

MARCH 2022



Priority List of Indicators for Girls' Menstrual Health and Hygiene: TECHNICAL GUIDANCE FOR NATIONAL MONITORING



MAILMAN SCHOOL
OF PUBLIC HEALTH



EMORY | ROLLINS
SCHOOL OF
PUBLIC
HEALTH



In collaboration with



Recommended citation: *Priority List of Indicators for Girls' Menstrual Health and Hygiene: Technical Guidance for National Monitoring.* (2022). Global MHH Monitoring Group. Columbia University. New York.ⁱ

This work was supported, in whole or in part, by the Bill & Melinda Gates Foundation INV-015857. Under the grant conditions of the Foundation, a Creative Commons Attribution 4.0 Generic License has already been assigned to the Author Accepted Manuscript version that might arise from this submission.

Our sincere gratitude to Katherine Millsaps for her support conducting the global desk review, and to Stefan Peterson for the design and layout of the guidance note.

ⁱ Global MHH monitoring group consists of the core group in alphabetical order: Bethany Caruso, Caitlin Gruer, Jackie Haver, Julie Hennegan, Therese Mahon, Penelope Phillips-Howard, Marni Sommer, Belen Torondel, Garazi Zulaika. Please see **Annex 5** for members of the global MHH expert measures group and Global Advisory Group.

Table of Contents

1	Introduction	4
1.1	Background	4
1.2	Purpose and Content of Guidance Note	4
1.3	Development of the Short List	5
1.4	Short List of Priority Indicators	5
2	Technical Guidance for Short List of Priority Indicators for MHH at National Level	7
2.1	Guidance for Collecting Data on MHH	7
2.2	Technical Guidance for Priority Indicators	9
	 MATERIALS	9
	 WASH	11
	 KNOWLEDGE	17
	 DISCOMFORT/DISORDERS	25
	 SUPPORTIVE SOCIAL ENVIRONMENT	27
	 MENSTRUAL HEALTH IMPACTS	28
	 POLICY	30
3	Annexes	33
	Annex 1: Detailed Methods Used for Development of the Short List	33
	Annex 2: Definitions	34
	Annex 3: Eligibility Questions	35
	Annex 4: Summary of Priority Indicators	36
	Annex 5: MHH Expert Group and Global Advisory Group Members ⁹	37
	References	39

1

Introduction

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

1.1 Background

There is growing global recognition of menstrual health and hygiene (MHH) as an important health, education, rights, and gender equality issue.¹⁻⁴ As efforts to support MHH gain momentum globally, the lack of adequate validated indicators with related measures is a critical barrier to progress. At national level, the absence of standardized indicators and related measures limits understanding MHH circumstances across populations and over time. It also impedes the evaluation of policies and programs designed to change them.

A lack of standardized indicators curtails efforts to set and assess progress against targets that support MHH, unify approaches, and hold governments and service providers to account. To monitor the main domains of MHH, indicators and measures most needed are those aligned to key sectors, including Health [sexual and reproductive health (SRH) and psychosocial health], Education, Gender, and Water, Sanitation, and Hygiene (WASH).⁵ With the exception of recent efforts by the The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) to include MHH in WASH monitoring,⁶ standardized MHH-related indicators have yet to be incorporated into these key sectoral areas for national level monitoring in most countries, despite the potential influence of menstruation on the respective sectoral outcomes, including their contribution to reaching certain Sustainable Development Goal (SDG) targets.⁶⁻⁸

To support countries to monitor progress on MHH for adolescent girlsⁱⁱ in and out of school, a global collaboration of MHH experts worked together with key stakeholders and leaders from four exemplar countries to develop a short list of priority indicators (the short list). These indicators monitor MHH across priority domains and are intended to enable comparability across countries² and over time.

1.2 Purpose and Content of Guidance Note

The purpose of this guidance note is to provide technical guidance on a recommended short list of indicators to monitor national progress towards supporting MHH among adolescent girls. The guidance note briefly describes the methods used to develop

ii For the purposes of facilitating the uptake of the recommended short list, we chose to utilize the existing wording in country-level indicators, which alternate between “girls” and “females.” Future adaptation should aim to be more inclusive of women and all people who menstruate.

the short list and considerations for collecting data on MHH, focusing particularly on this populationⁱⁱⁱ.^{5,9} The rationale for each indicator, its usefulness and challenges in data collection, and guidance for measurement are presented along with details on data sources for each and evidence of their prior usage at the time of writing.

WHAT THIS IS:

- A short list of indicators and related measures, based on current evidence, for countries to get started
- Intended for adolescent girls, but some indicators and measures can be adapted and tested with adult women
- Aligned to existing national monitoring tools such as JMP/ Demographic and Health Surveys (DHS)/Multiple Indicator Cluster Surveys (MICS) where possible

WHAT THIS ISN'T:

- A comprehensive list of MHH indicators and measures
- Detailed technical guidance on data collection methodology
- A fully validated, definitive list of indicators; testing is required to assess validity and adaptation may be needed based on context

1.3 Development of the Short List

A collaboration of MHH experts (the core group) in consultation with national-level experts/stakeholders engaged in monitoring MHH in four exemplar countries led the short list development. Efforts were supported by members of a Global Advisory Group of monitoring experts. For detailed methods on the development of the short list, which included four steps, please see **Annex 1**.

1.4 Short list of Priority Indicators

A short list of 21 priority indicators and related measures was identified. These are summarized in **Table 1** and presented according to key menstrual health domains identified to comprehensively address MHH among adolescent girls. The table also notes which level (individual, school, national) data would be collected at for each indicator. Further details about each indicator are provided in the technical guidance section below.

iii The short list focuses on the adolescent age group as the evidence base used to identify priority indicators and measures for this demographic group is stronger. We are not setting an age range as we are deferring to country preference for focus populations.

INTRODUCTION

GUIDANCE

MATERIALS

WASH

KNOWLEDGE

DISCOMFORT/
DISORDERS








SUPPORTIVE
SOCIAL
ENVIRONMENT

MENSTRUAL
HEALTH
IMPACTS

POLICY

ANNEXES

Table 1: Short List of Priority MHH Indicators^a

MHH Domain	Data Collection Level	Indicators
 MATERIALS	<i>Individual</i>	1 % of girls who reported having enough menstrual materials during their last menstrual period.
	<i>School</i>	2 % of schools with menstrual materials available to girls in case of an emergency.
 WASH	<i>Individual</i>	3 % of girls who reported changing their menstrual materials during their last menstrual period when at school.
	<i>Individual</i>	4 % of girls who changed their menstrual materials at school in a space that was clean, private, and safe during their last menstrual period.
	<i>School</i>	5 % of schools (primary/secondary) with improved sanitation facilities that are single-sex and usable (available, functional, and private) at the time of the survey.
	<i>School</i>	6 % of schools (primary/secondary) with improved sanitation facilities that are single-sex, usable (available, functional, and private), lockable from the inside, have covered disposal bins, and have discreet disposal mechanisms at the time of the survey.
	<i>School</i>	7 % of schools (primary/secondary) that have water and soap available in a private space for girls to manage menstruation.
	<i>Individual</i>	8 % of students (male/female) who have ever received education about menstruation in primary and secondary school.
	<i>Individual</i>	9 % of females who know about menstruation prior to menarche.
 KNOWLEDGE	<i>Individual</i>	10 % of females with correct knowledge of the fertile period during the ovulatory cycle.
	<i>School</i>	11 % of schools where education about menstruation is provided for students from age 9.
	<i>School</i>	12 Existence of pre-service or in-service teacher training about menstruation at the primary or secondary level.
	<i>School</i>	13 % of schools that have at least one teacher trained to educate primary/secondary students about menstruation.
	<i>Government / National</i>	14 % of countries where national policy mandates education about menstruation at primary and secondary level.
	 DISCOMFORT/ DISORDERS	<i>Individual</i>
<i>Individual</i>		16 % of girls who would feel comfortable seeking help for menstrual problems from a health care provider.
 SUPPORTIVE SOCIAL ENVIRONMENT	<i>Individual</i>	17 % of girls who have someone they feel comfortable asking for support (advice, resources, emotional support) regarding menstruation.
 MENSTRUAL HEALTH IMPACTS	<i>Individual</i>	18 % of girls who report a menstrual period does not impact their day.
	<i>Individual</i>	19 % of girls whose class participation was not impacted by their last menstrual period.
 POLICY	<i>Government / National</i>	20 % of countries with policies or plans that include menstrual health and hygiene.
	<i>Government / National</i>	21 National budget is allocated to menstrual health and hygiene; funds are dispersed to the schools in a timely and efficient manner.

a. See **Annex 2** for explanation of indicator level definitions.

b. We use “menstrual materials” throughout the guidance note to be all inclusive (e.g. disposable/reusable pads, cloths)

c. For the purposes of facilitating the uptake of the recommended short list, we chose to utilize the existing wording in country-level indicators, which alternate between “girls” and “females.”

2

Technical Guidance for Short List of Priority Indicators for MHH at National Level

2.1 Guidance for Collecting Data on MHH

There are key considerations for collecting quality data on MHH at individual, school, and national levels:

- Menstruation is a sensitive topic, particularly for adolescent girls and for some women and men, depending on the cultural context. The data collection team should be well trained on how to ask about menstruation in an appropriate and respectful way, with awareness of the impact of menstrual stigma on participant response. For safety, comfort, and quality purposes, data collection with girls should be facilitated by female enumerators.
- Translation of measures should be done carefully with back translation, to make sure the meaning of the question and response options are not altered.
- Questions about menstruation experiences are relevant to those who have had a menstrual period. For some indicators, eligibility questions that capture whether girls have started menstruating, and/or if they currently attend school, will be required (example eligibility questions are provided in **Annex 3**). Additional questions on girls' age and class/grade also will be needed for some indicators.
- To draw conclusions about progress at national level, appropriate sampling methods are required. Data collection methods should be reported, with particular attention to how individuals and schools were sampled, in order to transparently communicate the representativeness of the data. Many suggested indicators are relevant to post-menarcheal girls. The age range included in data collection should be transparently reported for comparability across contexts.
- Collecting additional data on personal characteristics of individual respondents, such as disability, geography, ethnicity, migratory status etc. will allow for data disaggregation to identify the needs of specific population sub-groups and/or disparities.

Data to populate the suggested individual indicators are collected through individual level surveys and school indicators are collected through school-level surveys. There are strengths and limitations of these data collection methods that should be considered when planning data collection and interpreting findings. Presenting both individual and school level indicators provides a way of triangulating findings and strengthening conclusions drawn.

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

- INTRODUCTION
- GUIDANCE
- MATERIALS
- WASH
- KNOWLEDGE
- DISCOMFORT/DISORDERS
- SUPPORTIVE SOCIAL ENVIRONMENT
- MENSTRUAL HEALTH IMPACTS
- POLICY
- ANNEXES

Individual level	School level
<p>STRENGTHS</p> <ul style="list-style-type: none"> • Data captures girls’ own experiences. • Data assesses if what has been provided via policies and programs translates into improved resources or experience for girls. • Data can be disaggregated by individual characteristics, such as age, disability, or socio-economic characteristics (i.e. ethnicity, religion, language, migratory status). • Further guidance on collecting disaggregated data is available from the United Nations Statistics Division⁶⁷. Specific guidance on data collection and monitoring related to WASH disability is available from UNICEF⁶⁸. General guidance and specific questions about disability to include in monitoring tools are provided by The Washington Group⁶⁹. 	<ul style="list-style-type: none"> • Data provides information on the provision of resources and services from schools. • Data tracks outputs likely linked to plans and budget lines.
<p>LIMITATIONS</p> <ul style="list-style-type: none"> • Questions about personal menstrual practices can be sensitive to ask with younger adolescent girls; proper enumerator training is essential to ensure participants are comfortable responding. • Self-reported questions may be prone to bias. Girls may report what they believe the interviewer wishes to hear, requiring a clear statement that girls are free to answer the question however they wish. • Many proposed indicators/measures ask about the last menstrual period which may not be representative of usual experience. <ul style="list-style-type: none"> ◦ There is an absence of evidence to determine how well the last menstrual period represents typical experiences, this can be addressed in future studies. • Girls may not have attended school or have relevant answers for the time period being asked about (e.g. last menstrual period). 	<ul style="list-style-type: none"> • Data collected is only representative of the presence of facilities, services, or resources at the time of the survey and may not be reflective of the quality or presence of these throughout the year. <ul style="list-style-type: none"> ◦ The availability of facilities, services, or resources does not capture girls’ comfort in accessing these. This limitation can be addressed through triangulation with the individual-level indicators. • Data quality is impacted by the person responding for the school. School administrators may have vested interest in misrepresenting the availability of facilities, services or resources, especially if used for audits. This limitation can be addressed if observers external to the school collect data.

2.2 Technical Guidance for Priority Indicators



MHH DOMAIN: MATERIALS

Indicator 1 % of girls who reported having enough menstrual materials during their last menstrual period.

Purpose

Menstrual health requires girls to be able to catch or absorb menstrual blood with sufficient, safe and comfortable materials, and to have reliable access to these materials. This indicator captures girls' access to sufficient menstrual materials to catch or absorb their menstrual bleeding. The indicator is informed by girls' own perspectives on whether the quantity of materials they had during their last period was sufficient.

DEFINITION	The proportion of adolescent girls post-menarche who report having enough materials to catch or absorb their menstrual blood during their last period.
NUMERATOR	Number of girls surveyed with access to enough menstrual materials during their last period.
DENOMINATOR	Total number of post-menarcheal girls surveyed
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Nationally representative population-based survey that includes the general adolescent population (e.g. household surveys) or a specific sub-population (e.g school-based surveys) ¹⁰ <i>(alternative: nationally representative school-based survey)</i>
INDICATOR TYPE	Outcome
METHOD OF MEASUREMENT	Individual self-report through self or enumerator administered surveys. To capture individuals' own perspectives on their access to materials requires responses from the target population.

Survey Question/s

1 a) During your last menstrual period, did you have enough menstrual materials to change them as often as you wanted to?

YES

NO

DON'T REMEMBER

Evidence and considerations

This indicator was selected to provide a girl-centered measure of menstrual material access. It was developed based on an item from the Menstrual Practice Needs Scale,¹¹ which was subsequently included in UNICEF's Guidance for Monitoring Menstrual Health and Hygiene.⁵ This follows efforts highlighting that individual menstrual material preferences differ across individuals and populations,¹² and that the type of material used may not reflect unmet material needs.¹³

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

There are multiple concepts that could be considered to reflect having adequate access to materials, such as use of preferred materials, informed choice, ease of access, and sufficient quantity and quality of materials. This indicator was selected to represent a basic level of access: having enough materials. Future indicators could be devised to assess if girls have access to sufficient quantities of their preferred materials.

Indicator 2 % of schools with menstrual materials available to girls in case of an emergency.

Purpose

Schools can support girls' reliable access to menstrual materials (disposable or reusable) by ensuring these are available and free in the case of unexpected need. This indicator captures the availability of emergency materials across schools.

DEFINITION	The proportion of schools with menstrual materials available for girls in case of an emergency. This means schools with materials for girls who start menstruating unexpectedly at school or need to change unexpectedly during the day. This does not assume schools to be the sole source of all menstrual materials for girls.
NUMERATOR	Number of schools surveyed which have menstrual materials available to girls in case of emergency at the time of the survey.
DENOMINATOR	Total number of schools surveyed
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Nationally representative sample of schools. <i>(alternative: e.g. specific sub-population of schools in one county)</i>
INDICATOR TYPE	Output
METHOD OF MEASUREMENT	Data is reported at the institutional level from administrators preferably with a validity check by enumerator observation.

Survey Question/s

2 a) At the time of the survey, are menstrual management materials available at the school in case of an emergency?

YES (FREE)

YES (AT COST)

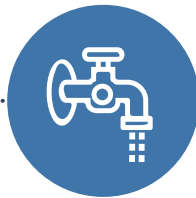
NO

Evidence and considerations

This indicator was developed to fill the gap identified by the core group on the reporting of access to menstrual materials in the school setting. The indicator was adapted from the Philippines Department of Education (DepEd) 3-Star WASH in Schools Monitoring Form.¹⁴ By 'emergency' we refer to events when a girl gets her period during school hours and may not have menstrual material with her to use.

The broader question of assessing the availability of free products in school beyond cases of emergency was not included. The desk review that was conducted of existing indicators and interventions currently being utilized in countries indicated that having a sustained, constant full supply for all girls and female teachers who are menstruating is not a feasible approach at this time in many country contexts, and is often time-dependent (i.e. distribution of products to schools varies widely month by month).

- INTRODUCTION
- GUIDANCE
- MATERIALS**
- WASH
- KNOWLEDGE
- DISCOMFORT/DISORDERS
- SUPPORTIVE SOCIAL ENVIRONMENT
- MENSTRUAL HEALTH IMPACTS
- POLICY
- ANNEXES



MHH DOMAIN: WASH

Indicator 3 % of girls who reported changing their menstrual materials during their last menstrual period when at school.

Indicator 4 % of girls who changed their menstrual materials at school in a space that was clean, private, and safe during their last menstrual period.

Purpose

MHH requires access to supportive facilities for caring for the body during menstruation, including having access to clean, private and safe spaces to change menstrual materials. Access to supportive spaces in the school environment is a priority for ensuring girls' MHH at school. Indicators #3 and #4 work together to describe the girls' access to supportive spaces at school. Indicator #3 captures the proportion of girls who change their materials at school, while Indicator #4 shows if the space they used met their needs. They are relevant for girls who are post-menarche (those who have started menstruating), with "menarche" being the onset of menstruation in a given individual.

INDICATOR #3	
DEFINITION	The proportion of post-menarcheal girls who report they changed their menstrual materials at school during their last period, based on girls' self-report.
NUMERATOR	Number of post-menarcheal girls surveyed who reported that they changed their menstrual materials at school during their last menstrual period.
DENOMINATOR	Total number of post-menarcheal girls surveyed who attend school

Survey Question/s

3 a) The last time you attended school during your menstrual period, did you change your menstrual materials at school?

YES	
NO	

INDICATOR #4	
DEFINITION	The proportion of post-menarcheal girls who reported that the location where they changed their menstrual materials at school was clean, private and safe during their last period, based on girls' self-report.
NUMERATOR	Number of post-menarcheal girls surveyed who reported that they changed their menstrual materials at school in a space that was clean, private, and safe during their last menstrual period.
DENOMINATOR	Total number of post-menarcheal girls surveyed who reported changing their menstrual materials at school during their last menstrual period.

- INTRODUCTION
- GUIDANCE
- MATERIALS
- WASH**
- KNOWLEDGE
- DISCOMFORT/DISORDERS
- SUPPORTIVE SOCIAL ENVIRONMENT
- MENSTRUAL HEALTH IMPACTS
- POLICY
- ANNEXES

Survey Question/s

4 a) If yes (to changing at school); Was the place that you changed your menstrual materials clean?

YES

NO

4 b) If yes (to changing at school); Did you worry [translation note: were you concerned] that someone would see you while you were changing menstrual materials?

YES

NO

4 c) If yes (to changing at school); Did you feel safe while you were changing your menstruation materials?

YES

NO

INDICATORS #3 AND #4

PREFERRED DATA SOURCE
/ALTERNATIVE DATA SOURCE

Nationally representative school-based survey.
*(alternative: household survey of girls)**

INDICATOR TYPE

Outcome

METHOD OF MEASUREMENT

Individual self-report.
To capture individuals' own perspectives requires responses from the target population.

Evidence and considerations

Indicator #3 was developed by the core group based on experiences implementing questions capturing the quality of school facilities. This indicator serves to outline the denominator for Indicator #4. Further, it highlights the proportion of girls who may not need, or are unwilling, to change materials at school or are without a facility to change at school. This indicator captures the last menstrual period experienced at school to avoid issues in the timing of survey data collections, where surveys undertaken immediately following school holidays may mean many respondents would not be at school during their last menstrual period. Girls who never attend school during their period may require a further 'Not applicable' response option.

Indicator #4 is drawn from the Performance Monitoring and Accountability (PMA)¹⁵ 2020 survey program and JMP^{16,17} which included the cleanliness, privacy and safety of locations used to change menstrual materials. However, questions used to construct this indicator have been drawn from the Menstrual Practice Needs Scale (MPNS).¹¹ The questions modify those originally used in PMA and JMP to avoid the use of terms such as "privacy" which can be difficult to translate consistently^{18,19}, and focus on the respondent's experience of the environment used to change their menstrual materials.

* School going girls should be defined within the country context, example eligibility questions are provided in Annex 3

INTRODUCTION

GUIDANCE

MATERIALS

WASH

KNOWLEDGE

DISCOMFORT/
DISORDERS

SUPPORTIVE
SOCIAL
ENVIRONMENT

MENSTRUAL
HEALTH
IMPACTS

POLICY

ANNEXES

This approach has also been used in surveys of sanitation experience.²⁰ This question formulation is similar to what has been adopted in UNICEF’s Guidance for Monitoring Menstrual Health and Hygiene⁵ based on the same evidence. This indicator captures girls’ experiences in school as a priority location for supporting participation in education. Schools are also likely to be the space in which policies and programs to improve menstrual management environments are enacted, and thus monitored. An expanded indicator set could include girls’ experiences in their home environment. It is important to present Indicator #3 and #4 together to contextualize responses.

Indicator 5 % of schools (primary/secondary) with improved sanitation facilities that are single-sex and usable (available, functional, and private) at the time of the survey.

Indicator 6 % of schools (primary/secondary) with improved sanitation facilities that are single-sex, usable (available, functional, and private), have covered disposal bins, and have discreet disposal mechanisms for menstrual waste at the time of the survey.

Indicator 7 % of schools (primary/secondary) that have water and soap available in a private space for girls to manage menstruation.

Purpose

Supportive spaces and facilities for managing menstruation at school are essential to supporting girls’ MHH. Indicators #5, #6 and #7 capture the proportion of schools providing increasing levels of supportive infrastructure and services for MHH. Indicator #5 captures the presence of improved, single-sex sanitation facilities that are functional and private, including having closing doors that can be locked. These facilities can be used by girls to manage their sanitation needs during menstruation and to change menstrual materials. Indicator #6 expands the set of facility characteristics queried in Indicator #5 to also include mechanisms for the discreet disposal of menstrual waste. Indicator #7 captures the availability of infrastructure and services for girls to wash their hands or body as needed during menstruation.

Together these indicators present a picture of the proportion of schools with water and sanitation facilities and services equipped to support MHH. Remember to ensure the types of school is recorded in the broader survey (e.g. is it a primary school, or a secondary school or both).

INDICATOR #5

DEFINITION	The proportion of schools providing improved, single-sex sanitation facilities.
NUMERATOR	Number of schools with at least one sanitation facility which, at the time of survey, meet all three criteria: <ul style="list-style-type: none"> Improved sanitation facilities (that is: flush/pour flush toilets, pit latrines with slab, composting toilet) Facility is usable (functional, available, private) Facilities are separate for boys and girls
DENOMINATOR	Total number of schools surveyed

- INTRODUCTION
- GUIDANCE
- MATERIALS
- WASH
- KNOWLEDGE
- DISCOMFORT/DISORDERS
- SUPPORTIVE SOCIAL ENVIRONMENT
- MENSTRUAL HEALTH IMPACTS
- POLICY
- ANNEXES

Survey Question/s

5 a) What type of student toilets/latrines are at the school? (check one – most common)	<p>Notes:</p> <p>From the JMP: “If more than one type is used, the most common type of student toilet/latrine should be selected. Response options should be modified to reflect the local context and terminology such that responses are able to be categorized by improved, unimproved or none. Photos may be useful, where feasible.¹² An “improved” sanitation facility is one that hygienically separates human excreta from human contact. “Improved” facilities in school settings include: flush/pour-flush toilets, pit latrines with slab, and composting toilets. “Unimproved” facilities include: pit latrines without slab, hanging latrines, and bucket latrines, or any other facility where human excreta is not separated from human contact.”¹⁷</p>
FLUSH/POUR-FLUSH TOILETS	
PIT LATRINES WITH SLAB	
COMPOSTING TOILETS	
PIT LATRINES WITHOUT SLAB	
HANGING LATRINES	
BUCKET LATRINES	
NOT TOILETS OR LATRINES	
5 b) Are the toilets/latrines separate for girls and boys?	<p>Notes:</p> <p>From the JMP: “Single-sex toilets means that separate girls’ and boys’ toilets are available at the school, or it is a single-sex school and has toilets.¹⁴ To be considered separate, facilities should provide privacy from students of the opposite sex, but this definition should be further defined based on local context, as needed. For schools that have separate shifts for girls and boys (i.e. girls attend the school at a separate time from boys), depending on local culture, the response could be “yes” since at the time of use, the toilets are only for girls. This question may not be applicable in pre-primary schools.”¹⁷</p>
YES	
NO	
5 c) How many student toilets / latrines are currently usable (available, functional, private)?	<p>Notes:</p> <p>From the JMP: “Only count toilets/latrines that are usable at the time of the survey or questionnaire, where “usable” refers to toilets/latrines which are (1) available to students (doors are unlocked or a key is available at all times), (2) functional (the toilet is not broken, the toilet hole is not blocked, and water is available for flush/pour-flush toilets), and (3) private (there are closable doors that lock from the inside and no large gaps in the structure) at the time of the questionnaire or survey. If any of these three criteria are not met, the toilet/latrine should not be counted as usable. However, lockable toilets may not be applicable in pre-primary schools.”¹⁷</p>
INSERT NUMBER OF HOLES / SEATS / STANCES	

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

INDICATOR #6	
DEFINITION	The proportion of school providing improved, single-sex sanitation facilities, and mechanisms for discreet menstrual waste disposal.
NUMERATOR	Number of schools with at least one sanitation facility which, at the time of survey, meet all five criteria: <ul style="list-style-type: none"> • Improved sanitation facilities (that is: flush/pour flush toilets, pit latrines with slab, composting toilet) • Facility is usable (functional, available, private) • Facilities are separate for boys and girls AND <ul style="list-style-type: none"> • Sanitation facility has covered disposal bins • School has mechanism for the discreet disposal of menstrual waste
DENOMINATOR	Total number of schools surveyed

Survey Question/s

Indicator #6 expands the set of facility characteristics queried in Indicator #5 and also includes mechanisms for the discreet disposal of menstrual waste. As such, Survey Questions 5a, 5b and 5c must be included along with those below in order to properly report on indicator #6.

6 a) Are there mechanisms for discreet disposal of used menstrual hygiene materials in the girls' toilets?	Notes: Discreet disposal mechanisms allow disposal of used materials without being seen and fully contain used materials. Examples include a covered bin or chute from inside the latrine to incinerator or storage chamber.
YES	
NO	

6 b) Are there disposal mechanisms for menstrual hygiene waste at the school?	Notes: From the JMP: "Disposal mechanisms can include incineration or another safe method on-site, or safe storage and collection via a municipal waste system, as appropriate. Not applicable in pre-primary schools." ¹⁷
YES	
NO	

INDICATOR #7	
DEFINITION	The proportion of schools providing a private space for girls to manage menstruation with access to soap and water. The private space may be the sanitation facility, but this may not be the case in all settings.
NUMERATOR	Number of schools with a space which, at the time of the survey, meet all three criteria: <ul style="list-style-type: none"> • A private space for girls to manage menstruation • Water available in the private space for menstrual management • Soap available in the private space for menstrual management
DENOMINATOR	Total number of schools surveyed

Survey Question/s

7 a) Is there a private space for girls to manage menstruation at school?
YES
NO

- INTRODUCTION
- GUIDANCE
- MATERIALS
- WASH
- KNOWLEDGE
- DISCOMFORT/DISORDERS
- SUPPORTIVE SOCIAL ENVIRONMENT
- MENSTRUAL HEALTH IMPACTS
- POLICY
- ANNEXES

7 b) Does the private space for girls to manage menstruation have water and soap?	Notes:
YES, WATER AND SOAP	From the JMP: "Check yes if water and soap are available for discrete personal hygiene (hand and body washing), cleaning clothes/uniform, and washing reusable menstrual hygiene products (as applicable)." ¹⁷
WATER, BUT NOT SOAP	
NO WATER	

INDICATORS #5, #6, #7	
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Nationally representative sample of schools. <i>(alternative: e.g. specific sub-population of schools in one country / province / district / study area)</i>
INDICATOR TYPE	Output
METHOD OF MEASUREMENT	Data is reported at the institutional level from administrators or by enumerator observation.

Interpretation

For additional analysis assistance with this indicator, go to the following JMP document:

WHO, UNICEF. [Core questions and indicators for monitoring WASH in schools in the Sustainable Development Goals](#) [Internet]. Geneva; 2018.

Evidence and considerations

Indicator #5 is based on several individual indicators from JMP's Core Sanitation Questions for Schools,²¹ the 2018 Bangladesh National Hygiene Baseline Survey,²² and the Philippines DepEd 3-Star WASH in Schools Monitoring Form.¹⁴ This indicator combines three essential components regarding the available sanitation facility into a single indicator.

Indicator #6 builds on Indicator #5 with an expanded set of criteria to capture menstrual waste disposal. The indicator is a modified version of the JMP indicator for menstrual friendly toilet facilities.

Further menstrual friendly characteristics of the sanitation facility are not included in the recommended indicator at this time, these include cleanliness which is captured from individuals' perspective in Indicator #4, sufficient lighting, sufficient space within the latrine cubical/stall/stance for managing menstruation, or the presence of a mirror.²³

Indicator #7 was developed by the core group, drawing on the JMP's core hygiene questions and expanded question set, capturing the availability of private spaces for menstrual management and availability of soap and water for menstrual management, this can include washing hands, the body, or cleaning blood from garments. This indicator may assess additional features of the sanitation facilities covered by Indicators #6 and #7, or may relate to a different space provided in some schools/countries.

Notably for Indicator #7, current measures assess privacy from the perspective of the school respondent. This does not assess if the space is lockable from the inside or if users feel secure.

Indicators #5, #6, and #7 are populated using a single checklist administered at the school level.

- INTRODUCTION
- GUIDANCE
- MATERIALS
- WASH
- KNOWLEDGE
- DISCOMFORT/DISORDERS
- SUPPORTIVE SOCIAL ENVIRONMENT
- MENSTRUAL HEALTH IMPACTS
- POLICY
- ANNEXES



MHH DOMAIN: KNOWLEDGE

Indicator 8 % of students (female/male) who have ever received education about menstruation in primary and secondary school.

Purpose

Education about puberty and menstruation is needed to equip girls with the knowledge to help understand their bodies, to dispel fears around menstruation and to support menstrual self-care. Boys also need to understand menstruation to contribute to a supportive social environment. This indicator captures the extent to which students (female and male) are receiving menstruation education, and when combined with data on grade level provides information on the proportion of students receiving education about menstruation in primary and secondary schools, and by class/grade and sex. “Students” was used to capture both females and males.

DEFINITION	The proportion of students (<i>female/male</i>) who report having ever received education about menstruation, by school level.
NUMERATOR	Number of students surveyed which have received education about menstruation in primary and/or secondary school.
DENOMINATOR	Total number of students surveyed (<i>disaggregated by sex if data available as noted below</i>) ²²
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Nationally representative population-based survey (<i>alternative: nationally representative school-based survey</i>)
INDICATOR TYPE	Outcome
METHOD OF MEASUREMENT	Individual self-report through self or enumerator administered surveys.

Survey Question/s

8 a) Have you ever received education about menstruation (in school)?	Notes: Those that report ‘yes’ comprise the numerator.
YES, IN PRIMARY SCHOOL	
YES, IN SECONDARY SCHOOL	
YES, IN PRIMARY AND SECONDARY SCHOOL	
NO, DID NOT RECEIVE EDUCATION ABOUT MENSTRUATION IN SCHOOL	

Evidence and considerations

This indicator was developed based on an indicator from the 2018 Bangladesh National Hygiene Baseline Survey²² which captured the percentage of schools where menstrual hygiene education is provided for girls in primary and secondary school. The core group developed the new indicator to reflect that individual students report on education received and expanded the indicator to capture male students. Educating boys about menstruation can help improve knowledge across the population, and to normalize menstruation and dispel myths.²⁴⁻²⁶ This indicator can also be used to show differences

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

in regional percentages of the number of students educated at sub-national levels in addition to the development of a national percentage of educated students. Disaggregation by sex can be used to show the provision of education to male and female students. No age is specified, as age ranges differ per school, area, and country, but local intelligence on age ranges can be used to derive an estimate as to when menstrual education is provided to girls.

It is important to note that this indicator does not provide information on the quality of education received. Further, the curriculum may not cover menstruation education on an annual basis, so depending on the grade level sampled, and timing of the survey within the school year there may be discrepancies in the findings. We therefore use “ever” to capture any learning the students may have had during their schooling.

Indicator 9 % of females who know about menstruation prior to menarche.

Purpose

In studies across contexts, being unaware of menstruation prior to the first menstrual period is associated with distress.³ Menstrual health requires accurate and timely knowledge about menstruation. This indicator captures the minimal level of *timely* knowledge that girls should receive prior to their first period to support MHH. Knowledge of menstruation prior to menarche can suggest that girls have received information from parents or school.²⁷

DEFINITION	The proportion of post-menarcheal girls who report that they had awareness of menstruation prior to menarche.
NUMERATOR	Number of post-menarcheal girls reporting they knew about menstruation before their first menstrual period.
DENOMINATOR	Total number of post-menarcheal girls surveyed
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Nationally representative population-based survey (<i>alternative: nationally representative school-based survey</i>)
INDICATOR TYPE	Outcome
METHOD OF MEASUREMENT	Individual self-report. To capture individuals' own perspectives on their access to knowledge requires responses from the target population.

Survey Question/s

9 a) Before you had your first menstrual period, did you know about menstruation?	Notes: Those that report 'yes' comprise the numerator.
YES	
NO	
DON'T REMEMBER	

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

Evidence and considerations

This indicator was developed during the 2019 Monitoring Menstrual Health and Hygiene meeting in Geneva;⁹ and is similar to a measure used in the 2018 Bangladesh National Hygiene Baseline Survey,²² along with other smaller or sub-national studies capturing the proportion of respondents who had heard or knew about menstruation before their first period.^{28-31,32}

This indicator only captures girls' self-reported awareness of menstruation prior to menarche, and does not capture whether they had accurate information or comprehensive education. It does not ask if girls felt prepared for menarche. The accuracy of knowledge, and preparation for menarche, may represent more advanced criteria and future indicators could address these concepts.

Indicator 10 % of females with correct knowledge of the fertile period during the ovulatory cycle.

Purpose

This indicator captures knowledge of the ovulatory cycle and fertile period. It provides information about the accuracy of menstrual knowledge and links between menstruation and reproduction.

DEFINITION	The proportion of girls who can accurately identify the fertile period during the ovulatory cycle.
NUMERATOR	Number of post-menarcheal girls correctly responding to the following two criteria: <ul style="list-style-type: none"> Whether there are certain days a woman is more likely to become pregnant (yes) The correct timing of the fertile window (e.g. halfway between two periods).
DENOMINATOR	Total number of post-menarcheal girls surveyed
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Nationally representative population-based survey (<i>such as the Demographic and Health Survey [DHS]</i>) (<i>alternative: nationally representative school-based survey</i>)
INDICATOR TYPE	Outcome
METHOD OF MEASUREMENT	Individual self-report through self or enumerator administered surveys.

Survey Question/s

10 a) From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	Notes: A 'correct' response for this question is 'yes.'
YES	
NO	
DON'T REMEMBER	

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

10 b) If yes, is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods? (pick one)

JUST BEFORE HER PERIOD BEGINS	
DURING HER PERIOD	
RIGHT AFTER HER PERIOD HAS ENDED	
HALFWAY BETWEEN TWO PERIODS	

Notes:
A 'correct' response for this question is 'halfway between two periods.'

Evidence and considerations

This indicator was developed from the following indicator on the 2017-2018 DHS Women’s Questionnaire:³³ Percent distribution of ever-married women aged 15-29 using the rhythm method by knowledge of fertile period during the ovulatory cycle. While data collected by the DHS includes a different target population (married women 15-49 rather than adolescent girls), knowledge among younger respondents can be used to provide insights on accurate knowledge of the menstrual cycle. As a ‘test’ of menstrual knowledge, this indicator provides more objective information than other self-reported items about the accuracy of individuals’ knowledge. The question could be included in surveys of adolescents to provide data for this indicator outside of DHS.

This indicator bridges MHH and sexual and reproductive health.^{34,35} Education on this topic could be provided in the context of sexuality education and does not indicate that girls have comprehensive knowledge of menstrual biology, reproduction or self-care.

Indicator 11 % of schools where education about menstruation is provided for students from age 9.

Purpose

This indicator provides school-level data on the inclusion of menstruation in school curriculum. It provides insights on the timeliness of the provision of education about menstruation to support girls’ MHH.

DEFINITION	The proportion of schools with menstruation in the curriculum for students starting at age 9.
NUMERATOR	Number of schools reporting that menstruation is included in their curriculum for students starting at age 9
DENOMINATOR	Total number of schools surveyed
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Nationally or locally representative sample of schools to inform policy at that level.
INDICATOR TYPE	Output
METHOD OF MEASUREMENT	Data is reported at the institutional level from administrators or by enumerator observation.

- INTRODUCTION
- GUIDANCE
- MATERIALS
- WASH
- KNOWLEDGE**
- DISCOMFORT/ DISORDERS
- SUPPORTIVE SOCIAL ENVIRONMENT
- MENSTRUAL HEALTH IMPACTS
- POLICY
- ANNEXES

Survey Question/s

11 a) Does your school provide menstrual education?

YES, GIRLS ONLY

YES, GIRLS AND BOYS

NO

11b) If yes, at what grade do students start getting menstrual education?

11c) If yes, what is the age range for this grade?

Evidence and considerations

This indicator draws on an indicator from the 2018 Bangladesh National Hygiene Baseline Survey²² capturing if menstrual education was provided for primary and secondary schoolgirls, and the Philippines DepEd WinS Monitoring System¹⁴ capturing the proportion of girl students grade four (age 9) and above that receive information, education and communication materials on menstrual health and hygiene.

The indicator provides a school/output-level indication which can be triangulated with students' reports provided in Indicator #9. Measures used to construct the indicator mean that the indicator can be presented by gender to show the proportion of girls and boys receiving education on menstruation. Age 9 was selected as the target educational age to ensure information about menstruation is received prior to menarche. The existence of menstruation information in the school curriculum does not capture whether the education is delivered as intended, or the quality of education delivery. It does not mean that all students in the school have received information, nor does it capture the type of information received. In future, the indicator could be expanded to assess if the menstrual education curriculum includes information about menstrual biology, reproduction, and information about caring for the body during menstruation.

Indicator 12 Existence of pre-service or in-service teacher training about menstruation at the primary or secondary level.

Indicator 13 % of schools that have at least one teacher trained to educate primary/secondary students about menstruation.

Purpose

Indicators #12 and #13 capture access to training for teachers, and whether they have been equipped to educate students about menstruation. These indicators can be used in combination with other knowledge indicators to provide a picture of the extent and quality of menstrual education provided to and received by students. Positive education about menstruation can support girls MHH by equipping them with knowledge about their own biology and cycle, and information about caring for their body during menstruation. Education can also dispel fears, misconceptions and

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

stigma about menstruation. Indicator #12 captures the provision of pre-service and in-service teacher training while Indicator #13 captures the proportion of schools with at least one trained teacher.

INDICATOR #12

DEFINITION	The proportion schools in which teachers are provided with in-service or pre-service training about menstruation.
NUMERATOR	Number of schools reporting that they provide in-service or pre-service training on menstruation
DENOMINATOR	Total number of schools surveyed

Survey Question/s

12 a) Do teachers receive training on menstruation education as part of pre-service training or in-service trainings?

YES

NO

12 b) If yes, what content does the menstrual education for teachers include?

BIOLOGY AND REPRODUCTION

PRACTICAL GUIDANCE ON CARE OF THE BODY

BOTH

NEITHER

Notes:
This is not part of the indicator but has been included to get further information about those reporting “yes.”

INDICATOR #13

DEFINITION	The proportion schools in which at least one teacher has been trained to educate about menstruation
NUMERATOR	Number of schools reporting that they have at least one teacher on staff trained to educate students about menstruation
DENOMINATOR	Total number of schools surveyed

Survey Question/s

13 a) How many teachers (of total) at this school have received training to educate primary/secondary students about menstruation?

NUMBER OF TEACHERS (OF TOTAL NUMBER OF TEACHERS)

INDICATORS #12 AND #13

PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Nationally or locally representative sample of schools to inform policy at that level.
INDICATOR TYPE	Output
METHOD OF MEASUREMENT	Data is reported at the institutional level from administrators

- INTRODUCTION
- GUIDANCE
- MATERIALS
- WASH
- KNOWLEDGE
- DISCOMFORT/DISORDERS
- SUPPORTIVE SOCIAL ENVIRONMENT
- MENSTRUAL HEALTH IMPACTS
- POLICY
- ANNEXES

Evidence and considerations

Indicators #12 and #13 were developed from the Philippines DepEd 3-Star WASH in Schools tool which captures the percentage of teachers who have received training information on how to teach about menstruation.

Indicator #12 captures the proportion of schools providing training, while Indicator #13 captures the proportion of schools with trained teachers. Indicator #12 has an expanded measure to capture the content of menstrual education. According to country needs the indicator could be expanded to require training on menstrual biology, reproduction and practical care. However, the current broad indicator provides a baseline assessment of the extent of in-service/pre-service training available for teachers to help monitor the quality of training for the educator and information shared to students on menstruation.

Indicator #13 requires schools to have a single trained teacher. It is important to note this indicator can be adapted for each country based on information gathered in previous years and national targets, e.g. moved to 50% of teachers trained rather than just one teacher trained.

In the future, this indicator could be expanded to assess the quality and sufficiency of the teacher training received in order to improve the delivery of menstruation-related educational content.

Indicator 14 % of countries where national policy mandates education about menstruation at primary and secondary level.

Purpose

This indicator will be used to measure national policies that mandate menstrual education for primary and secondary schools at the global level. A national policy on menstrual education will help to ensure that students are receiving biologically accurate and timely information that is socially supportive about menstrual health and hygiene. This indicator would provide important information on the personal development, health and wellbeing of the students.

DEFINITION	The proportion of countries with a national policy mandating education about menstruation by primary and secondary school
NUMERATOR	Number of countries with a national policy that mandates education about menstruation by primary and secondary levels.
DENOMINATOR	Total number of countries assessed, by primary and secondary school levels.
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Desk review of policy documents.
INDICATOR TYPE	Input
METHOD OF MEASUREMENT	This indicator requires data collected at the national level from education sector policy documents and/or key informant interviews, by school type (primary/secondary), and aggregated internationally.

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

Survey Question/s

14 a) Is education about menstruation mandated in any of your education policies, standards or procedures at the primary level?

YES

NO

14 b) Is education about menstruation mandated in any of your education policies, standards or procedures at secondary level?

YES

NO

Evidence and considerations

This indicator was developed by the core group in collaboration with the global team members who identified that there was a gap in knowledge of the total number of countries who have policies on menstrual education in the school system, which this indicator aims to cover. It is important that these data be collected at the national level, rather than on any other sub-governmental level, as the national level may not be representative of sub-national level policies on the inclusion of menstruation education in school curriculum. This indicator could be adapted for countries that have devolved education systems to monitor sub-national policies (e.g. % provinces with a provincial / state policy mandating education about menstruation in primary and secondary school).

It is important to note that the existence of a policy does not ensure that there is budget for implementation, nor does it provide an indication that education has been distributed or capture the quality of education.

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES



MHH DOMAIN: DISCOMFORT/DISORDERS

Indicator 15 % of girls who report that they were able to reduce their menstrual (abdominal/back/cramping) pain when they needed to during their last menstrual period.

Purpose

Many adolescent girls experience menstrual pain such as abdominal pain, back pain and cramping before or during menstruation. This indicator captures the proportion of girls who can reduce their pain. It can be used to indicate the proportion of girls with access to effective pain-relief measures.

DEFINITION	The proportion of girls who were able to reduce their menstrual pain when they needed to during their last menstrual period.
NUMERATOR	Number of girls reporting that they were able to reduce menstrual pain during their last period
DENOMINATOR	Total number of post-menarcheal girls who experienced menstrual pain during their last menstrual period. This excludes those who reported that they "didn't need to reduce pain during their last menstrual period".
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Nationally representative population-based survey <i>(alternative: nationally representative school-based survey)</i>
INDICATOR TYPE	Outcome
METHOD OF MEASUREMENT	Individual self-report through self or enumerator administered surveys.

Survey Question/s

15 a) Were you able to reduce your menstrual (menstruation-related) pain during your last menstrual period when you needed to?

YES

NO

I DIDN'T NEED TO REDUCE PAIN DURING MY LAST MENSTRUAL PERIOD

Evidence and considerations

This indicator was developed by the core group in collaboration with the global team members who identified that there was a gap in attention to menstrual pain. This indicator was adapted from those in various past surveys capturing the proportion of women/girls who have access to resources for menstrual pain management. By asking if girls are able to reduce their pain, this indicates the extent of successful pain management rather than access to pain management tools which may or may not be effective. It is important to make sure the responses capture if this is not applicable (girl does not have pain). Also considered in the development of this indicator was a question in the Self-Efficacy in Addressing Menstrual Needs Scale which includes a question about confidence in the ability to reduce menstrual pain.³⁶

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/DISORDERS

 SUPPORTIVE SOCIAL ENVIRONMENT

 MENSTRUAL HEALTH IMPACTS

 POLICY

ANNEXES

Indicator 16 % of girls who would feel comfortable seeking help for menstrual problems from a health care provider.

Purpose

Menstrual health includes being able to access timely diagnosis, treatment and care for menstrual cycle-related discomforts and disorders. This indicator will be used to capture if girls feel comfortable to seek help from healthcare providers if they were to experience menstrual problems or abnormalities on an individual level. It can be used to assess whether health services are adolescent friendly and girls use these services to seek support for menstrual problems.

DEFINITION	The proportion of girls who reported that they would feel comfortable to seek help from care providers if they experienced concerns about their menstrual period
NUMERATOR	Number of girls reporting that they would feel comfortable seeking help from a health care provider for concerns about their menstrual period
DENOMINATOR	Total number of post-menarcheal girls surveyed
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Nationally representative population-based survey <i>(alternative: nationally representative school-based survey)</i>
INDICATOR TYPE	Outcome
METHOD OF MEASUREMENT	Individual self-report through self or enumerator administered surveys.

Survey Question/s

16 a) If you had a concern about your menstrual period, would you feel comfortable seeking help from a health care provider such as a school nurse, community health worker, or doctor?	Notes: Examples of health care providers noted in the measure can be changed as relevant to the context.
YES	
NO	

Evidence and considerations

This indicator was developed by the core group in collaboration with the global team members that identified that there was a gap in knowledge about girls’ health seeking behaviors in relation to menstruation. This indicator includes respondents who might not experience any menstrual concerns in the denominator, in contrast to the previous indicator, to help gauge if they would feel comfortable enough to seek out help from healthcare providers if they needed to and providing data on the full sample of girls. The indicator captures girls perceived comfort to seek care, it does not capture if care is received or if comfort seeking help translates into health care seeking for those who need it.

Future indicators could be developed to capture health care seeking, but would be limited to girls experiencing menstrual concerns or problems which may be difficult to define in a population survey.

- INTRODUCTION
- GUIDANCE
- MATERIALS
- WASH
- KNOWLEDGE
- DISCOMFORT/DISORDERS
- SUPPORTIVE SOCIAL ENVIRONMENT
- MENSTRUAL HEALTH IMPACTS
- POLICY
- ANNEXES



MHH DOMAIN: SUPPORTIVE SOCIAL ENVIRONMENT

Indicator 17 % of girls who have someone they feel comfortable asking for support (advice, resources, emotional support) regarding menstruation.

Purpose

Social support has been identified as an important antecedent for a positive menstrual experience and for MHH. Having access to supportive individuals who can provide information, resources or emotional support is part of a supportive sociocultural environment for menstruation and can support girls in navigating their menstrual health needs. Stigma surrounding menstruation, or a lack of supportive individuals may mean girls do not have someone they could ask for help. This indicator captures the proportion of girls with access to at least one person they could ask for support.

DEFINITION	The proportion of girls who report feeling comfortable asking for advice, resources or emotional support for their period from someone.
NUMERATOR	Number of girls reporting that they have someone they feel comfortable asking for support for their period
DENOMINATOR	Total number of post-menarcheal girls surveyed
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Nationally representative population-based survey <i>(alternative: nationally representative school-based survey)</i>
INDICATOR TYPE	Outcome
METHOD OF MEASUREMENT	Individual self-report through self or enumerator administered surveys.

Survey Question/s

17 a) Do you have someone who you would feel comfortable asking for support (advice, resources, emotional support) for your period if needed?

YES

NO

NOT APPLICABLE/DO NOT NEED

Evidence and considerations

This indicator was developed by the core group in collaboration with the global team members that identified that there was a gap in measurement of the support that girls receive around MHH. This indicator was adapted from one used in multiple existing surveys capturing girls' comfort seeking support for menstruation.^{31,37} The measure was modified to more clearly specify the types of support that may be sought. This indicator captures a minimal level of social support: having at least one person who a girl feels comfortable to talk to. It does not capture if girls do reach out to this person, or if support is received if requested. Some girls may feel that they do not need any support for their period. To gain more granular insights into girls' level of comfort seeking support for menstruation, Likert-style responding could be used in the measure, such as "very uncomfortable, uncomfortable, comfortable, very comfortable".

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES



MHH DOMAIN: MENSTRUAL HEALTH IMPACTS

Indicator 18 % of girls who report a menstrual period does not impact their day.

Purpose:

The purpose of this indicator is to highlight the number of girls whose daily activities are not negatively impacted by their period in some way. Engagement and participation in social aspects of life should not be inhibited by menstruation. While other indicators capture the provision of necessary education, support and resources for navigating menstruation, this indicator can be used to infer the aggregate success of those efforts. This indicator also highlights the number of girls whose daily activities are negatively impacted by their period in some way.

DEFINITION	The proportion of girls (age?) reporting that their period does not impact their day
NUMERATOR	Number of girls reporting that their period does not impact their day
DENOMINATOR	Total number of post-menarcheal girls surveyed
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Nationally representative population-based survey (<i>alternative: nationally representative school-based survey</i>)
INDICATOR TYPE	Outcome
METHOD OF MEASUREMENT	Individual self-report through self or enumerator administered surveys.

Survey Question/s

18 a) Getting my period does not impact my day.

YES

NO

Evidence and considerations

This indicator was modified from a measure included in the Global Early Adolescent Study (GEAS) conducted in nine countries which had the question “Getting my period/ cycle is not a big deal to me.”³⁸ The MENISCUS study also included a question “Period days are like any other.”³¹ This measure is also similar to those used to capture the attitudes towards menstruation, for example the 1980 Menstrual Attitude Questionnaire³⁹ (MAQ) includes items such as “Avoiding certain activities during menstruation is often very wise”, the 1993 Menstrual Attitude Questionnaire⁴⁰ which includes questions such as “Coping with periods is easy”, and Beliefs about and Attitudes Toward menstruation Questionnaire (BATM)⁴¹ which included items such as “ It is annoying for women to have the period every month”.

This indicator provides an overarching indication of the proportion of girls impacted by their period, it does not indicate the difficulty or impact that they experience.

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

Indicator 19 % of girls whose class participation was not impacted by their last menstrual period.

Purpose

This indicator captures the impacts of menstruation on girls’ school participation. Unmet MHH needs have been identified as a barrier to girls’ comfort and willingness to participate in class.

DEFINITION	The proportion of girls whose participation in class was not impacted by their period
NUMERATOR	Number of girls reporting that they did not have trouble participating in class due to their period
DENOMINATOR	Total number of post-menarcheal girls surveyed who attended school
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Nationally representative population-based survey* <i>(alternative: school-based survey)</i>
INDICATOR TYPE	Outcome
METHOD OF MEASUREMENT	Individual self-report through self or enumerator administered surveys.

Survey Question/s

19 a) During your most recent period, did you have trouble participating in class due to your period?

YES

NO

Evidence and considerations

This indicator was developed by the core group in collaboration with the global team members. This indicator was adapted from the Performance Monitoring for Action surveys¹⁵ which assessed school and work absenteeism due to the last menstrual period.⁴² While some trials of menstrual health interventions have tested the impact of programs on school attendance, evidence is mixed, and a myriad of challenges have been reported in accurately capturing menstrual-related absenteeism.^{24,31,43} Further, many have highlighted that presence at school may not indicate girls’ comfort and willingness to participate in daily activities. Thus, this indicator captures girls’ own perception on if they had trouble participating in class due to their period. Difficulties participating may be due to menstrual pain, difficulties in menstrual management, or the sociocultural environment surrounding menstruation.

It is important to note that this indicator is relevant to school-going girls. No eligibility question will be required for school-based surveys, but surveys drawing on a household or other sampling method will require an eligibility question to ask only girls still attending school.

Indicators capturing self-reported absenteeism may start conversations on response accuracy and bias issues. The group readjusted to focus solely on participation in school and school aged girls for this basic level indicator on an individual’s experience during menstruation.

* School going girls should be defined within the country context, example eligibility questions are provided in Annex 3

- INTRODUCTION
- GUIDANCE
- MATERIALS
- WASH
- KNOWLEDGE
- DISCOMFORT/ DISORDERS
- SUPPORTIVE SOCIAL ENVIRONMENT
- MENSTRUAL HEALTH IMPACTS
- POLICY
- ANNEXES





MHH DOMAIN: POLICY

Indicator 20 % of countries with policies or plans that include menstrual health and hygiene.

Purpose

National or sub-national policies and plans contribute to creating an enabling environment for MHH to be implemented consistently at scale.⁴⁴ This indicator aims to capture the countries who include menstrual health and hygiene within their policies or plans on a national level.

DEFINITION	The proportion of countries with policies or plans that include menstrual health and hygiene.
NUMERATOR	Number of countries reviewed which have policies or plans that include menstrual health and hygiene.
DENOMINATOR	Total number of countries reviewed.
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Country level indicator documenting presence of policy documents. <i>(alternative: desk review of country level policy documents)</i>
INDICATOR TYPE	Output
METHOD OF MEASUREMENT	Numerator obtained from looking into policies and plans of countries who are surveyed for those which include MHH. Denominator measured by the total number of countries that are surveyed.

Survey Question/s

20 a) Do any national policies and plans include provision for menstrual health and hygiene? (If yes, please specify)

YES	
NO	

Evidence and considerations

This indicator was informed by drafts of the GLAAS survey⁴⁵ but adapted to address MHH specifically. It was included by the core group to address the gap in existing indicators for examining the number of national level policies or plans that include MHH. It has not been tested or used elsewhere. The indicator developed from the 2020 Kenya MHM Framework helped spark the conversations on the addition of this indicator.^{46,47} This indicator could be adopted for countries that have devolved governance to monitor sub-national policies and plans (e.g. Do any provincial/state policies and policies include provision for MHH? If yes, please specify).

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES



Indicator 21 National budget is allocated to menstrual health and hygiene; funds are dispersed to the schools in a timely and efficient manner.

Purpose

This indicator aims to identify whether a country has a national level budget that includes menstrual health and hygiene, the sector the budget is allocated from, and whether funds are being dispersed to support the policy. Having a clear understanding of whether resources are allocated to ensure the policies are active and resourced is important for menstruators. The policy is ineffective if not resourced efficiently and timely.

DEFINITION	The proportion of countries where budget is allocated and dispersed efficiently and timely to schools for MHH.
NUMERATOR	N/A
DENOMINATOR	N/A
PREFERRED DATA SOURCE /ALTERNATIVE DATA SOURCE	Country level budget documents.
INDICATOR TYPE	Input
METHOD OF MEASUREMENT	Requires review of data collected at the national level, including examining countries' national budget inclusion and disbursement plans for allocation towards menstrual health and hygiene. ⁴⁸

Survey Question/s

21 a) Is there a budget line or national funding for MHH?

YES

NO

21 b) If yes, please identify which of the following sectors the funding comes through: (tick all that apply)

EDUCATION

HEALTH

WASH

OTHER

21 c) Are there mechanisms in place to disburse these funds to the implementation levels in a timely manner in order to ensure smooth and effective program implementation?

YES

NO

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

Evidence and considerations

This indicator is adapted from the World Bank SABER School Health Questionnaire V2.⁴⁸ The country teams advised the core group on the importance of identifying allocated budget as well as the sector(s) supporting this budget, and whether mechanisms exist for timely and efficient disbursement of funds. Some countries may have developed responsibility for financing MHH to sub-national levels. In this context the indicator and measures could be adapted to sub-national level (e.g. % of provinces/states that have a budget line or funding for MHH. For which the measure would be: Is there a budget line or provincial / state funding for MHH?)

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

Annex 1: Detailed Methods Used for Development of the Short List

- (I) **Identifying priority domains for monitoring MHH.** The core group reviewed definitions for menstrual health and hygiene,^{2,49,50} operational conceptualizations of MHH,^{51,52} and past research⁵³ to develop priority domains for monitoring MHH, in collaboration with stakeholders and key representatives in each exemplar country. The aim was to utilize domains that are situated within or of relevance to key sectors engaging with adolescent girls (Health [sexual and reproductive; psychosocial; Gender; Education; WASH])
- (II) **Mapping existing indicators, measures, and data sources.** A desk review complemented by survey of national stakeholders and the Global Advisory Group were used to catalogue existing indicators and measures used for monitoring progress towards MHH. This focused on indicators already being utilized in national level surveys and data collection efforts (for example, those used in multi-country monitoring such as the Demographic and Health Surveys (DHS)⁵⁴ and Joint Monitoring Programme (JMP)⁵⁵ or in national level efforts such as the Bangladesh National Hygiene Survey.²² Identified indicators and measures were grouped according to priority domain.
- (III) **Appraising quality and feasibility of indicators and measures.** The core group undertook an initial appraisal of indicator quality and feasibility. Meetings were held to reach consensus on a long list of indicators and to identify gaps for which alternative indicators or measures were sought from efforts to develop or test measures for MHH concepts^{11,13,36,56,57,58} along with surveys from controlled trials⁵⁹ and primary studies. After core group review, a final long list was shared with the Global Advisory Group and national stakeholders, and experts rated the relevance, usefulness and feasibility of each indicator with space for comments and dialogue under each using an online platform (Power Noodle). This was followed by a two-day online meeting held in June 2021 with break-out group discussions to review indicators by domain, with experience of use of such indicators provided by exemplar countries at plenary sessions.
- (IV) **Refining the short list and developing guidance.** Feedback from the virtual meeting along with repeated meetings among the core group served to refine the indicator list. A draft short list was circulated for final review.

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

Annex 2: Definitions (measure, types of indicators) as used in this guidance note

Measure: Measurements are used to collect data that contribute to the construction indicators by determining the proportions needed while having the ability to be tested for reliability and validity.^{62 64} They will capture relevant information on different health attributes and dimensions, and the performance of health systems which can be summarized to represent health indicators.⁶³

- *Examples:* Measurement data collected from nationally representative, population-based sample surveys (DHS, MICS); Monitoring systems

Indicator: Indicators give data added value by converting them into information which can be used in decision making since they represent more than the data which they are based on.⁶⁴ They are not measurement tools themselves but an estimate with some degree of imprecision of a given health dimension in a target population used in public health surveillance.^{62 63 65} They are summary measures that capture relevant information that attempt to describe and monitor a population's health status which are relevant to define the health-related goals. Some desirable attributes that are useful in evaluating health indicators include measurability/feasibility, validity, timeliness, replicability, sustainability, relevance/importance, and comprehensible.⁶⁵

- *Examples:* Incidence rate of menstrual-related complications in schoolgirls per year

Output Indicators: Used to measure benchmarks of program-level performance.⁶⁰ Direct tangible results of activities; What the project delivers.⁶¹

- *Examples:* Indicators on increased practical MHH knowledge; Use of facilities or supplies to manage menstruation

Outcome Indicators: Used to measure medium-term population-level results.⁶⁰ Key intermediate change. What the programs hope to see.⁶¹ Measures of expected change in the short intermediate or long-term.⁶³

- *Examples:* Indicators collected which demonstrate increased menstrual knowledge; use of MHH facilities.

Impact: Used to measure higher level or longer -term, population-level impact. The Ultimate Objective.⁶¹

- *Examples:* Indicators demonstrating improved participation in school.

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

Annex 3: Eligibility Questions

As noted throughout the document, certain indicators look specifically at a subset of the population of girls. The below questions are recommended to be utilized as appropriate for the specific indicator being considered.

Age:

How old are you? [add response selections as appropriate]

How old are you?
[add response selections as appropriate]

School Status:

There are a few question options to choose from:

Did you attend school at any time in the past 12 months?¹⁵

YES	1
NO	0
NO RESPONSE	-99

Are you currently enrolled in school?

YES	
NO	
ENROLLED BUT NOT ATTENDING	

Have you attended any school in the past school year?

YES	
NO	

Menarche and Menstrual Status:

To determine if have started menstruating:

Have you started to have menstrual periods?

YES	
NO	

If already menstruating:

Have you had a menstrual period in the past 6 months?

YES	
NO	

INTRODUCTION

GUIDANCE

MATERIALS

WASH

KNOWLEDGE

DISCOMFORT/
DISORDERS

SUPPORTIVE
SOCIAL
ENVIRONMENT

MENSTRUAL
HEALTH
IMPACTS

POLICY

ANNEXES

Annex 4: Summary of Priority Indicators

For the purposes of facilitating the uptake of the recommended short list, we chose to utilize the existing wording in country-level indicators, which alternate between “girls” and “females.”

Individual-level LONG-TERM IMPACTS

MENSTRUAL HEALTH IMPACTS

- 18 % of girls who report a menstrual period does not impact their day.
- 19 % of girls whose class participation was not impacted by their menstrual period.

Individual-level SHORT-TERM OUTCOMES

MATERIALS

- 1 % of girls that reported having enough menstrual materials during their last menstrual period.

WASH

- 3 % of girls who reported changing their menstrual materials during their last menstrual period when at school.
- 4 % of girls who changed their menstrual materials at school in a space that was clean, private, and safe during their last menstrual period.

KNOWLEDGE

- 8 % of students (female/ male) who have ever received education about menstruation in primary and secondary school.
- 9 % of females that know about menstruation prior to menarche.
- 10 % of females with correct knowledge of the fertile period during the ovulatory cycle.

DISCOMFORT/ DISORDERS

- 15 % of girls who report that they are able to reduce their menstrual (abdominal/ back/ cramping) pain when they needed to during their last menstrual period.
- 16 % of girls who would feel comfortable seeking help for menstrual problems from a health care provider.

SUPPORTIVE SOCIAL ENVIRONMENT

- 17 % of girls who have someone they feel comfortable asking for support (advice, resources, emotional support) regarding menstruation.

School-level OUTPUTS

- 2 % of schools with menstrual materials available to girls in case of an emergency.

- 5 % of schools (primary/secondary) with improved sanitation facilities that are single-sex and usable (available, functional, and private) at the time of the survey.

- 6 % of schools (primary/secondary) with improved sanitation facilities that are single-sex, usable (available, functional, and private), lockable from the inside, have covered disposal bins, and have discreet disposal mechanisms for menstrual waste at the time of the survey.

- 7 % of schools (primary/secondary) that have water and soap available in a private space for girls to manage menstruation.

- 11 % of schools where education about menstruation is provided for students from age 9.

- 12 Existence of pre-service or in-service teacher training about menstruation at the primary or secondary level.

- 13 % of schools that have at least one teacher trained to educate primary/secondary students about menstruation.

Government-level OUTPUTS

- 14 % of countries where national policy mandates education about menstruation at primary and secondary level.
- 20 % of countries with policies or plans that include menstrual health and hygiene.
- 21 National budget is allocated to menstrual health and hygiene; funds are dispersed to the schools in a timely and efficient manner.

POLICY

Annex 5: MHH Expert Group and Global Advisory Group Members

Core Group Members

Bethany Caruso (Rollins School of Public Health, Emory University), Caitlin Gruer (Mailman School of Public Health, Columbia University); Jacquelyn Haver (Save the Children), Julie Hennegan (Burnet Institute), Therese Mahon (WaterAid), Penelope Phillips-Howard (Liverpool School of Tropical Medicine), Marni Sommer (Mailman School of Public Health, Columbia University), Belen Torondel (London School of Hygiene and Tropical Medicine), Garazi Zulaika (Liverpool School of Tropical Medicine)

Measures & MHH Expert Group

Jura Augustinavicius (School of Population and Global Health, McGill University), Janita Bartell (UNICEF), Nicole Bella (Global Education Monitoring (GEM) Report/UNESCO), Emily Cherenack (Duke University), Nikhit D'Sa (Global Center for the Development of the Whole Child), Regina Guthold (Maternal, Child and Adolescent Health and Ageing Department, World Health Organization), Michelle Hindin (Population Council), Rick Johnston (Joint Monitoring Programme (JMP), World Health Organization), Caroline Kabiru (African Population and Health Research Center), Kristen Matteson (Women & Infants Hospital and Warren Alpert Medical School, Brown University), Katherine Millsaps (Emory University), Albert Motivans (Equal Measures 2030), Ella Cecilia Gamolo-Naliponguit (Department of Education, Philippines), Neville Okwaro (Ministry of Health, WASH, Kenya), Elizabeth Omoluabi (Performance Monitoring for Action (PMA) Nigeria), Tom Slaymaker (Joint Monitoring Programme (JMP), UNICEF), Frances Vavrus (University of Minnesota), Ravi Verma (International Center for Research on Women)

Country Expert Groups

Bangladesh: Dr. Md Sabizur Rahman (Directorate General of Health Services), Dr. Sirajum Munira (Directorate General of Health Services), Aniq Raiza (Directorate of Secondary and Higher Education), Dr. Md Jahangir Hossain (Directorate of Secondary and Higher Education), Azim Kabir (Directorate of Secondary and Higher Education), S.M. Moniruzzaman (Department of Public Health Engineering), Dr. Md Jaynal Haque (Directorate General of Family Planning), Dr. Selina Ferdous (Practical Action), Mahbuba Kumkum (SIMAVI & MHM Platform), Dr. Nurullah Awal (WaterAid Bangladesh)

Kenya: Ibrahim Basweti Nyasani (Ministry of Health), Tabitha Musyoka (State Department of Gender), Emmah Mwende (Ministry of Health), Dorothy Ogega (Ministry of Education), Neville Okwaro, (Ministry of Health, WASH Hub), Michelle Sagala (Ministry of Health)

Philippines: Abram Abanil (Department of Education), Dr. Maria Corazon Dumlao (Department of Education), Vonerich Berba (Department of Education), Lien Callado (Department of Education), Mylene Quiray (Population Commission), Grace Dela Cruz (Population Commission), Miel Nora (USAID ReachHealth Project/seconded to

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

Department of Health - Adolescent Maternal Health Unit), Jonathan Valdez (Save the Children)

South Africa: Mags Beksinka (University of the Witwatersrand), Sipiwo Matshoba (Government of South Africa), Ntsiki Manzini-Matebula (UNFPA, South Africa), Lewis Ndhlovu (Masazi Development)

Global Advisory Group

To review the list of members, please see the Green Paper, *Monitoring Menstrual Health and Hygiene: Measuring Progress for Girls related to Menstruation*.⁹ New members include: Bella Monse (GIZ).

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

References

1. Sommer M, Hirsch JS, Nathanson C, Parker RG. Comfortably, safely, and without shame: Defining menstrual hygiene management as a public health issue. *Am J Public Health*. 2015;105(7):1302–11.
2. Hennegan J, Winkler IT, Bobel C, Keiser D, Hampton J, Larsson G, et al. Menstrual health: a definition for policy, practice, and research. *Sex Reprod Heal Matters [Internet]*. 2021 [cited 2021 Dec 8];29(1). Available from: <https://www.tandfonline.com/action/journalInformation?journalCode=zrhm21>
3. Hennegan J, Shannon AK, Rubli J, Schwab KJ, Melendez-Torres GJ. Women's and girls' experiences of menstruation in low- and middle-income countries: A systematic review and qualitative metasynthesis. *PLoS Med [Internet]*. 2019 May 1 [cited 2021 Dec 8];16(5). Available from: <https://pubmed.ncbi.nlm.nih.gov/31095568/>
4. Babbar K, Martin J, Ruiz J, Parray AA, Sommer M. Menstrual health is a public health and human rights issue. *Lancet Public Heal [Internet]*. 2021 Oct [cited 2021 Dec 8];0(0). Available from: <http://www.thelancet.com/article/S2468266721002127/fulltext>
5. UNICEF. Guidance for Monitoring Menstrual Health and Hygiene (Version I) [Internet]. New York, NY; 2020. Available from: <https://www.unicef.org/media/85461/file/MHM-Monitoring-Resource.pdf>
6. WHO, UNICEF. Progress on Household Drinking Water, Sanitation and Hygiene 2000-2020: Five Years into the SDGs [Internet]. Geneva; 2021. Available from: <https://washdata.org/sites/default/files/2021-07/jmp-2021-wash-households.pdf>
7. Sommer M, Torondel B, Hennegan J, Phillips-Howard PA, Mahon T, Motivans A, et al. How addressing menstrual health and hygiene may enable progress across the Sustainable Development Goals. *Glob Health Action [Internet]*. 2021 [cited 2021 Dec 8];14(1). Available from: <https://www.tandfonline.com/doi/abs/10.1080/16549716.2021.1920315>
8. Loughnan L, Mahon T, Goddard S, Bain R, Sommer M, Bobel C, et al. Monitoring Menstrual Health in the Sustainable Development Goals. *Palgrave Handb Crit Menstruation Stud [Internet]*. 2020; Available from: <https://pubmed.ncbi.nlm.nih.gov/33347211/>
9. Sommer M, Zulaika G, Schmitt ML, Gruer C. Monitoring Menstrual Health and Hygiene: Measuring Progress for Girls related to Menstruation [Internet]. New York & Geneva; 2019. Available from: http://www.publichealth.columbia.edu/sites/default/files/green_paper_monitoring_menstrual_health_and_hygiene.pdf
10. Global Action for Measurement of Adolescent health (GAMA) Advisory Group. Proposed indicators for global adolescent health measurement by the Global Action for Measurement of Adolescent health (GAMA) Advisory Group. 2020;88. Available from: https://www.who.int/docs/default-source/mca-documents/advisory-groups/gama/gama-list-of-indicators-draft-2-v20201020.pdf?sfvrsn=f6d00176_6

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

ANNEXES

11. **Hennegan J, Nansubuga A, Smith C, Redshaw M, Akullo A, Schwab KJ.** Measuring menstrual hygiene experience: development and validation of the Menstrual Practice Needs Scale (MPNS-36) in Soroti, Uganda. *BMJ Open [Internet]. 2020 Feb 17 [cited 2021 Dec 10];10(2).* Available from: <https://pubmed.ncbi.nlm.nih.gov/32071187/>
12. **UNICEF.** Guide to menstrual hygiene materials [Internet]. 2019 [cited 2021 Dec 8]. Available from: <https://www.unicef.org/media/91346/file/UNICEF-Guide-menstrual-hygiene-materials-2019.pdf>
13. **Smith AD, Muli A, Schwab KJ, Hennegan J.** National Monitoring for Menstrual Health and Hygiene: Is the Type of Menstrual Material Used Indicative of Needs Across 10 Countries? *Int J Environ Res Public Health [Internet]. 2020 Apr 2 [cited 2021 Dec 8];17(8).* Available from: [/pmc/articles/PMC7215803/](https://pubmed.ncbi.nlm.nih.gov/32071187/)
14. **Republic of the Philippines Department of Education.** WinS Monitoring Form [Internet]. 2017. p. 6. Available from: [https://deped-wins.sysdb.site/OfflineSystem/WinS Monitoring Form v2017-05-25.pdf](https://deped-wins.sysdb.site/OfflineSystem/WinS%20Monitoring%20Form%20v2017-05-25.pdf)
15. **PMA Data [Internet].** [cited 2021 Dec 9]. Available from: <https://www.pmadata.org/>
16. **WHO, UNICEF.** Progress on Drinking Water, Sanitation and Hygiene in Schools: Special Focus on COVID-19. *New York; 2020.*
17. **WHO, UNICEF.** Core questions and indicators for monitoring WASH in schools in the Sustainable Development Goals [Internet]. *Geneva; 2018.* Available from: <https://washdata.org/sites/default/files/documents/reports/2018-08/SDGs-monitoring-wash-in-schools-2018-August-web2.pdf>
18. **Khan SM, Bain RES, Lunze K, Unalan T, Beshanski-Pedersen B, Slaymaker T, et al.** Optimizing household survey methods to monitor the Sustainable Development Goals targets 6.1 and 6.2 on drinking water, sanitation and hygiene: A mixed-methods field-test in Belize. *PLoS One [Internet]. 2017 Dec 1 [cited 2021 Dec 9];12(12):e0189089.* Available from: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0189089>
19. **Larson E, Turke S, Miko NH, Oumarou S, Alzouma S, Rogers A, et al.** Capturing menstrual health and hygiene in national surveys: insights from performance monitoring and accountability 2020 resident enumerators in Niamey, Niger. *J Water, Sanit Hyg Dev [Internet]. 2021 Mar 1 [cited 2021 Dec 9];11(2):295–303.* Available from: <http://creativecommons.org/licenses/by/4.0/>
20. **Caruso BA, Clasen T, Yount KM, Cooper HLF, Hadley C, Haardörfer R.** Assessing Women's Negative Sanitation Experiences and Concerns: The Development of a Novel Sanitation Insecurity Measure. *Int J Environ Res Public Health [Internet]. 2017 Jul 11 [cited 2021 Dec 8];14(7).* Available from: [/pmc/articles/PMC5551193/](https://pubmed.ncbi.nlm.nih.gov/32071187/)
21. **WHO, UNICEF.** Core questions and indicators for monitoring WASH in Schools in the Sustainable Development Goals. 2016;20. Available from: <https://washdata.org/monitoring/methods/core-questions>

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

APPENDICES

22. **Bangladesh Bureau of Statistics, WaterAid Bangladesh, UNICEF Bangladesh.** National Hygiene Survey 2018 [Internet]. 2020. Available from: https://www.wateraid.org/bd/sites/g/files/jkxoof236/files/2021-01/National_Hygiene_Survey_2018_Bangladesh.pdf
23. **Schmitt ML, Clatworthy D, Ogello T, Sommer M.** Making the Case for a Female-Friendly Toilet. *Water 2018, Vol 10, Page 1193* [Internet]. 2018 Sep 5 [cited 2022 Jan 4];10(9):1193. Available from: <https://www.mdpi.com/2073-4441/10/9/1193/htm>
24. **Benshaul-Tolonen A, Aguilar-Gomez S, Batzer NH, Cai R, Nyanza EC.** Period teasing, stigma and knowledge: A survey of adolescent boys and girls in Northern Tanzania. *PLoS One* [Internet]. 2020 Oct 1 [cited 2021 Dec 9];15(10):e0239914. Available from: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0239914>
25. **Mason L, Sivakami M, Thakur H, Kakade N, Beauman A, Alexander KT, et al.** “We do not know”: a qualitative study exploring boys perceptions of menstruation in India. *Reprod Health.* 2017;14(1):174.
26. **Mahon T, Tripathy A, Singh N.** Putting the men into menstruation: The role of men and boys in community menstrual hygiene management. *Waterlines.* 2015;34(1):7–14.
27. **Hennegan J, Swe ZY, Than KK, Smith C, Sol L, Alberda H, et al.** Monitoring menstrual health literacy: Awareness of menstruation at menarche as an indicator.
28. **Tamiru S, Mamo K, Acidria P, Mushi R, Satya Ali C, Ndebele L.** Towards a sustainable solution for school menstrual hygiene management: cases of Ethiopia, Uganda, South-Sudan, Tanzania, and Zimbabwe. 2015 [cited 2021 Dec 9];34(1). Available from: [www.practicalactionpublishing.orghttp://dx.doi.org/10.3362/1756-3488.2015.009,ISSN:0262-8104](http://dx.doi.org/10.3362/1756-3488.2015.009,ISSN:0262-8104)
29. **Van Eijk AM, Sivakami M, Thakkar MB, Bauman A, Laserson KF, Coates S, et al.** Menstrual hygiene management among adolescent girls in India: a systematic review and meta-analysis. *BMJ Open* [Internet]. 2016 [cited 2021 Dec 9];6(3). Available from: <https://pubmed.ncbi.nlm.nih.gov/26936906/>
30. **Hennegan J, Sol L.** Confidence to manage menstruation at home and at school: findings from a cross-sectional survey of schoolgirls in rural Bangladesh. <https://doi.org/10.1080/1369105820191580768> [Internet]. 2020 Feb 1 [cited 2021 Dec 9];22(2):146–65. Available from: <https://www.tandfonline.com/doi/abs/10.1080/13691058.2019.1580768>
31. **Miiró G, Rutakumwa R, Nakiyingi-Miiró J, Nakuya K, Musoke S, Namakula J, et al.** Menstrual health and school absenteeism among adolescent girls in Uganda (MENISCUS): a feasibility study. *BMC Womens Health* [Internet]. 2018 [cited 2021 Dec 9];18(1). Available from: <https://pubmed.ncbi.nlm.nih.gov/29298699/>
32. **Chandra-Mouli V, Vipul Patel S.** Mapping the knowledge and understanding of menarche, menstrual hygiene and menstrual health among adolescent girls in low- and middle-income countries. *Reprod Health* [Internet]. 2017;14. Available from: <https://reproductive-health-journal.biomedcentral.com/articles/10.1186/s12978-017-0293-6>

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

APPENDICES

33. **The Demographic and Health Surveys Program, USAID.** Guide to DHS Statistics: DHS-7 [Internet]. 2018. Available from: https://dhsprogram.com/pubs/pdf/DHSG1/Guide_to_DHS_Statistics_DHS-7.pdf
34. **Babbar K, Dev P.** Modelling the impact of Ovulatory Cycle Knowledge on the number of children and age of women at first birth. *Ahmedabad*; 2021.
35. **Starrs AM, Ezeh AC, Barker G, Basu A, Bertrand JT, Blum R, et al.** Accelerate progress—sexual and reproductive health and rights for all: report of the Guttmacher–Lancet Commission. *Lancet Comm [Internet]*. 2018;391(10140):2642–92. Available from: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)30293-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)30293-9/fulltext)
36. **Hunter EC.** Self-efficacy in addressing menstrual needs: Construct conceptualization and measurement in Bangladeshi schoolgirls. *Johns Hopkins University*; 2019.
37. **Hennegan J, Bukenya JN, Makumbi FE, Nakamya P, Exum N, Schwab KJ, et al.** Menstrual health challenges in the workplace and consequences for women’s work and wellbeing: a cross-sectional survey in Mukono, Uganda. [cited 2021 Dec 10]; Available from: <https://osf.io/preprints/socarxiv/rb9wq/>
38. **WHO, Johns Hopkins Bloomberg School of Public Health.** Download The Measures — Global Early Adolescent Study [Internet]. [cited 2021 Dec 9]. Available from: <https://www.geastudy.org/download-the-measures>
39. **Brooks-Gunn J, Ruble DN.** The menstrual attitude questionnaire. *Psychosom Med [Internet]*. 1980 [cited 2021 Dec 9];42(5):503–12. Available from: <https://pubmed.ncbi.nlm.nih.gov/7465737/>
40. **Morse JM, Kieren D, Bottorff J.** The adolescent menstrual attitude questionnaire, part I: Scale construction. *Health Care Women Int [Internet]*. 1993 [cited 2021 Dec 9];14(1):39–62. Available from: /record/1993-39765-001
41. **Marván M, Ramírez-Esparza D, Cortés-Iniestra S, Chrisler J.** Development of a new scale to measure beliefs about and attitudes toward menstruation (BATM): Data from Mexico and the United States. *Health Care Women Int*. 2006;27(5):453–73.
42. **Hennegan J, OlaOlorun FM, Oumarou S, Alzouma S, Guiella G, Omoluabi E, et al.** School and work absenteeism due to menstruation in three West African countries: findings from PMA2020 surveys. *Sex Reprod Heal matters [Internet]*. 2021 [cited 2021 Dec 9];29(1). Available from: <https://pubmed.ncbi.nlm.nih.gov/33969811/>
43. **Phillips-Howard PA, Nyothach E, ter Kuile F, Omoto J, Wang D, Zeh C, et al.** Menstrual cups and sanitary pads to reduce school attrition, and sexually transmitted and reproductive tract infections: a cluster randomised controlled feasibility study in rural Western Kenya. *BMJ Open [Internet]*. 2016;6. Available from: <https://bmjopen.bmj.com/content/6/11/e013229>
44. **Sommer M, Figueroa C, Kwauk C, Jones M, Fyles N.** Attention to menstrual hygiene management in schools: An analysis of education policy documents in low- and middle-income countries. *Int J Educ Dev [Internet]*. 2017;57(1). Available from: <https://www.learntechlib.org/p/195695/>

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE








 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

APPENDICES

- INTRODUCTION
- GUIDANCE
-  MATERIALS
-  WASH
-  KNOWLEDGE
-  DISCOMFORT/
DISORDERS
-  SUPPORTIVE
SOCIAL
ENVIRONMENT
-  MENSTRUAL
HEALTH
IMPACTS
-  POLICY
- APPENDICES

45. WHO. The GLAAS 2021/2022 country survey [Internet]. Geneva; 2021. Available from: https://cdn.who.int/media/docs/default-source/wash-documents/glaas/glaas-2021-2022/glaas_2021_2022_country_survey_en---7-sept-2021.pdf?sfvrsn=85112799_30&download=true
46. Republic of Kenya Ministry of Health. Menstrual Hygiene Management Policy: 2019-2030 [Internet]. 2020. Available from: <https://www.health.go.ke/wp-content/uploads/2020/05/MHM-Policy-11-May-2020.pdf>
47. Republic of Kenya Ministry of Health. Menstrual Hygiene Management Strategy: 2019-2024 [Internet]. Available from: <https://menstrualhygieneday.org/wp-content/uploads/2020/06/Kenya-MHM-Strategy-Final.pdf>
48. World Bank. SABER School Health Policy Instrument. 2011.
49. Sommer M, Sahin M. Overcoming the taboo: advancing the global agenda for menstrual hygiene management for schoolgirls. *Am J Public Health [Internet]*. 2013 Sep [cited 2021 Dec 10];103(9):1556–9. Available from: <https://pubmed.ncbi.nlm.nih.gov/23865645/>
50. Caruso BA, Clasen TF, Hadley C, Yount KM, Haardörfer R, Rout M, et al. Understanding and defining sanitation insecurity: women’s gendered experiences of urination, defecation and menstruation in rural Odisha, India. *BMJ Glob Heal [Internet]*. 2017 [cited 2021 Dec 10];2(4). Available from: <https://pubmed.ncbi.nlm.nih.gov/29071131/>
51. UNICEF. Guidance on Menstrual Health and Hygiene [Internet]. New York; 2019. Available from: <https://www.unicef.org/media/91341/file/UNICEF-Guidance-menstrual-health-hygiene-2019.pdf>
52. Geertz A, Iyer L, Kasen P, Mazzola F, Peterson K. An Opportunity to Address Menstrual Health and Gender Equity. Boston; 2016.
53. Hennegan J, Brooks DJ, Schwab KJ, Melendez-Torres GJ. Measurement in the study of menstrual health and hygiene: A systematic review and audit. *PLoS One [Internet]*. 2020 Jun 1 [cited 2021 Dec 8];15(6):e0232935. Available from: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0232935>
54. USAID. The DHS Program - Quality information to plan, monitor and improve population, health, and nutrition programs [Internet]. [cited 2021 Dec 10]. Available from: <https://dhsprogram.com/>
55. WHO, UNICEF. Joint Monitoring Programme for Water Supply, Sanitation and Hygiene [Internet]. [cited 2021 Dec 9]. Available from: <https://washdata.org/>
56. Caruso BA, Portela G, McManus S, Clasen T. Assessing Women’s Menstruation Concerns and Experiences in Rural India: Development and Validation of a Menstrual Insecurity Measure. *Int J Environ Res Public Heal* 2020, Vol 17, Page 3468 [Internet]. 2020 May 15 [cited 2021 Dec 10];17(10):3468. Available from: <https://www.mdpi.com/1660-4601/17/10/3468/htm>
57. Haver J, Long JL, Caruso BA, Dreibelbis R. New directions for assessing menstrual hygiene management (MHM) in schools: A bottom-up approach to measuring program success. *Stud Soc Justice*. 2018;12(2):372–81.

58. **Mendoza P, Long JL, Haver J.** Psychometric Analysis of Menstruation Related Engagement, Self-Efficacy and Stress (MENSES) Assessment Pilot.
59. **Sol L, Scholmerich V, Liket K, Alberda H.** The Ritu Study Protocol : A cluster randomized controlled trial of the impact of menstrual health programs on school attendance and wellbeing of girls in rural Bangladesh. 2019 Feb 1 [cited 2021 Dec 10];45. Available from: <https://simavi.nl/media/pages/medialibrary/15fb5bd669-1618996933/20190207-study-protocol-ritu.pdf>
60. **Roll Back Malaria, MEASURE Evaluation, World Health Organization, UNICEF.** 2004. *Guidelines for Core Population Coverage Indicators for Roll Back Malaria: To Be Obtained from Household Surveys.* MEASURE Evaluation: Calverton, Maryland.
61. **Therese Mahon & Bethany Caruso.** 2019. *Foundational Presentation from the 'Monitoring Menstrual Health and Hygiene: Measuring Progress for Girls Related to Menstruation'* meeting. March 11th 2019, Geneva.
62. **CDC- Health Indicators Warehouse Workshop.** 2012. *Tabulate, chart, map, download: Pre-tabulated health indicators.* https://www.cdc.gov/nchs/ppt/nchs2012/li-18_churchill.pdf
63. **PAHO's Special Program for Health Analysis (SHA).** 2001. *Health Indicators: Building Blocks for Health Analysis.* Epidemiological Bulletin, Vol.22 No.4. https://www1.paho.org/english/sha/be_v22n4-indicators.htm
64. **Sommer M, Zulaika G, Schmitt ML, et al.** 2020. *Improving the impact of menstrual health innovations in low- and middle-income countries: a theory of change and measurement framework.* Journal of Global Health Reports. 4:e2020007. doi:10.29392/001c.12105
65. **Yasmin von Schirnding.** 2002. *Health in Sustainable Development Planning: The Role of Indicators.* WHO/HDE/HID/02.11.
66. **Pan American Health Organization.** 2018. *Health Indicators. Conceptual and operational considerations.* Washington, D.C.:PAHO.
67. **Inter-Agency and Expert Group on SDG Indicators, United Nations Statistics Division.** Compilation of tools and resources for data disaggregation. *United Nations Statistics Division; 2021 Aug.*
68. **United Nations Children's Fund, Make it Count: Guidance on disability inclusive WASH programme data collection, monitoring and reporting.** UNICEF, New York, 2021
69. **Washington Group on Disability Statistics.** Disability Measurement and Monitoring using the Washington Group Disability Questions [Internet]. 2020 Jul [cited 2022 Mar 1]. Available from: <http://www.washingtongroup-disability.com/>.

INTRODUCTION

GUIDANCE

 MATERIALS

 WASH

 KNOWLEDGE

 DISCOMFORT/
DISORDERS

 SUPPORTIVE
SOCIAL
ENVIRONMENT

 MENSTRUAL
HEALTH
IMPACTS

 POLICY

APPENDICES