empowerment of all girls and women, and SDG 6, on access to water and sanitation. However, the meeting highlighted that there was a clear link – sometimes proximal, sometimes distal – of menstruation and MHH across all existing SDGs. This suggests that assessments of menstruation and MHH can serve as an important proxy indicator for progress being made across and within countries to address the needs of country populations in the coming years.

## REFLECTIONS AND NEXT STEPS

Overall, the meeting participants familiar with MHH came away from the meeting with insights into the higher level priorities of the sectors they are trying to influence to prioritize menstruation, and those newer to MHH came away with a much deeper understanding of the importance and relevance of menstruation and the need for addressing MHH as a contribution toward making progress globally within and across the priority areas. Insights included, for example, why addressing menstruation has a role in reducing child marriage, and why attention to MHH is essential for meeting SDG4’s focus on advancing and achieving gender equality in education. A key overarching conclusion was that MHH interventions contribute to influencing various sector impacts and outcomes but could do so lower down on the results chain, meaning that some interventions alone may not be sufficient for causing change but may contribute to change. Thus, there is a rationale for focusing on the direct impact of interventions that address girls’ menstruation needs and experiences, but also an understanding of how menstruation-focused interventions feed into broader outcomes.

The meeting also deepened participants’ appreciation for the complexity of addressing menstruation in societies around the world that have ongoing restrictions and taboos in relation to menstruation that are relevant for the design of interventions. The continued gaps in what is known were highlighted, such as understanding of the bleeding patterns of adolescents in low-income contexts, and implications for influence on anemia or of teacher sensitivity training needed for their successful classroom engagement. Participants who were newer to MHH departed the meeting with a strengthened understanding of the role of MHH within the five priority areas, while the MHH experts at the meetings departed with a stronger appreciation for the top priorities of relevant areas. Consensus was strong that aligning efforts in the future was essential for making progress towards the SDGs, and the group collectively submitted a question during the Demographic and Health Survey (DHS) open submission period with the aim of increasing our global understanding of girls’ awareness around menstruation prior to menarche within and across countries.

**FIVE YEAR VISION**

The effort to bring together MHH experts and leaders from the key priority areas of relevance for girls in and out of school, enabled the identification of important alignments and potential for future synergy:

<b>Key Recommendations for MHH Progress in the Future</b>	
<b>1.</b>	Create a platform for the sharing of knowledge around the use of measures of progress, including cross-sectoral linkages and at different points in the results chain (e.g. inputs, outputs, outcomes, impact).
<b>2.</b>	Pilot work to validate existing or adapted MHH measures, and where needed, to develop new concepts and measurement tools.
<b>3.</b>	Support the translation of how to interpret measures and related findings for implementation programs or broader monitoring efforts by governments.
<b>4.</b>	Develop instruments for the top MHH indicators per sub-group ready for integration into existing or new tools used by governments to monitor MHH in relevant sectors.
<b>5.</b>	Conduct research that explores the relevance of menstruation and MHH interventions for impacts higher up in the results chain impacts.

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## **APPENDICES**

- A. Agenda
- B. Participants
- C. Global Advisory Group (GAG)
- D. Priorities identified
- E. One Pagers (SRH, Education, WASH, Psychosocial Health, Gender)

## APPENDIX A: Agenda

**Measuring Progress on MHM Meeting  
March 11-13<sup>th</sup> 2019, Geneva**

<b>Day One</b>	
<b>8:00am</b>	<b>Registration</b> (*coffee and croissants provided)
<b>8:30am</b>	<b>Opening Session</b> Scene setting, understanding and linking perspectives Identifying key priorities and indicators
<b>12:30pm</b>	<b>Lunch Break</b>
<b>1:30pm</b>	<b>Afternoon Session</b> Alignment of measures from key areas with MHM
<b>5:15pm</b>	<b>Break for Dinner</b> (*on your own)
<b>Day Two</b>	
<b>8:30am</b>	<b>Morning Session</b> Review of MHM measurements and gaps Systematic analysis of MHM measures
<b>12:30pm</b>	<b>Lunch Break</b>
<b>1:30pm</b>	<b>Afternoon Session</b> Exploring fit for purpose and missing measures
<b>5:30pm</b>	<b>Break for Dinner</b> (*on your own)
<b>Day Three</b>	
<b>8:30am</b>	<b>Morning Session</b> Linking to global and national monitoring Existing national monitoring and challenges
<b>12:00pm</b>	<b>Lunch Break</b>
<b>1:00pm</b>	<b>Afternoon Session</b> Next steps and dissemination
<b>4:30pm</b>	<b>Meeting Concludes</b>

**Prepared by the Scientific Technical Advisory Group Members:**  
Bethany Caruso, Caitlin Gruer, Jackie Haver, Therese Mahon,  
Penelope Phillips-Howard, Marni Sommer, Belen Torondel

**APPENDIX B: Participants**

- Rockaya Aidara (WSSCC; attended Day One)
- Jura Augustinavicius (Johns Hopkins University, Bloomberg School of Public Health)
- Nicole Bella (UNESCO)
- Bethany Caruso (Emory University, Rollins School of Public Health)
- Emily Cherenack (Duke University)
- Caitlin Gruer (Columbia University, Mailman School of Public Health)
- Regina Guthold (World Health Organization)
- Jackie Haver (Save the Children)
- Julie Hennegan (Johns Hopkins University, Bloomberg School of Public Health)
- Michelle Hindin (Population Council)
- Richard Johnston (WHO; attended Day One)
- Caroline Kabiru (Population Council, Kenya)
- Virginia Kamowa (WSSCC)
- Therese Mahon (WaterAid)
- Kristen Matteson (Brown University, The Walpert Allen Medical School)
- Albert Motivans (Equal Measures 2030)
- Penny Phillips-Howard (Liverpool School of Tropical Medicine/KEMRI/Kenya)
- Dr. Ella Naliponguit (Ministry of Education, Philippines)
- Neville Okwaro (Ministry of Health, Kenya)
- Elizabeth Omoluabi (Centre for Research, Evaluation Resources and Development, Nigeria)
- Tom Slaymaker (UNICEF)
- Marni Sommer (Columbia University, Mailman School of Public Health)
- Belen Torondel (London School of Hygiene and Tropical Medicine)
- Frances Vavrus (University of Minnesota, College of Education and Human Development)
- Ravi Verma (International Center for Research on Women, India)
- Garazi Zulaika (Liverpool School of Tropical Medicine/KEMRI/Kenya)

**APPENDIX C: Global Advisory Group (GAG)**

<b>Name</b>	<b>Organization</b>		<b>Name</b>	<b>Organization</b>
Hilda Alberda	Simavi		Karen Austrian	Population Council
Rob Bain	UNICEF		Mags Beksinska	University of Witswatersrand, South Africa
Chris Bonell	London School of Hygiene and Tropical Medicine		Louise Boorstin	Osprey Foundation
Pete Cronin	US Agency for International Development		Robert Dreibelbis	London School of Tropical Hygiene and Medicine
Stephanie Drozer	Days for Girls		Nora Fyles	United Nations Girls' Education Initiative (UNGEI)
Ganga Gautam	Tribhuvan University of Nepal		Leeat Gellis	Grand Challenges Canada
Kiya Gezahegne Wotere	UNFPA East and Southern Africa Region		Maja Hansen	UNFPA East and Southern Africa Region
Erin Hunter	Johns Hopkins Bloomberg School of Public Health		Shane Khan	UNICEF
Christina Kwauk	Brookings Institute		Puleng Letsie	UNFPA East and Southern Africa Region
Connie Lewin	Sustainable Health Enterprises		Pema Lhaki	NFCC
Jeanne Long	Save the Children		Lorna McLeod	Huru International
Claudia Mitchell	McGill University, Integrated Studies in Education		Megan Mukuria	Zana Africa
Arundati Muralidharan	Public Health Institute Foundation India; WaterAid		Sivakami Muthusamy	Tata Institute of Social Science
Kristin Neudorf	Grand Challenges Canada		Lauren Patrick	Osprey Foundation
Chelsea Polis	Gutmacher Institute		Jen Rubli	Femme International
Murat Sahin	UNICEF		Diana Sierra	BeGirl
Roopal Thaker	Zana Africa		Matthew Thomas	University of Sydney, School of Education and Social Work
Helen Weiss	London School of Hygiene and Tropical Medicine		Emily Wilson-Smith	IRISE and University of Sheffield
Inga Winkler	Columbia University, Institute for the Study of Human Rights		Brooke Yamakoshi	UNICEF

## APPENDIX D: Range of Priorities Identified

The priority groups generated additional measures that there was not time to analyze in relation to MHH. These are listed out below, for consideration of future analysis.

### Education:

- School completion rates
- Transitioning into secondary level and sustaining
- Scholastic achievements of girls in science and math
- Teacher professional training
- Youth literacy
- School-related gender-based violence and bullying (school related GBV)
- Proportion of qualified and trained teachers
- Dropout rates/late entry/completely excluded

\*Attendance/Absenteeism – the education group discussed attendance and absenteeism given this is raised frequently in the MHH community in relation to donors and governments wanting evidence that MHH interventions impact attendance. The group suggested that attendance is too hard to measure accurately, and that the information generally stays at the classroom or school level. This is not a nationally useful level measure, and existing approaches for assessing attendance for information at the national level are perceived to be of great accuracy or use. However some within the sector perceive absenteeism to be important.

### Psychosocial:

- Depression (maybe)
- Anxiety (lower level)
- Resilience (focused on wellbeing instead)

### SRH:

- Access and quality of SRH services and information
- STIs and RTIs
- SGBV

### WASH:

- Knowledge and awareness of menstruation between menarche
- Change in menstrual hygiene behavior
- Change in social norms relating to MHH specific WASH
- Cost of providing and maintaining female friendly facilities (enabling MHH) at school
- Menstrual materials are safely and appropriately disposed

### Gender:

- Gender parity in education
- Political participation
- Proportion of 10-19 girls who have experienced any violence
- Proportion of girls aged 15 and older who have experienced physical, sexual or psychological violence (link to GBV)
- Child marriage
- Proportion of 15-49 year old women who make their own informed decisions regarding sexual relations, contraceptive use and reproductive healthcare

**Appendix E: One Pagers per priority area**

**Education**  
**Psychosocial**  
**SRH**  
**WASH**  
**Gender**

## Education

### *Measuring Progress on Menstruation for Girls*

**Purpose:** In March 2019, multi-sectoral researchers, practitioners, and monitoring and evaluation specialists convened to identify priority indicators across key areas within global health and development, and assess alignment of the identified priority indicators with interventions addressing menstruation. The focus was on the menstruation-related issues impacting girls in and out of school, given this shows strong potential links between MHH policy and outcomes.

**Background.** The ‘menstrual movement’ is rapidly evolving, and there is a need for collaboration and consensus to assess progress for holistic MHH policy that can improve girls’ learning and life outcomes, and to identify opportunities for linking with other measurement efforts at national and global levels. This includes aligning menstruation with the priority areas of education, gender, WASH, psychosocial health, and sexual and reproductive health (SRH). Validated, rigorous measures are needed across levels of investment in relation to menstruation.

**How MHH relates to Education.** Schools need to provide gender-sensitive learning environments for menstruation, including the provision of adequate school WASH facilities, for female students and teachers, and curricular content and teaching methods that raise awareness and destigmatize menses for girls, boys and teachers. A supportive education environment for MHH includes female and male teachers who are trained in gender issues and have confidence and adequate information to equip students with the knowledge and skills to manage their puberty effectively, challenge gender norms, and correctly teach comprehensive sexuality education or MHH and puberty education; provides the school policies aimed at protecting girls from bullying and harassment (e.g. when they leak blood), including sexual harassment and violence; permits girls and all people who menstruate to have extra bathroom breaks to manage menstruation; and provides resources to girls, such as emergency menstrual products or pain killers. Inadequate school environments can hinder girls’ abilities to manage menses in school, which in turn can lead to reduced participation and difficulty concentrating during menses, and potentially contributing to absenteeism, drop out, and negatively impacting learning outcomes. The provision of adequate MHH is suggested to improve girls’ self-esteem, autonomy and confidence, and to increase their ability to concentrate and work. These factors support girls’ ability to reach their potential and remove the stress of falling behind, and associated teasing and bullying, and improve learning outcomes.

**Alignment of Education Impact Measures with MHH.** An analysis was conducted to examine if and how MHH monitoring and evaluation efforts contribute or could contribute to the priorities within each of the five areas, and to map out where connections or overlaps exist. The top four priorities identified as relevant for Education included: **gender sensitive teacher training; increasing the proportion of schools with providing sexuality education; improved transition rates; and greater learning achievement/outcomes.** Note: Attendance/absenteeism did not emerge as a broadly-used outcome/impact measure for analysis during this meeting due to the difficulties in data availability.

Missing measures, or those in need of further development, were also identified. These included a concept of gender friendly school policies; and teachers’ knowledge of menstruation issues.

**Link to SDGs.** In addition, menstruation and MHH were identified as relevant to achieving SDG4 (quality education) and SDG5 (gender equality).

## Psychosocial

### *Making Progress on Menstruation for Girls*

**Purpose:** In March 2019, multi-sectoral researchers, practitioners, and monitoring and evaluation specialists convened to identify priority indicators across key areas within global health and development, and assess alignment of the identified priority indicators with interventions addressing menstruation. The focus was on the menstruation-related issues impacting girls in and out of school, given this shows strong potential links between MHH policy and outcomes.

**Background.** The ‘menstrual movement’ is rapidly evolving, and there is a need for collaboration and consensus to assess progress for holistic MHH policy that can improve girls’ learning and life outcomes, and to identify opportunities for linking with other measurement efforts at national and global levels. This includes aligning menstruation with the priority areas of education, gender, WASH, psychosocial health, and sexual and reproductive health (SRH). Validated, rigorous measures are needed across levels of investment in relation to menstruation.

**How MHH relates to Psychosocial Health.** Psychosocial factors focus on the potential impact of menstruation on psychological and social well-being. Important factors that might impact psychosocial wellness include individual normative and societal expectations, such as internalized menstrual stigma and negative attitudes towards menarche and menstruation; gender norms along with social and descriptive norms (such as restrictions during menstruation, expectations of cleanliness); access to social support, such as the provision (or lack thereof) of emotional and practical support, advice, assistance in providing resources, teasing and bullying and girls’ perceived support; self-efficacy for MHH tasks; experienced distress and shame; menstrual-related pain and other health issues, and resource provision. The experience of MHH, and the WASH, education and psychosocial environments in turn may have impacts on participation in school and other activities of daily living and societal engagement. Overall, menstruation may have impacts on mental health and well-being, including psychological, emotional, and social well-being, and participation in other activities of daily living and social engagement.

**Alignment of Psychosocial Health Impact Measures with MHH.** An analysis was conducted to examine if and how MHH monitoring and evaluation efforts contribute or could contribute to the priorities within each of the five areas, and to map out where connections or overlaps exist. The top three priorities were **psychological distress, wellbeing, and stigma**.

Missing measures, or those in need of further development, were also identified. This included self-efficacy and stress related to menstruation of girls in school (efforts for the former are underway); and measures of received and perceived social support may be advantageous in understanding the contribution of support to MHH and outcomes, as may improved assessment of social norms and restrictions and the ways in which these contribute to MHH.

**Link to SDGs.** In addition, menstruation and MHH were identified as relevant to achieving SDG3 (good health and well-being).



## Sexual and Reproductive Health

### *Measuring Progress on Menstruation for Girls*

**Purpose:** In March 2019, multi-sectoral researchers, practitioners, and monitoring and evaluation specialists convened to identify priority indicators across key areas within global health and development, and assess alignment of the identified priority indicators with interventions addressing menstruation. The focus was on the menstruation-related issues impacting girls in and out of school, given this shows strong potential links between MHH policy and outcomes.

**Background.** The ‘menstrual movement’ is rapidly evolving, and there is a need for collaboration and consensus to assess progress for holistic MHH policy that can improve girls’ learning and life outcome, and to identify opportunities for linking with other measurement efforts at national and global levels. This includes aligning menstruation with the priority areas of education, gender, WASH, psychosocial health, and sexual and reproductive health (SRH). Validated, rigorous measures are needed across levels of investment in relation to menstruation.

**How MHH relates to SRH.** Limited SRH (and menstruation-related) knowledge and related social norms around SRH can constrain girls’ ability to make decisions about sex resulting in sexual risk behaviors. Girls who have few resources and are obligated to use makeshift materials, and girls who lack the ability, knowledge, resources or physical environment to hygienically wash and dry the materials they are using, which includes the physical spaces in which they manage blood flow and frequency that they are able to change menstrual materials, may suffer discomfort and could be at higher risk of urogenital and bacterial vaginosis (BV) infections. The most impoverished girls or those prone to peer pressure may be vulnerable to sexual coercion, e.g. sexual favors in exchange for menstrual products, creating risk of pregnancy and infection with sexually-transmitted infections (STI). This may reduce their ability to engage in school due to pregnancy status or being sick. Improvements in the availability and use of products can contribute toward decreased rates of STIs, including HIV and AIDS, and decreased vulnerability to unintended adolescent pregnancy which may lead to school dropout. As pregnancy is a primary reason that girls dropout or are expelled, the enabling of adequate MHH can thus potentially lead to decreased school dropout. Together these have the potential to contribute towards increased educational equity and economic potential, reduced stigma, violence and morbidity and mortality among adolescent girls.

**Alignment of SRH Impact Measures with MHH.** An analysis was conducted to examine if and how MHH monitoring and evaluation efforts contribute or could contribute to the priorities within each of the five areas, and to map out where connections or overlaps exist. **The four top priorities identified as relevant for SRH were: adolescent pregnancy, anemia, modern contraception, and child marriage.**

Missing measures were also identified, or those in need of further development. For SRH, these included an expanded understanding for more diverse populations of “what is normal” in relation to adolescent bleeding patterns; what is menstrual health for girls (frequency, duration, regularity and volume); and the cost of heavy menstrual bleeding (health care visits, treatment, and indirect costs).

**Link to SDGs.** In addition, menstruation and MHH were identified as relevant to achieving SDG3 (good health and wellbeing), and SDG5 (gender equality).

## WASH

### *Measuring Progress on Menstruation for Girls*

**Purpose:** In March 2019, multi-sectoral researchers, practitioners, and monitoring and evaluation specialists convened to identify priority indicators across key areas within global health and development, and assess alignment of the identified priority indicators with interventions addressing menstruation. The focus was on the menstruation-related issues impacting girls in and out of school, given this shows strong potential links between MHH policy and outcomes.

**Background.** The ‘menstrual movement’ is rapidly evolving, and there is a need for collaboration and consensus to assess progress for holistic MHH policy that can improve girls’ learning and life outcomes, and to identify opportunities for linking with other measurement efforts at national and global levels. This includes aligning menstruation with the priority areas of education, gender, WASH, psychosocial health, and sexual and reproductive health (SRH). Validated, rigorous measures are needed across levels of investment in relation to menstruation.

**How MHH relates to WASH.** Girls, women and all individuals who menstruate must have an enabling environment for managing menstruation. This includes the provision and maintenance of the required infrastructure and services for managing menstruation. Specifically, this includes the provision and maintenance of water at hand-washing and bathing facilities, and sanitation facilities that are private, accessible, clean and safe; and accurate and pragmatic menstrual hygiene behavior change communication delivered, for example, by hygiene promoters. The enabling environment may include having sufficient numbers of female-friendly and sex- (or gender-) separated toilets in schools, situating water points close to toilets for washing hands, body and stains from clothes, ensuring adequate privacy for changing and washing menstrual cloths and pads, supplying adequate soap and hand-washing facilities, and investing in culturally appropriate disposal mechanisms, including systems of waste management that are environmentally-friendly, for used menstrual products and materials. A poor WASH environment can negatively impact school participation, increase vulnerability to urogenital infections, increase blockage of sanitation systems, and reduce safety.

**Alignment of WASH Impact Measures with MHH.** An analysis was conducted to examine if and how MHH monitoring and evaluation efforts contribute or could contribute to the priorities within each of the five areas, and to map out where connections or overlaps exist. The top three priorities identified as relevant were: **availability of female friendly WASH facilities in schools; ability to manage MHH specific needs at home; and acceptability of WASH MHH facilities in institutional settings.**

Missing measures, or those in need of further development, were also identified. For WASH this included capturing confidence using facilities during menstruation.

**Link to SDGs.** In addition, menstruation and MHH were identified as relevant to achieving SDG5 (gender equality), SDG6 (clean water and sanitation), SDG11 (sustainable cities and communities), SDG12 (responsible production and consumption), and SDG15 (life on land).

## Gender

### *Measuring Progress on Menstruation for Girls*

**Purpose:** In March 2019, multi-sectoral researchers, practitioners, and monitoring and evaluation specialists convened to identify priority indicators across key areas within global health and development, and assess alignment of the identified priority indicators with interventions addressing menstruation. The focus was on the menstruation-related issues impacting girls in and out of school, given this shows strong potential links between MHH policy and outcomes.

**Background.** The ‘menstrual movement’ is rapidly evolving, and there is a need for collaboration and consensus to assess progress for holistic MHH policy that can improve girls’ learning and life outcomes, and to identify opportunities for linking with other measurement efforts at national and global levels. This includes aligning menstruation with the priority areas of education, gender, WASH, psychosocial health, and sexual and reproductive health (SRH). Validated, rigorous measures are needed across levels of investment in relation to menstruation.

**How MHH relates to Gender.** The challenges girls face in school are grounded in systems that are gender unequal and perpetuate girl’s disempowerment. Thus, the various aspects presented in the above priority areas, such as a lack of access to resources for MHH, compromised health and wellbeing, harmful gender and social norms, stigma and lack of agency, and biased laws, policies and environments, contribute to disempowerment, gender inequality and discrimination. This in turn compromises the dignity and rights of girls, and all people who menstruate. Changing institutional structures and systems, and engaging girls and women, men and boys, and other gender minorities through education, interventions and policy is essential, recognizing that menstruators (girls and all individuals who menstruate) exist within a societal framework, and without doing so, we risk inadvertently creating or exacerbating a gender gap.<sup>48,56</sup> Policies must explicitly commit to promoting gender equality, including providing a safe environment to/from and within schools, promoting girls in sports, and working with families and communities to provide gender enabling environments beyond schools.

**Alignment of Gender Impact Measures with MHH.** An analysis was conducted to examine if and how MHH monitoring and evaluation efforts contribute or could contribute to the priorities within each of the five areas, and to map out where connections or overlaps exist. The top priorities identified were **gender norms; child labor; empowerment; and child marriage.**

Missing measures, or those in need of further development, were also identified. These included gender specific pathways in relation to menstruation that pertain to gender equity, along with cost and financing, such as from the perspective of household expenditures (but also relevant for schools).

**Link to SDGs.** In addition, menstruation and MHH were identified as relevant to achieving SDG5 (gender equality) and SDG10 (reduced inequalities).