GUIDE TO MENSTRUAL HYGIENE MANAGEMENT INDICATORS

BACKGROUND

Research to understand lived experiences of menstruation continues to expand globally, yet the experiences of menstruators who are working remain understudied and overlooked. Further assessments are needed to broaden the understanding of menstrual experiences, determinants, and outcomes of those who engage in work outside the home. Specifically, limited information is known about menstruation-related outcomes (e.g., health, well-being, economic engagement) and determinants, including at the workplace (e.g., access to facilities), individual (e.g., access to resources), and biological levels (e.g., heavy bleeding, pain) among women who are working outside the home. Indicators (defined as quantitative metrics used to assess performance or achievement and derived from measures) supported by rigorously tested measures (direct assessments, implemented through surveys or other evaluation tools) would enable comparability across populations and geographies over time, and would support evaluation of programs that aim to improve workplace experiences, determinants, and/or outcomes relating to menstruation (UNAIDS, 2010).

To fill this gap, the USAID Water, Sanitation, and Hygiene Partnerships and Learning for Sustainability (WASHPaLS) project conducted research in Nepal and Kenya with the following objectives:

1. To develop or adapt existing measure(s) to assess experiences, determinants, and outcomes related to menstruation while working outside the home.

2. To identify a set of potential indicators and corresponding measures for monitoring experiences, determinants, and outcomes related to menstruation and work.

This guide focuses on the 21 indicators identified for monitoring work-related menstruation experiences, providing guidance on using the indicators and outlining next steps for adoption of the indicators into nationally-representative surveys (e.g., Demographic and Health Surveys [DHS] and Multiple Indicator Cluster Surveys [MICS]). The final metrics report is available here.
GUIDE TO MHM INDICATORS

METHODOLOGY

To inform the identification of a concise set of potential indicators, the WASHPaLS team first carried out a rapid review of relevant research and tools. The review informed a conceptual model, which demonstrates how determinants at various levels influence menstruation experiences while working outside the home, which may in turn impact individual well-being and employment-related outcomes (Figure 1). The conceptual model, which builds on an earlier one developed by WASHPaLS (see Final Desk Review Report) and is further described in the final metrics report, was used to identify the central domains to monitor.

Further, the research team reviewed the following monitoring documents, both for guidance and to identify indicators and corresponding measures that may be adapted for assessing menstruation at work at various points along the conceptual model:

- Core questions and indicators for monitoring WASH in schools in the Sustainable Development Goals (JMP, 2018a)
- Progress on household drinking water, sanitation and hygiene 2000-2020: five years into the SDGs (UNICEF/WHO, 2021)
- Guidance for Monitoring Menstrual Health and Hygiene by UNICEF (2020)
- Proposed guidance and indicators for national monitoring of girls’ menstrual health and hygiene developed by the Global MHH Monitoring Group (GMMG [in press]).

None of these documents included indicators specific to menstruation in the workplace or while working outside the home. However, the indicators and measures in the documents served as an important launch point, given that many have been well vetted, tested, and could be adapted to consider work experiences and settings (e.g., indicators that aim to assess the school setting can be adapted to assess the workplace setting).

Figure 1. Conceptual Model

Determinants

- **Workplace Level**
  - Social Environment
  - Institutional Policies
  - Physical Environment
    - WASH
    - Resource Availability

- **Individual Level**
  - Access to Resources
    - Materials
    - Pain Management
    - Social Support
    - Knowledge
  - Demographic factors
    - Age, Education, Marital Status, Financial Decision-making Power, Job Type

- **Biological Level**
  - Pain & Symptoms
  - Heavy Bleeding
  - Irregularity

Outcomes

- **Individual Well-Being**
  - Health (Physical & Mental)
  - Comfort
  - Safety
  - Stigma/Social Impacts

- **Individual Employment**
  - Absenteeism/Presenteeism
  - Ability to Complete Work
  - Earnings
  - Advancement Opportunities
  - Job Satisfaction

Work Menstruation Experience

- Practices
- Needs
- Self-Efficacy/Confidence
- Bodily Integrity
Aligned with the conceptual model above, the team developed a comprehensive survey that was administered to a random sample of more than 1,000 working women in Kathmandu, Nepal and Nairobi, Kenya who worked in a diverse set of occupations (across the formal and informal sectors). The measures in the survey were used to assess the 21 potential indicators identified. The indicator list includes 12 indicators for determinants (eight at the workplace level and four at the individual level), five for work menstruation experiences, and four for individual well-being and employment outcomes.

Each of these indicators was assessed by asking questions of individuals (not workplaces), to facilitate adoption by existing data collection systems (e.g., nationally-representative, population-based surveys). Furthermore, the questions shifted the focus away from the ‘workplace’ to not limit those engaged. Not all women who work and menstruate have specific workplaces. Some may report to a different (multiple) workplace each day or multiple times a day. Therefore, the team deliberately shifted the concept of ‘working’ to ask women about ‘working outside the home’, to be more inclusive.

Ideally, the individual level data would be complemented by workplace assessments; however several challenges lie ahead: First, assessing workplaces would require systems for gathering data on workplaces, similar to what exists for monitoring water and sanitation in schools, which do not currently exist globally. Additionally, establishing systems or agreement about what to measure at the workplace may not be appropriate given the variety of workplaces and the varying nature of work (i.e., not all working individuals do so in formal settings). In the absence of a feasible way to conduct workplace assessments, the team focused on identifying indicators and corresponding measures that could be assessed at the individual level and adopted into existing data collection systems (e.g., DHS, MICS).

Finally, the indicators all refer to women because the team tested these indicators and measures with women specifically and they are expected to be taken up by initiatives or data collection efforts that engage women specifically (e.g., DHS). That said, these indicators and measures could be adapted for use with menstruators who do not identify as women and the term ‘woman’ in each indicator could be changed to ‘menstruator’ as appropriate.

The following sections present the indicators proposed as well as the measure, possible response categories, and reporting notes, according to each part of the conceptual model. The reporting notes provide guidance for calculating the proportions for the indicators, which is straightforward for most of the indicators, while for others, analysis of several variables is required. Additional information and considerations regarding the indicators can be found in Table 2 and Annex D of the final metrics report available here.
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measure</th>
<th>Response Categories</th>
<th>Reporting Notes</th>
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<tbody>
<tr>
<td><strong>Social Environment</strong></td>
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<tr>
<td>Proportion of women who agreed or strongly agreed that women where they work hide the fact that they were menstruating</td>
<td>Item 1 asks “Is the place you most often use to change your menstrual materials while you are working structurally private (such as walls, doors, and roof are made of non-transparent materials with no gaps or spaces)?” Item 2 asks “Is the place you most often use to change your menstrual materials while you are working lockable from the inside?” Item 3 asks “How often did you feel safe in the place where you typically went to change your menstrual materials/ manage your menstruation?”; and Item 5 asks “Is the place you most often use to change your menstrual materials while working to work have separate toilets or sanitation facilities for women only?</td>
<td>Strongly disagree; Disagree; Agree; Strongly agree; Don’t know</td>
<td>Data can be reported by response options or dichotomized as follows: ‘Agree’ being a combination of ‘Agree’ and ‘Strongly agree’; ‘Disagree’ being a combination of ‘Disagree’ and ‘Strongly Disagree’; Excluding those who answered ‘Don’t know’.</td>
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<tr>
<td>Proportion of women who reported being able to take a break to meet their menstrual needs whenever they needed to while working outside the home during their last menstrual period</td>
<td>If I am menstruating at work and I need to take a break to meet my menstrual needs (such as changing materials, bathing, or washing materials or clothing) I am allowed to go</td>
<td>Not at all; Only during specific breaks or when I can get someone to cover my post; Only after asking permission or informing someone; Whenever I need to</td>
<td>Data can be reported by response options or dichotomized as follows: ‘Able to take breaks whenever they need to’ being ‘Yes’ to Item 1 AND ‘Yes’ to Item 2, ‘Always’ to Item 3, AND ‘Facility/toilet at my workplace’ to Item 4.</td>
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<td>Proportion of women whose workplaces provided menstrual materials to employees, whether for free or at a cost</td>
<td>Are menstrual materials available where you work?</td>
<td>Yes, for free; Yes, for purchase; Yes, from a friend; No</td>
<td>Data can be reported by response options or dichotomized as follows: ‘Yes, workplace provision’ being a combination of ‘Yes for Free’ and ‘Yes for purchase’; ‘No workplace provision’ being a combination ‘Yes from a friend’ and ‘no’.</td>
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<tr>
<td><strong>Institutional Policies</strong></td>
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<td>Proportion of women who reported that they had access to sanitation facilities that are single-sex at their workplace</td>
<td>Does the place where you work have separate toilets or sanitation facilities for women only?</td>
<td>Yes; No</td>
<td>‘Proportion of women reporting that they have access to sanitation facilities that are single-sex at their workplace.’ need to have reported: ‘Yes’</td>
</tr>
<tr>
<td>Proportion of women who reported changing their menstrual materials at their workplace in a space that was clean, private, and safe during their last menstrual period</td>
<td>Multiple items required: Items 1-3* and Item 4: Where do you most often change your menstrual materials while you are working?</td>
<td>Item 1: Yes; No Item 2: Yes; No Item 3: Never; Sometimes; Often; Always Item 4: Facility/toilet at my workplace; A public/shared toilet outside my workplace; Facility/toilet at another place of business; Toilet at my home; Toilet at someone else’s home; Use the outdoors/in the bush or a field (do not use a facility); Private room at my workplace (without toilet/latrine); Other</td>
<td>‘Proportion of women who changed their menstrual materials while working in a space that was clean, private, and safe during their last menstrual period’ need to have reported: ‘Yes’ to Item 1, ‘Yes’ to Item 2, ‘Always’ to Item 3, AND ‘Facility/toilet at my workplace’ to Item 4.</td>
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<td><strong>Material Access</strong></td>
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<tr>
<td>Proportion of women who changed their menstrual materials while working outside the home in a space that was clean, private, and safe during their last menstrual period</td>
<td>Multiple items required: Items 1-3*</td>
<td>Item 1: Yes; No Item 2: Yes; No Item 3: Never; Sometimes; Often; Always</td>
<td>‘Proportion of women who changed their menstrual materials while working in a space that was clean, private, and safe during their last menstrual period’ need to have reported: ‘Yes’ to Item 1, ‘Yes’ to Item 2, ‘Always’ to Item 3, AND ‘Facility/toilet at my workplace’ to Item 4.</td>
</tr>
<tr>
<td>Proportion of women who changed their menstrual materials while working outside the home in a space that was clean, private, and safe during their last menstrual period</td>
<td>Multiple items required: Items 1-3*, Item 4: Do you usually have to wait to use this location because of lines or crowding? and Item 5*</td>
<td>Item 1: Yes; No Item 2: Yes; No Item 3: Never; Sometimes; Often; Always Item 4: Yes; No Item 5: Yes; No</td>
<td>‘Proportion of women who changed their menstrual materials while working in a space that was clean, private, and safe during their last menstrual period’ need to have reported: ‘Yes’ to Item 1, ‘Yes’ to Item 2, ‘Always’ to Item 3, ‘Yes’ to Item 4, AND ‘Yes’ to Item 5.</td>
</tr>
<tr>
<td>Proportion of women who reported that there was water and soap available in a private place to manage menstruation at their workplace</td>
<td>Multiple items required: Item 1: Does the place where you work have any private facilities for women to bathe/wash themselves or wash reusable menstrual materials (such as a tap and basin inside a lockable toilet stall)? and Item 2: Is there water and soap available in this place?</td>
<td>Item 1: Yes; No; Don’t Know Item 2: Yes, water and soap; Yes, water only; Yes, soap only; No, neither water nor soap</td>
<td>‘Proportion of women reporting that there is water and soap available in a private place to manage menstruation’ need to have reported: ‘Yes’ to Item 1 AND ‘Yes, water and soap’ to Item 2.</td>
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## INDIVIDUAL-LEVEL DETERMINANTS

Among the proposed individual-level determinant indicators, one indicator relates to knowledge, one to menstrual materials, one to pain management, and one to social support. No indicators were included to assess biological-level determinants. A key criteria for selecting the indicators is that they assess something that can change (or be changed) in a reasonable timeframe (UNICEF, 2020). At the biological level, while conditions like menstrual irregularity, pain and symptoms, and heavy bleeding could conceivably change for individuals over time, there is not a strong rationale for regular monitoring of these conditions at the population level.

### Table 2. Proposed Indicators: Individual-level Determinants

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>MEASURE</th>
<th>RESPONSE CATEGORIES</th>
<th>REPORTING NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of women who reported that they could usually predict when their menstruation will start (1)</td>
<td>Can you usually predict when your menstrual period will start? If so, how?</td>
<td>No, I don’t know when it will start; Yes, I keep a calendar/track; Yes, my body tells me (e.g., sore breasts, cramping); Yes, I am on oral contraceptives so I know when my period will begin; Yes, other</td>
<td>Data can be reported by response options or dichotomized as follows: ‘Yes’ being a combination of ‘Yes, I keep a calendar/track’; ‘Yes, my body tells me (e.g., sore breasts, cramping)’; ‘Yes, I am on oral contraceptives so I know when my period will begin’; and ‘Yes, other’. ‘No’ being ‘No, I don’t know when it will start’</td>
</tr>
<tr>
<td>Proportion of women who reported always having enough menstrual materials during their last menstrual period while working outside the home (2,3)</td>
<td>Thinking about your last menstrual period you had while working at your main job outside the home, did you have enough of your menstrual materials to change them as often as you wanted to?</td>
<td>Never; Less than half the time; More than half the time; Always</td>
<td>Data can be reported by response options or dichotomized as follows: “Always having enough” being “Always”. “Not always having enough” being the combination of all other responses.</td>
</tr>
<tr>
<td>Proportion of women who reported always being able to get pain remedies when needed during their last menstrual period while working outside the home (1)</td>
<td>During your last menstrual period, were you able to get menstrual pain remedies you needed?</td>
<td>Never; Sometimes; Often; Always; Choose not to use remedies; N/A, did not experience pain</td>
<td>Data can be reported by response options or dichotomized as follows: ‘Always able to’ being ‘Always’.‘Not always able to’ being the combination of ‘Never’, ‘Sometimes,’ and ‘Often’. Those reporting ‘Choose not to use remedies’ and ‘N/A, did not experience pain’ would be excluded from both the numerator and denominator.</td>
</tr>
<tr>
<td>Proportion of women who report that they would feel comfortable seeking help for menstrual problems from a health care provider (2,4)</td>
<td>If you had a concern about your menstrual period, would you feel comfortable seeking help from a health care provider?</td>
<td>Yes; No</td>
<td>‘Proportion of women who report that they would feel comfortable seeking help for menstrual problems from a health care provider’ need to have reported: ‘Yes’</td>
</tr>
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</table>

(1) UNICEF (2020); (2) GMMG (In Press); (3) Hennegan, Nansubuga, Smith et al., (2020); (4) Hennegan, Bukunya, Makumbi et al., (2021).
**WORKPLACE MENSTRUATION EXPERIENCES**

To monitor workplace menstruation experience, five indicators are proposed, one for menstrual practices while working, one for pain remediation, one for bodily integrity, and two for self-efficacy.

**Table 3. Proposed Indicators: Workplace Menstruation Experiences**

<table>
<thead>
<tr>
<th>INDICATOR (SOURCE THAT INFORMED INDICATOR)</th>
<th>MEASURE</th>
<th>RESPONSE CATEGORIES</th>
<th>REPORTING NOTES</th>
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</thead>
<tbody>
<tr>
<td><strong>MENSTRUAL PRACTICES WHILE WORKING</strong></td>
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<tr>
<td>Proportion of women who changed their menstrual materials during their last menstrual period while working outside the home [among those who needed to change them] (1)</td>
<td>During your last menstrual period, while working did you ever change your menstrual materials while working outside the home?</td>
<td>Yes; No, I went home to change; No, I did not need to change my materials</td>
<td>Data can be reported by response options or dichotomized as follows: “Proportion of women changing at work when needed” reporting “Yes.” “Proportion of women not changing at work when needed” reporting “No, I went home to change.” Those reporting “No, I did not need to change my materials” being excluded from the numerator and denominator.</td>
</tr>
<tr>
<td><strong>PAIN REMEDIATION</strong></td>
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</table>
| Proportion of women who reported that they were able to reduce their menstrual (abdominal/ back/ cramping) pain when they needed to during their last menstrual period while working outside the home (2,3) | Multiple items required:  
  - Item 1: During your last menstrual period, were you able to get menstrual pain remedies you needed?  
  - Item 2: To what extent did those measures reduce your pain? | Item 1: Yes; No  
  Item 2: Not at all; Slightly; Quite a bit; Completely | ‘Proportion of women who report that they were able to reduce their menstrual (abdominal/ back/ cramping) pain when they needed to while at work’ need to have reported: ‘Yes’ to Item 1 AND ‘slightly’, ‘quite a bit’ OR ‘completely’ to Item 2. |
| **BODILY INTEGRITY**                        |         |                     |                 |
| Proportion of women who reported that their work responsibilities prevented them from addressing their menstruation-related needs at least some of the time during their last menstrual period (4) | My responsibilities at work prevented me from addressing my menstruation-related needs | Never stops me; Sometimes stops me; Often stops me; Always stops me | Data can be reported by response options or dichotomized as follows: ‘Prevented from addressing needs’ is a combination of ‘Not at all confident’; ‘Often stops me’; and ‘Always stops me’. ‘Not prevented from addressing needs’ is ‘Never stops me’. |
| **SELF-EFFICACY**                           |         |                     |                 |
| Proportion of women who reported not feeling completely confident working during their menstruation (1) | How confident do you feel working during your menstruation? | Not at all confident; Slightly confident; Very confident; Completely confident | Data can be reported by response options or dichotomized as follows: ‘Not feeling completely confident’ is a combination of ‘Not at all confident’; ‘Slightly confident’; and ‘Very confident’. ‘Feeling completely confident’ is ‘Completely confident’. |
| Proportion of women who reported not feeling completely confident in their ability to manage menstruation when working outside the home (2) | Managing menstruation at work can involve changing, washing, disposing of materials, and other behaviors. How confident do you feel in your ability to manage your menstruation when working outside the home? | Not at all confident; Slightly confident; Very confident; Completely confident | Data can be reported by response options or dichotomized as follows: ‘Not feeling completely confident’ is a combination of ‘Not at all confident’; ‘Slightly confident’; and ‘Very confident’. ‘Feeling completely confident’ is ‘Completely confident’. |

(1) GMMG, (In press); (2) UNICEF (2020); (3) Hunter (2019); (4) Sinharoy et al., (2021).
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OUTCOMES RELATING TO INDIVIDUAL WELL-BEING AND EMPLOYMENT

Four indicators are proposed to monitor outcomes, two relate to individual well-being and two to employment. While these are proposed here, it is important to note that these indicators may be better suited for monitoring or assessing programs or policies that seek to change these outcomes specifically. If there are no programs, policies, or initiatives taking place that could conceivably have impact on these outcomes, it would not be worth regular monitoring.

Table 4. Proposed Indicators: Outcomes

<table>
<thead>
<tr>
<th>INDICATOR (SOURCE THAT INFORMED INDICATOR)</th>
<th>MEASURE</th>
<th>RESPONSE CATEGORIES</th>
<th>REPORTING NOTES</th>
</tr>
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<tbody>
<tr>
<td><strong>STRESS</strong></td>
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</table>
| During their last menstruation while working... Proportion of women who reported experiencing stress at least sometimes when they last needed to access a location to change their menstrual materials (1) | During my last menstrual period while working at my main job outside the home, I experienced stress or tension when I needed to access a location to change my menstrual materials/ manage my menstruation. | Never; Sometimes; Often; Always | Data can be reported by response options or dichotomized as follows: ‘Experienced stress at least sometimes’ is a combination of ‘Sometimes’; ‘Often’; and ‘Always’.

‘Never experienced stress’ is ‘Never’ |
| **SAFETY**                                |         |                     |                 |
| During their last menstrual period while working... Proportion of women who reported that concerns about safety at least some of the time prevented them from changing their materials when they needed to (2) | How often did concerns about safety prevent you from changing your materials when you wanted to? | Never; Sometimes; Often; Always | Data can be reported by response options or dichotomized as follows: ‘Concerned about safety at least sometimes’ is a combination of ‘Sometimes’; ‘Often’; and ‘Always’.

‘Never concerned about safety’ is ‘Never’ |
| **JOB SATISFACTION**                      |         |                     |                 |
| Proportion of women who are satisfied with their ability to meet their menstrual needs at their current job (3) | I feel fairly well satisfied with my ability to meet my menstrual needs at my current job. | Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree | Data can be reported by response options or dichotomized as follows: ‘Satisfied’ is a combination of ‘Agree’; and ‘Strongly Agree’.

‘Not satisfied’ is a combination of all other responses |
| **LOST EARNINGS**                         |         |                     |                 |
| Proportion of women who reported lost earnings or decreased pay in the past year due to their menstruation (4) | In the past year; have you lost earnings or had your pay reduced because of decreased productivity or missed work related to menstruation? | Yes; No | ‘Proportion of women who reported lost earnings or decreased pay in the past year due to their menstruation’ need to have reported: ‘Yes’ to this question. |

(1) UNICEF (2020); (2) Developed as part of this study; (3) Thompson & Phua, (2012); (4) GMMG (In Press).
This indicator list is an important starting point, and more work is needed before indicators are adopted and measures are included in national surveys. The list should undergo a process of external review by experts to identify what modifications to the indicators and corresponding measures may be warranted, and to eliminate or add indicators and/or items as is deemed necessary. Further, a process of prioritization is needed. A comprehensive list of indicators was intentionally proposed to cover all aspects of the conceptual model. However it is not feasible for all 21 indicators to be taken up for routine monitoring. A prioritization process should be undertaken to identify an agreed upon set of indicators that are most important for monitoring over time so that the corresponding measures can be promoted for adoption in large scale surveys (e.g., DHS, MICS).

REFERENCES


JMP. (2018b). Core questions on drinking water and sanitation for household surveys: World Health Organization and UNICEF.


UNAIDS. (2010). An Introduction to Indicators. Geneva: UNAIDS.


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