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GUIDANCE FOR MONITORING MENSTRUAL HEALTH AND HYGIENE (VERSION 1)

CONTENTS

Acknowle	edgements	1
Highlight	rs ·	9
Key defin	iitions	17
• Introdu	uction	21
1.1	What is menstrual health and hygiene?	23
1.2	Overview of this monitoring guidance	27
Princip	oles of monitoring MHH	29
2.1	Ethical considerations	31
2.2	The steps of monitoring	32
	2.2.1 Selecting and defining associated indicators	33
	2.2.2 Developing means of verification	35
	2.2.3 Pre-testing data collection tools	37
	2.2.4 Collecting data	38
	2.2.5 Analysing and using results	39
2.3	Equity and inclusion	40
	oring MHH outside the home through national nation systems	43
3.1	Overview of monitoring outside the home	45
3.2	Example questions for monitoring outside the home	46
• Monito	oring MHH in households through national surveys	51
4.1	Overview of household monitoring	53
4.2	Example questions for national household surveys	54
	4.2.1 Woman's questionnaire	54
	4.2.2 Man's questionnaire	61

•	МНН р	rogram	nme monitoring	63
	5.1	Overvi	iew of programme monitoring	65
	5.2	Examp	ole questions for programme monitoring	65
		5.2.1	Background information	66
		5.2.2	Social support	68
		5.2.3	Knowledge and skills	82
		5.2.4	Facilities and services	9
		5.2.5	Materials	102
		5.2.6	Cross-cutting outcomes	109
MHH sector knowledge gaps and areas requiring			3	
	further	researd	ch	
_				
R	eference	S		117
Α	nnex 1: A	Assessir	ng the enabling environment	123
Annex 2: Key resources		125		
Α	Annex 3: Example data tabulation			128
Α	nnex 4: E	xample	e consent and assent forms	130
Α	Annex 5: Example theories of change and models			33



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HIGHLIGHTS

There has been significant increased attention to menstrual health and hygiene (MHH) in the WASH sector over the past decade, but it has not been accompanied by robust or consistent monitoring. While there is not yet sufficient evidence to recommend a comprehensive set of validated indicators and questions to support MHH monitoring, there are simple steps that can be taken now by governments and programme managers to strengthen monitoring efforts.

The purpose of this guide is to support the development and/or improvement of MHH monitoring, by highlighting basic principles (including ethical considerations) and example questions to monitor the various elements of MHH. The questions and the wider guidance are not intended to be comprehensive or prescriptive; rather, they represent practical suggestions for monitoring MHH, based on sector experiences and the best available information at the time of publication.

PRINCIPLES OF MONITORING MHH

Planning phase

- Data should only be collected if it is clear how it will be used to benefit the target group(s);
- Indicators and questions should be based on existing evidence and formative research with the target group(s) to understand their specific challenges and terminology;
- Where possible, outcomes that can identify gender transformation, such as men's and boys' involvement, community perceptions and beliefs (including stigma and discrimination) and agency and self-efficacy of people who menstruate, should be incorporated;
- Each target indicator should be something that is able to change within five years, or the programme timeline;
- Indicators should be monitored along the entire theory of change (or results chain), including tracking the extent to which the intervention was implemented as planned;
- All concepts being measured should be clearly defined prior to data collection and draw on global definitions, where available (e.g. if a change in stigma is a target indicator, 'stigma' should be defined);
- Questions should be pre-tested to ensure they are understandable and relevant to the target group(s); and

Data collection phase

- Data collectors should be trained in ethics and how to ask sensitive questions appropriately;
- Informed written or verbal consent should be obtained from participants, or if the respondent is below 18 years old, consent should be obtained from their legal guardian, as well as assent from the participant;
- Shared data should not include any identifying information and must be stored safely;

Data analysis and use phase

- Findings should be shared with stakeholders and decision-makers regardless of the findings;
- Findings from a non-representative sample should not be generalized to a larger group/country;
- Definitions used and original questionnaires should be shared alongside the findings:
- Data should be analysed and used for feedback loops, so that it improves experiences for people who
 menstruate

EXAMPLE QUESTIONS

The following example questions illustrate the idea of monitoring the four elements (or 'pillars') of MHH identified by UNICEF (i.e. social support, knowledge and skills, facilities and services, and materials). The example questions are based on, or adapted from, existing questions that have been used in national information systems, large-scale household surveys, and MHH programme monitoring frameworks. The example questions are intended to be answered by either institutional administrators or girls and women themselves; additional example questions, sources and notes are provided alongside each question in Sections 3, 4 and 5. This section is meant only to highlight illustrative examples from each subsequent section.

> Example questions for national information systems (refer to Section 3)

This section assumes that questions will be answered by institutional administrators that are not WASH or MHH professionals.

QUESTION	RESPONSE OPTIONS
Have any staff members been trained on menstruation education?	Yes
Is water and soap available in a private space for women and girls to manage menstruation?	Yes, water and soap
Are there covered bins for disposal of menstrual materials in the toilets used by women and girls?	Yes
Are menstrual materials (e.g. pads) available on premises?	Yes, for free 1 Yes, for purchase 2 Yes, to borrow 3 No 4



> Example questions for large-scale household surveys (refer to Section 4)

This section contains questions to be answered by women or men; the below examples are intended for women and adolescent girls aged 15-49 years old.

QUESTION	RESPONSE OPTIONS	
Before you had your first menstrual period, were you aware of menstruation?	Yes	
During your last menstrual period, did you miss any of the following activities due to your period? (Y/N/NA for each) Select N/A (not applicable) if the woman would not normally do this activity, for example she does not normally attend school, work, or social activities.	Attending school Yes (1) No (2) N/A (99) Paid work Yes (1) No (2) N/A (99) Participating in social activities Yes (1) No (2) N/A (99) [Other context specific activity] Yes (1) No (2) N/A (99)	
During your last menstrual period, were you able to wash and change in privacy while at home?	Yes	
During your last menstrual period, what materials did you use most often to absorb or catch menstrual blood? Read options.	Cloth 1 Reusable sanitary pads 2 Single-use sanitary pads 3 Tampons 4 Menstrual cup 5 Toilet paper 6 Cotton wool 7 Underwear alone 8 Other 9 No materials used 99	
From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	Yes	

> Example questions for programme monitoring (refer to Section 5)

This section provides example questions that use observational data and information from people who menstruate and their influencers. Potential data sources for each question are coded in Section 5 according to the respondent; the below examples are intended for adolescent girls.

SOCIAL SUPPORT

Yes
Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 5
Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 5
Yes
Yes

KNOWLEDGE AND SKILLS

Practical skills

How confident do you feel that you have the skills to manage your menstruation, including changing and disposing or washing materials?

Very confident	1
Confident	2
Unconfident	3
Very unconfident	4
No response	99

Basic knowledge

I am going to read you some sentences between two people who are arguing and you have to tell me whose sentence is correct. One girl is named Maria and the other is named Martha. Sometimes Maria is correct and sometimes Martha is correct. You have to pay attention to tell me who is correct and who is making a mistake.

Maria: A few days of pain just before and/ or during menstruation is normal; it happens because the uterus is contracting.

Martha: A few days of mild pain just before and/or during menstruation is dangerous.

Maria: Menstruation always happens as soon as you turn 13 years old.

Martha: Menstruation commonly starts between 10 and 15 years of age, sometimes earlier or later.

Maria: Menstruation happens every month on the same date.

Martha: Menstruation happens every 21 to 35 days, dependinwg on the woman.



FACILITIES AND SERVICES

Menstruation-friendly spaces			
		Yes (1)	No (2)
During your menstrual period, while at home/	Clean?		
school, was the place you changed your menstrual materials:	Private (you did not worry you could be seen)?		
Check Yes or No for each	Safe (you did not worry you could be harmed)?		
	Able to be locked?		
	Supplied with water?		
	Supplied with soap?		
	Supplied with a mirror so you could check clothing for stains?		
	Supplied with a shelf and hook for storing belongings during use?		
	Well-lit (have sufficient lighting to comfortably see)?		
	Supplied with a covered bin for disposal of menstrual materials?		
	Well-ventilated (had windows or outlets for some flow of air)?		
Disposal			
During your last menstrual period, while at home , were you able to dispose of your used menstrual materials in the way that you wanted?	Yes No Away from home during last period Don't know or don't remember	od	2 99
During your last menstrual period, while at school (or work, etc), were you able to dispose of your used menstrual materials in the way that you wanted?	Yes No Away from school / work during la: Don't know or don't remember	st period	2 99
Reuse			
neuse			
During your last menstrual period, were you able to wash your menstrual materials whenever you needed?	Yes No No response		2

MATERIALS

Accessibility		
During your last menstrual period, could you get more of your menstrual materials when you needed to?	Yes 1 No 2 Don't know 98 No response 99	
During your last menstrual period, did you have enough materials to change them as often as you wanted?	Yes	
During your last menstrual period, did you ever worry about how you would get more menstrual materials if you ran out?	Yes	

Acceptability	
During your last menstrual period, what materials did you <u>use</u> most often to absorb or catch menstrual blood? Read options	Cloth 1 Reusable sanitary pads 2 Single-use sanitary pads 3 Tampons 4 Menstrual cup 5 Toilet paper 6 Cotton wool 7 Underwear alone 8 Other 9 No materials used 99
Of all the different menstrual material options, which one would you prefer if you could choose anything you wanted? Read options	Cloth 1 Reusable sanitary pads 2 Single-use sanitary pads 3 Tampons 4 Menstrual cup 5 Toilet paper 6 Cotton wool 7 Underwear alone 8 Other 9 No materials used 99
If the material reportedly used and preferred don't match: You mentioned that you mostly used [response from material used], during your last period, but [response from preferred material] is your preferred. What prevents you from using your preferred material?	Not available from reliable/ local vendor



KEY DEFINITIONS*

Dysmenorrhea: The medical term for menstrual cramps, which are caused by uterine contractions. Primary dysmenorrhea refers to recurrent, crampy pain occurring with menses in the absence of a disorder, while secondary dysmenorrhea refers to menstrual pain associated with an underlying pelvic pathology (disorder), such as endometriosis, pelvic inflammatory disease, or ovarian cysts¹.

Gender: The socially constructed characteristics of women and men – such as norms, roles and relationships of and between groups of women and men. It varies from society to society and can be changed. The concept of gender includes five important elements: relational, hierarchical, historical, contextual and institutional. While most people are born either male or female, they are taught appropriate norms and behaviours – including how they should interact with others of the same or opposite sex within households, communities and work places. When individuals or groups do not fit established gender norms, they often face stigma, discriminatory practices or social exclusion – all of which adversely affect health.²

Menarche: The onset of menstruation, the time when a girl has her first menstrual period.

Menstrual facilities and services: Those facilities and services most associated with safe and dignified menstruation, such as the on-going provision of water, sanitation, hygiene and disposal infrastructure in toilets, changing rooms and other designated locations.

Menstrual health and hygiene (MHH)³: Encompasses the broader systemic factors that link menstruation with health, well-being, gender equality, education, equity, empowerment, and rights. These systemic factors have been summarised by UNESCO as: accurate and timely knowledge; available, safe, and affordable materials; informed and comfortable professionals; referral and access to health services; sanitation and washing facilities; positive social norms; safe and hygienic disposal; and advocacy and policy.⁴

Menstrual hygiene management (MHM): Management of hygiene associated with the menstrual process. The WHO/UNICEF Joint Monitoring Programme (JMP) for drinking water, sanitation and hygiene has used the following definition of adequate MHM: 'Women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary for the duration of a menstrual 1. period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials. They understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear'.5

^{*} Normative definitions related to menstrual health and hygiene are relatively new and still evolving. The definitions outlined here represent sector discussions to date, but work is ongoing to develop improved definitions, including work by the global 'Menstrual Health Collective'. The definitions outlined here should be used with these limitations in mind, including that grouping women and girls (and men and boys) together does not adequately consider differences between age groups and the way in which gender inequalities change over the lifecycle.

^{1.} De Sanctis, V. et al., 'Dysmenorrhea in Adolescents and Young Adults: A Review in Different Countries', *Acta Biomed.*, vol. 87, no. 3, pp. 233–246, 2016.

 $^{2.} World Health Organization, \textit{Gender Mainstreaming for Health Managers: A Practical Approach, 2011. Available at: apps.who.int/iris/bitstream/handle/10665/44516/9789241501064_eng.pdf; jsessionid=8DA03D75F83DFD77CCC01F8BC89472E1?sequence=2.}$

^{3.} A definition of menstrual health is being developed through a multi-stage process, led by the Terminology Action Group of the Global Menstrual Collective. The Global Menstrual Collective was established in 2019 to bring together multi-sectoral stakeholders and coalitions working on menstrual health and hygiene with the purpose of driving improved investment through collective, evidence-based advocacy. Available at: https://www.wsscc.org/partners/knowledge-and-technical-partners/global-menstrual-collective

^{4.} UNICEF, Guidance on Menstrual Health and Hygiene, 2019. Available at: https://www.unicef.org/wash/files/UNICEF-Guidance-menstrual-health-hygiene-2019.pdf

Menstrual materials: The materials used to capture and contain menstrual blood, such as sanitary pads, cloths, tampons or cups. These can include disposable and reusable materials, and purchased products as well as non-purchased materials⁶.

Menstrual supplies: Other supportive items needed for MHH, such as body and laundry soap, underwear and pain relief items.

Menstruation or menses: The natural bodily process of releasing blood and associated matter from the uterus through the vagina as part of the menstrual cycle.

Monitoring: A continuous process of collecting and analysing data for performance indicators to compare how well a development intervention, partnership or policy reform is being implemented against expected results (achievement of outputs and progress toward outcomes).⁷

People who menstruate: Those who menstruate and therefore have menstrual health and hygiene needs – including girls, women, transgender and non-binary persons. Where the term 'girls and women' is used in this document, it is not intended to be restrictive and refers to all people who menstruate regardless of gender identity.

Self-efficacy: An individual's belief in their own ability to execute behaviours necessary to produce a certain outcome that affects their lives. It is not the same as self-esteem or generalised confidence (although these can influence self-efficacy). Someone with high self-esteem feels they have worth, while someone with high self-efficacy feels they are able to do something in a particular domain of functioning⁸. An example related to MHH that demonstrates this distinction is someone can feel they have value and worth as a person (high self-esteem), yet feel that they are unable to use a particular menstrual material effectively (low self-efficacy for that behaviour). Self-efficacy, in this context, refers to their belief in their ability to do something necessary for managing their menstruation.

Sex: Sex refers to the biological characteristics that define humans as female or male. While these sets of biological characteristics are not mutually exclusive, as there are individuals who possess both, they tend to differentiate humans as males and females. In general use in many languages, the term sex is often used to mean 'sexual activity', but for technical purposes in the context of menstruation and sexual health discussions, the above definition is preferred.⁹

Social norms: The informal rules that govern behaviour in groups or societies. They refer to individuals' belief that a sufficiently large subset of the group or society conforms to a certain norm in a given situation and a sufficiently large subset of the group or society either expects them to conform to that norm or prefers them to conform, and that deviance from that norm could be punished¹⁰. This includes social norms relating to men and women, boys and girls, and all people who menstruate.

^{5.} WHO and UNICEF, 'Consultation on Draft Long List of Goal, Target and Indicator Options for Future Global Monitoring of Water, Sanitation and Hygiene', 2012. Available at: www.washdata.org/sites/default/files/documents/reports/2017-06/JMP-2012-post2015-consultation.pdf

^{6.} https://www.wsscc.org/partners/knowledge-and-technical-partners/global-menstrual-collective

^{7.} UNICEF, Results-based Management Handbook: Working Together for Children, 2017. Available at: www.pndajk.gov.pk/upload-files/downloads/RBM_Handbook_Working_Together_for_Children_July_2017.pdf

^{8.} Bandura, A., 'Self-efficacy', in Encyclopedia of human behavior, V. S. Ramachaudran, Ed., New York, Academic Press, pp. 71–81, 1994.

^{9.} WHO working definition. See: www.who.int/reproductivehealth/topics/gender_rights/defining_sexual_health/en

^{10.} Bicchieri, C., R. Muldoon, and A. Sontuoso, 'Social Norms', in *Stanford Encyclopedia of Philosophy*, Winter 201., E. N. Zalta, Ed., 2018; and Bicchieri, C., *The Grammar of Society: The Nature and Dynamics of Social Norms*, Cambridge, Cambridge University Press, 2006.

Stigma: The discrimination or disapproval of a person based on something that distinguishes them from other members of society.

Taboos: Customs (religious or non-religious) that limit actions or even the discussion of a particular topic.





INTRODUCTION

There is increasing recognition that menstrual health and hygiene (MHH) is a multi-sectoral issue that requires integrated action from the water, sanitation and hygiene (WASH), education, and health sectors, as well as specific expertise in adolescent development, child protection and justice, disability, employment and gender. As the body of research on the importance of MHH expands, there is growing interest to address the MHH-related needs of women, girls and all other people who menstruate.

However, this increased attention to MHH has not been accompanied by robust or consistent monitoring. MHH monitoring has been limited, in part, by a lack of validated measures and standardised monitoring guidance [1]-[5]. Efforts are underway to review existing tools and develop and validate new measures, including work done by the MHH Global Advisory Group¹¹ and monitoring and measurement experts. However, this process will take time [1], [2], [6], [7].

In the meantime, many national governments are interested to understand and track the MHH situation in institutions and households in their countries, and many MHH programmes are already being developed and implemented, and require programme monitoring. Despite the absence of validated MHH measures, programme managers and partners can take simple steps to strengthen MHH monitoring of existing or planned programmes.

The purpose of this guide is to support the development and/or improvement of MHH monitoring, by providing overall guidance, accompanied by example questions for monitoring various elements of MHH. The questions and information included are not intended to be comprehensive or prescriptive; rather, they provide practical guidance based on sector experiences and the best available information at the time of publication.

Because there is not yet sufficient evidence to recommend comprehensive validated indicators and questions, examples have been provided based on a review of existing monitoring frameworks in MHH and related sectors, complemented by consultations with MHH experts from a variety of organisations and backgrounds. A list of key informants is provided in the Acknowledgements section, and Section 6 provides additional details on the resources used. This guidance is intended to serve as a starting point; a foundation to build upon and improve MHH monitoring as validated tools emerge from practice, research and global efforts [1], [2].

^{11.} The Global Advisory Group on MHH is convened by Columbia University and includes key stakeholders in the MHH sector, including specialists from the WASH, education, health, adolescence and gender sectors. The group's overarching aspirational goal is that 'Girls live in societies that enable them to be confident and knowledgeable about their menstruation, and able to manage it with dignity, safety, and comfort, thereby promoting their health, wellbeing, and ability to realise their potential and equitable role in society.' The group's March 2019 meeting resulted in an initial review of MHH monitoring needs [1].

Guidance and examples are provided in subsequent sections, including:

- Section 2. Principles of MHH monitoring: Basic guidance on monitoring MHH, including question selection and instrument design, data collection, analysis and use, and ethical considerations;
- Section 3. Monitoring MHH outside the home through national information systems: Examples of questions that could be incorporated into national sectoral information management systems, such as education management information systems (EMIS) and health management information systems (HMIS) which typically include a questionnaire completed by the institution and submitted to central government on a quarterly, biannual, or annual basis;
- Section 4. Monitoring MHH in households through national surveys: Examples of questions that could be incorporated into national household surveys where MHH is one of many topics and individuals are interviewed in the privacy of their own home; and
- Section 5. MHH programme monitoring: Examples of questions that could be included in more comprehensive monitoring at sub-national or programme levels, or periodic national thematic surveys.



I.I WHAT IS MENSTRUAL HEALTH AND HYGIENE?

Menstrual health and hygiene (MHH) is a broad term that includes the various factors that influence the experience of those who menstruate, as defined in Box 1.

Box 1. Definitions of MHM and MHH¹²

Menstrual hygiene management (MHM): 'Women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary for the duration of a menstrual period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials. They understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear' [8].

Menstrual health and hygiene (MHH): 'Encompasses both MHM and the broader systemic factors that link menstruation with health, well-being, gender equality, education, equity, empowerment, and rights. These systemic factors have been summarised by UNESCO as: accurate and timely knowledge; available, safe, and affordable materials; informed and comfortable professionals; referral and access to health services; sanitation and washing facilities; positive social norms, safe and hygienic disposal; and advocacy and policy' [3], [9].

MHH is central to achieving multiple Sustainable Development Goals (SDGs) and fulfilling basic human rights. It is critical to achieving SDG 6.2, which aims for 'universal access to adequate and equitable sanitation and hygiene for all...paying special attention to the needs of women and girls...'. MHH is also linked to health outcomes (SDG 3), including sexual and reproductive health and the impact of stigma, shame and stress around menstruation on mental health. People who menstruate any miss school or work, or struggle to participate and benefit fully in educational activities (SDG 4) or economic opportunities (SDG 8) due to menstruation, and achievement of gender equality (SDG 5) is both affected by and dependent on removing stigma, discrimination and taboos associated with menstruation that often restrict participation of people who menstruate [3].

MHH is intrinsically connected to human rights; upholding human rights such as the Convention of the Rights of the Child (CRC) and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) both support and depend on the ability of people who menstruate to make informed decisions and access the facilities, services and materials they need for MHH [3], [10]. MHH is a precursor and an outcome of the fulfilment of many human rights, such as those related to health, education, work, adequate housing and safe water and sanitation [11]-[13]. These rights extend to all persons who menstruate, irrespective of age, religion, socio-economic background or contexts.

^{12.} A definition of 'menstrual health' is forthcoming from the global MHH Collective Terminology Group.

^{13.} When the term 'women and girls' is used in this document, it is shorthand for all people who menstruate regardless of gender identity and is not intended to be restrictive, though in some places gender terms are limited by the structure of existing survey instruments.

Box 2. MHH in UNICEF's Gender Action Plan (2018-2021)

Because of its transformational potential, MHH is one of UNICEF's five inter-linked priorities for empowering adolescent girls in its Gender Action Plan 2018-2021, which accompanies its broader Strategic Plan for the same period and is approved by the organisation's Executive Board. The Gender Action Plan is UNICEF's commitment to achieving gender equality and girls' empowerment. The five priorities of the Gender Action Plan, implemented together and at scale, can dismantle some of the most stubborn barriers to gender equality and transform the lives of adolescent girls – supporting them to become healthy, educated and empowered women, able to direct the course of their own lives. The priorities of the plan are monitored and reported on annually.

THE KEY ELEMENTS OF MHH

The key elements of MHH programming can be categorised into four inter-related 'pillars' of MHH, based on a UNICEF synthesis of available guidelines and research. The pillars are: social support; knowledge and skills; facilities and services; and materials [3], [14]. The indicators and tools in this guidance document provide examples of monitoring for these four pillars. A suggested checklist to assess the MHH enabling environment, which affects all four of these pillars, is also provided in Annex 1.









KNOWLEDGE AND SKILLS



FACILITIES AND SERVICES



MATERIALS

[ENABLING ENVIRONMENT]

SOCIAL SUPPORT

The **social support** pillar includes access to supportive resources such as emotional, informational and tangible support. This can include: promotion of equitable gender norms that allow freedom of movement for people who menstruate¹⁴ and the ability to make and act on decisions including control of resources (an element of empowerment); agency to seek support when needed; reduced stigma and taboos; access to emotional and practical support from trusted others; and reduced fear, stress and worry related to menstruation, including menstrual-related bullying. These elements are important before and after menarche and throughout the reproductive life course [15].

KNOWLFDGF AND SKILLS

The **knowledge and skills** pillar includes that people understand the basic facts related to menstruation and sexual and reproductive health, as well as whether people who menstruate have the practical knowledge and skills to take care of their bodies during menstruation. ¹⁵ Accurate and comprehensive information should be accessible before and after menarche and throughout the reproductive life course, including from knowledgeable and gender-sensitive professionals, such as those providing puberty or life skills education in schools or support and services in communities and health care facilities.

^{14.} The JMP defines menstrual exclusion as activities that women and girls do not participate in due to their menstrual period [25]. Note that a lack of participation could be due to societal restrictions placed on people who menstruate, but could also be due to inadequate facilities or in response to pain; causal pathways should be assessed to understand why people who menstruate do not participate in activities.

^{15.} The Global MHH Collective Terminology Group's proposed definition of menstrual health is forthcoming; preliminary discussions have suggested that the term 'hygiene' may reinforce stigma and that more health-focused terms should be used, such as 'take care of their bodies during menstruation' as opposed to 'hygienically manage'.

FACILITIES AND SERVICES

The **facilities and services** pillar includes facilities and services that allow for changing, washing, and/ or disposing of materials and clothing, and for handwashing and bathing when needed. These should be private, clean, have water and soap available, and be acceptable to users during menstruation. Facilities or mechanisms for drying and/or disposing of used materials should be discrete, hygienic, safe and environmentally friendly.

MATERIALS

The **materials**¹⁶ pillar includes materials for absorbing or catching menstrual blood (such as sanitary pads, cloths, tampons or menstrual cups) and supportive supplies (such as underwear or laundry soap) that are hygienic/safe, acceptable (and appropriate), and accessible (physically and economically) to people who menstruate, including supplies for pain management.

Long-term outcomes and impacts of MHH programmes may include increased learning achievement, improved informed decision-making around contraceptive practices, gender equality, and improved mental health and wellbeing. Short-term cross-cutting outputs and outcomes, which may be more effective for programme monitoring, may include: access to materials, facilities and services; menstrual self-efficacy and perceptions that practices and environments meet the needs of people who menstruate; reduced shame and distress associated with menstruation; improved freedom of movement during menstrual periods; and reduced perceived and experienced stigma [7], [16].



^{16.} The JMP defines menstrual hygiene materials as hygienic materials used to absorb, collect and dispose of menstrual blood which may be disposable or reusable. They include sanitary cloths or pads, tampons, and menstrual cups as hygienic materials [25].

1.2 OVERVIEW OF THIS MONITORING GUIDANCE

WHY MONITOR MHH?

Information on how the lives of people who menstruate are impacted by MHH is needed for governments and support agencies to understand the problem and develop solutions, engage in evidence-based advocacy, track progress to improving MHH over time, target resources and learn from successes and failures. Monitoring shines a spotlight on MHH and is critical to tracking related SDG targets and the progressive realisation of associated human rights.

Monitoring the progress and effectiveness of programmes is a critical part of accountability, particularly to the adolescent girls and women who are the primary target group of MHH programmes, and to ensure that resources are being put to their best use.

This guidance sets out recommended best practices, and example indicators and questions for monitoring MHH in a range of settings.

WHO IS THIS GUIDANCE FOR?

This guidance is primarily intended for those monitoring MHH at the national, sub-national and programme levels, including governments, external support agencies, and civil society organisations, in their work on MHH-specific and MHH-related programmes (such as WASH, education, health, nutrition, child protection, gender, adolescent development, employment and disability programming).

HOW CAN THIS GUIDANCE BE USED?

This guidance can be used to inform the development of indicators and the design of data collection tools, including routine administrative reporting formats and occasional surveys to monitor MHH at institutions (e.g. schools, health care facilities, workplaces) or households.

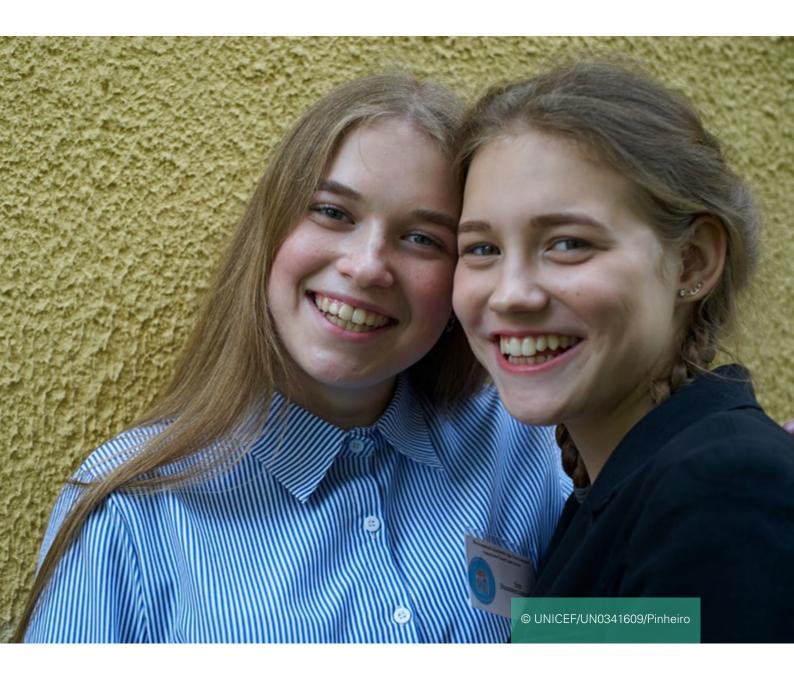
Findings from questions in Section 3 (Monitoring MHH outside the home through national information systems) and Section 4 (Monitoring MHH in households through national surveys) can be used to establish national baselines for MHH and support advocacy efforts to improve experiences of people who menstruate, and to guide decisions on policy and resource allocation. Progressive harmonisation of national MHH indicators and data collection methods can also enable benchmarking and comparison of progress across countries and inform efforts and funding allocations at regional and global levels. Data gathered from more comprehensive questions, such as those in Section 5 (MHH programme monitoring) can be used to evaluate programme or project quality to inform adjustments and guide detailed planning and policy development.

THE QUESTIONS IN EACH SECTION ARE GENERIC EXAMPLES AND SHOULD BE ADAPTED TO THE CONTEXT AND PROGRAMME AIMS.

Because the majority of MHH interventions are currently delivered within the WASH and education sectors, most existing tools and experiences are based on these settings, and this guide focuses primarily on those sectors. The questions could be modified and/or complemented by others in consultation with partnering experts from a particular programme, including sexual and reproductive health, adolescent participation, child protection, gender (including gender-based violence and harmful practices) and others.

Questions should be selected based on a particular programme or context. There is a range of different opportunities to collect data on MHH, including multi-topic data collection tools with limited scope to add more than a few questions on MHH (see Section 3 and Section 4) and targeted data collection tools that are programme-, health-, or hygiene-specific and able to cover a larger number of MHH-related questions (see Section 5). Selecting a limited number of questions that capture the key aspects of MHH in a given context or programme is recommended to simplify monitoring, particularly where it is not possible (or effective) to administer a long questionnaire or interview, and to limit survey fatigue and demands on the time of respondents. Guidance on question selection and ethical considerations are included in Section 2.

While there are many approaches to monitoring, there are some basic principles that apply to most MHH monitoring efforts. These are outlined in this section, with a primary focus on maintaining ethical practices. These are highlighted at the beginning and followed by detailed guidance for each stage of monitoring. Supporting resources that provide additional information and detail are outlined in Annex 2.



2.

PRINCIPLES OF MONITORING MHH



PRINCIPLES OF MONITORING MHH

2.1 ETHICAL CONSIDERATIONS

Ethical procedures must be followed in MHH monitoring, including specific considerations for child and adolescent participants and particularly children from disadvantaged, vulnerable, or marginalised groups [17]-[20]. This should include whether the data collection actually needs to be done, if children and adolescents need to be involved and in what capacity, and should always follow the principle of 'do no harm' [21].

MHH monitoring often deals with sensitive and personal information, and therefore privacy is important [20]. Gathering data from children can be particularly sensitive and should follow global guidelines for Ethical Research Involving Children (ERIC) [22] and the implementing organisation's relevant policies, such as UNICEF's 'Procedure for Ethical Standards in Research, Evaluation, Data Collection and Analysis' [18]. Ethical considerations related to MHH monitoring should include the following, at a minimum:

ETHICAL CONSIDERATIONS FOR PLANNING PHASE

- Questions should be included in monitoring instruments only if it is clear how the information will benefit the target group(s). Each question should have a clear purpose and plan for how data will be used (a sample data tabulation is provided in Annex 3).
- Data collectors should be trained in ethics, and how to behave appropriately and ask sensitive
 questions in the particular context and with the target group(s).
- Safeguarding procedures should be in place, including clear steps that will be followed if there is evidence that a participant is in danger (for example, if abuse is reported) [17], [19].

ETHICAL CONSIDERATIONS FOR DATA COLLECTION

- In keeping with the principle of 'do no harm', data collection must not put participants at risk of violence or abuse. For example, consultations with migrants, sex workers or transgender people who menstruate should be conducted in a way that does not put them at risk of harm or expose them to additional stigma, and does not publicly identify them if it is not safe to do so.
- Participants should have a clear understanding of the purpose of the data collection, their involvement, and their ability to withdraw with no consequences at any point.
- Informed written or verbal consent must be obtained from all participants able to give consent¹⁷;
 - For children and adults not capable of giving consent, assent of the participant and consent of a parent/guardian must be obtained;
 - Depending on the context, school principals may be able to give consent in lieu of parental/ guardian consent where monitoring activities take place at school under in loco parentis;¹⁸
 - Informed consent/assent should include how data will be collected and used, risks, benefits, confidentiality (including how data will be stored and shared), compensation, contacts, and voluntary participation (sample consent and assent forms are provided in Annex 4).

^{17.} Note that this is not required for management information system questionnaires such as EMIS, which ask head teachers about facilities and educational material.

^{18.} The legal responsibility of a person or organisation to take on some of the functions and responsibilities of a parent.

- Approval may also be needed from community leaders or representatives. Local knowledge should be sought, and organisational policies should be consulted to understand best practices in a particular context [18], [21].
- If monitoring activities result in photographs of children, organisational policies regarding photographs with children should be consulted. At a minimum, informed assent (and consent of an appropriate adult) should be gained and the participants should clearly understand why they are being asked to be in a picture, what will happen to them and what will happen to the pictures [22].

ETHICAL CONSIDERATIONS FOR DATA ANALYSIS AND USE

- Data should be analysed and made publicly available, as well as shared with the stakeholders so they can make direct use of it themselves wherever possible.
- Findings should be shared with stakeholders and decision-makers regardless of the results.
- Shared data should not include any information that could be used to identify a respondent.¹⁹ For example:
 - "I always eat my lunch with my friend Gloria at the park by Marie Goretti school at 1pm" should be changed to "I always eat my lunch with my friend [name removed] near our school [location and time removed]," or
 - If there is only one person with a disability in the dataset, data on disabilities would not be anonymous.
- All questionnaires and data collection methods should be made publicly available to support accurate interpretation of results.

2.2 THE STEPS OF MONITORING

Monitoring is a continuous process of tracking performance against planned activities, outputs and outcomes, which supports accountability tracking and learning, and informs timely decision-making [23]. What is monitored often guides where attention and resources are focused. Monitoring is how programme success is determined and informs adjustments that may be needed. This section sets out some basic guidance from existing literature for simple monitoring frameworks.

In general, monitoring consists of the steps set out below. These assume that for programme monitoring, formative research and development of a theory of change (ToC) have already been conducted which will support the selection of appropriate indicators and terminology (see Annex 2 for references on formative research for MHH and Annex 6 for example ToCs for MHH). The steps are:

- 1. Selecting and defining associated indicators;
- 2. Developing means of verification;
- 3. Pre-testing data collection tools;
- 4. Collecting data; and
- 5. Analysing and using results.

General guidance on each of these steps are outlined below, followed by considerations for inclusivity.

^{19.} Data could be coded (replacing personal identifiers with a number or other ID), de-identified (personal identifiers are permanently removed), or anonymous (no personal identifiers collected).

^{20.} Example adapted from the WinS4Girls e-course module 3 on research ethics. More information can be found on the website: www.washinschoolsmapping.com/the-wins4girls-e-course

2.2.1 SELECTING AND DEFINING ASSOCIATED INDICATORS

The selection of national MHH monitoring indicators should consider indicators recommended by global monitoring bodies such as the JMP [24]-[26] and those used by international survey programmes such as UNICEF's MICS [27] and USAID's DHS [28], which are included in the examples within this document. As appropriate, additional indicators may be included based on local context and national priorities.

The selection of MHH programme monitoring indicators should consider the activities, outputs and outcomes in the associated theory of change (ToC). Example ToCs for MHH programmes are provided in Annex 5, including an example from the MHH Global Advisory Group (Figure 1) [1]. Where possible, outcomes that can identify gender transformation, such as community perceptions and beliefs (including stigma and discrimination) and agency and self-efficacy of people who menstruate, should be incorporated [29]-[32]. All concepts being measured should be clearly defined prior to data collection and draw on global definitions where available [2]. For example, if a change in stigma related to menstruation is a target indicator then 'stigma' should be defined for the purposes of assessment and included in results reporting.

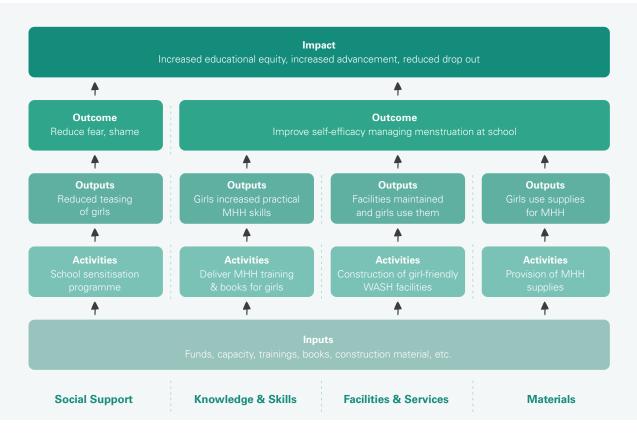


Figure 1. Example of MHH in relation to educational impact (adapted from ToC prepared by B. Caruso) [1]

Most programmes will monitor activities, outputs, and short-term outcomes that are likely to be associated with impacts.²¹ Assessing long-term outcomes and impacts requires greater financial and technical resources and a greater length of time for in-depth and longitudinal studies. Some MHH programmes may want to complement monitoring with more in-depth evaluation and research to help fill MHH

^{21.} Research is ongoing to better understand which outcomes are indicative of which impacts.

evidence gaps [4], [14]. Additional guidance on MHH programme evaluation is provided in Save the Children's MHM Operational Guidelines [33]. Where in-depth research or more complex designs are desired, evaluation experts²² such as academic and non-academic research institutions should be identified and partnered with from the beginning, including the process of designing research protocols and tools and securing adequate funding. In general, indicators should be specific, measurable, achievable, relevant, and consider what is possible to change in a five year horizon or the duration of a programme [34], [35]. Indicators should also be commensurate with the resources available to collect, analyse and share results, as well as the expertise of those guiding monitoring efforts (e.g. non-medical professionals should not be collecting biological data, and frameworks that require complex analyses should be conducted in partnership with research experts).

Most importantly, stakeholders should be involved in the process, to ensure the indicators are meaningful and to encourage buy-in. This should include mechanisms to share the data with stakeholders and decision-makers so they can own/use them. Section 5 includes examples of indicators that could be useful in the development of appropriate indicators for a particular programme or context.

Box 3 provides a checklist for indicator development and additional resources.

Box 3. Indicator development checklist ☐ Were programme stakeholders involved in indicator development? Was the theory of change (or results chain or logical framework) used to guide the indicator Have the concepts for which indicators are being developed been clearly defined? Are the indicators specific, measurable, time-bound and relevant? Example: '% of girls who have experienced menstruation-related bullying at school in the Specific: 'menstruation-related bullying at school' Measurable: '% of girls' Time-bound: 'past three months' Relevant: menstruation-related bullying at school was reported as a challenge by girls during formative research Are the indicators measuring something that is able to change in a reasonable timeline (e.g. programme baseline to endline, or within five years for national monitoring)? ☐ Do the indicators provide useful information? ☐ Do the indicators include all the essential information without unnecessary complexity? Additional information and guidance on developing indicators can be found in the following resources: including specific guidance for MHH [33], gender-equality and empowerment [34], and ending

Indicators should be monitored along the theory of change (or results chain, or logical framework), including tracking the extent to which the intervention was implemented as planned and if the outcomes were achieved. This should include fidelity (whether the intervention was delivered as intended), dose (the quantity of intervention implemented), reach (whether the intended audience comes into contact with the intervention, and how), and adaptation (the extent to which the intervention was tailored to fit

^{22.} The Acknowledgements section provides a list of key informants for this document, including MHH research experts from academia.

different contexts) [37]. As a simplified example, if a programme that provided female-friendly toilets and MHH education for girls and boys at school was intended to decrease absenteeism, monitoring should include not only school attendance, but if the programme elements were implemented successfully (e.g. were the toilets functional and available for use by all intervention target groups? How many education sessions were conducted, who was included, and to what extent was the relevant knowledge covered?), as well as if other interventions may have taken place in parallel that could have impacted outcomes.

2.2.2 DEVELOPING MEANS OF VERIFICATION

Each indicator will need a means of verification (MoV) that describes how and from whom to obtain the data needed to measure the indicator. Some commonly used MoV for monitoring MHH programmes and when they might be used are included in Table 1. Where resources allow, data should be triangulated from different respondents and sources.

Table 1. Example means of verification for monitoring indicators and when they are typically used

MEANS OF VERIFICATION	USED FOR
Direct observation by survey enumerators	Questions that are not opinion-based (e.g. do the school toilets have a bin with a lid?) or to validate interview responses
Interviews with students, teachers, administrators or government officials	Opinion-based questions (e.g. do you worry that blood may leak through to your clothing?) and when resources are sufficient for interviewer training and one-on-one data collection
Self-administered paper and pencil question- naires or text-message based surveys	Opinion-based questions that might be more comfortable for the respondent to answer anonymously (e.g. have you ever teased anyone because they were on their menstrual period?) and when resources are insufficient for one-on-one data collection
Administrative surveys through national information systems (e.g. EMIS, HMIS)	Direct questions about resources and practices that can be answered or observed by the administration of an institution (e.g. head teacher) with limited bias (e.g. is menstrual hygiene management included in the school curriculum for boys?). Typically, they are administered annually and only a few questions on a particular topic can be included

Observation: The presence and quality of facilities such as toilets and menstrual waste disposal systems, and even MHH or SRH curriculum can often be directly observed by survey enumerators. These 'observable' elements are also often assessed in national surveys conducted by trained enumerators.

Interviews and questionnaires: Adequacy of facilities and services is dependent on the perspectives of people who menstruate and is best monitored through interviews, self-administered questionnaires or text-message based surveys, including assessment of stress and insecurity related to sanitation as well as their confidence to use facilities [1]²³. Behaviours (such as the location people who menstruate typically choose to change their menstrual materials), the type of products they use, and their disposal methods are also typically captured in interviews or surveys with people who menstruate. Interviews and questionnaires also provide an opportunity to ask a small number of open-ended questions to be able to capture unexpected results or unintended consequences.

While individual questions, such as asking if boys and girls believe menstruation is a secret, can provide insight into stigma, they should not, on their own, be used as an indicator of 'stigma' more generally. For these less tangible cross-cutting indicators of attitudes and beliefs, 'measures' or 'scales' consisting of multiple questions can be helpful [6], [16]. Examples of emerging MHH measures are briefly discussed in sub-section 5.2.6.

National information system questionnaires are usually completed by the administrator of an institution. They typically have a broad scope and space for only a small number of questions on MHH. In these cases, cross-cutting questions with limited potential for bias that are based on existing evidence may be useful, such as if teachers are trained to provide menstrual or puberty education [15].²⁴

Box 4. Recall and stigma: Asking MHH monitoring questions

Recall bias is a challenge in MHH monitoring: some women may not have had their menstrual period for months or years for various reasons, such as pregnancy or menopause, early menstruators may have multiple months between menstrual periods, and surveys conducted at the beginning of the school year with questions about menstrual experiences in school may include respondents who have not had their menstrual period while in school since the previous school year (or ever). Recall bias may be reduced by restricting survey participation to people that have had a menstrual period in the past six months,²⁵ though more research is needed in this area to understand the implications of a longer or shorter recall period [38], [2].

While information on menstrual practices can be collected directly from people who menstruate, understanding progress toward reducing stigma and taboos may require data to be collected from the people in their lives who may perpetuate or challenge stigma and taboos, including men and boys [33], [39]. Both groups (people who menstruate and those that do not) should have privacy to answer questions honestly and candidly, and questions need to be structured carefully and pre-tested, so as not to increase stigma or propagate taboos. Awareness of and the use of both positively and negatively framed questions may also help avoid negatively biasing perceptions of menstruation and gender roles (e.g. asking both 'do you think menstruation is a sign that a woman is healthy?' versus 'do you think menstruation is a sign that a woman is possessed by evil spirits?') [2]. Caution is also needed to ensure that the original meaning of questions is retained when translated, particularly for sensitive topics [40].

^{23.} While administrative systems do not question people who menstruate directly, commonly perceived facility needs can be integrated into institutional level questions based on formative research.

^{24.} Programme monitoring questions that are linked to multiple chains in the theory of change may be challenging because it may be unclear what elements are effective and which may require modification to achieve the desired outcomes. For programme monitoring, collecting data along each level of a results chain or theory of change is critical to track intervention fidelity (i.e. if the programme was implemented as anticipated).

^{25.} Based on key informant feedback in the development of this document.

2.2.3 PRE—TESTING DATA COLLECTION TOOLS

Pre-testing (or piloting) monitoring tools is critical to ensure that respondents, and enumerators where applicable, understand the questions and approaches as intended and that resulting data are useful [2]. Pre-testing should be conducted with respondents similar to those in the target group, and the language and question formulation should be adapted as needed [41].²⁶ Cognitive interviewing is a useful method for identifying sources of response error that are often overlooked in conventional pretesting efforts [42], [43].

Where surveys are administered by enumerators, training is an essential step to increase consistency between enumerators' and respondents' understanding of the questions. Pre-testing and adjusting questionnaires or activities should be conducted prior to training. Additional adjustments may also be needed based on pilot testing during training and feedback from enumerators prior to formal data collection. Guidance on training of enumerators for collecting data on MHH is available in the WinS4Girls e-course (module 9) [44].

Pre-testing (and/or formative research) should help to identify the most appropriate sex, age, language skills and socio-economic background of enumerators based on the context. For interviews with people who menstruate, female interviewers are often more appropriate; in some contexts, older enumerators may be more appropriate, while in others younger enumerators may be best. For interviews with men and boys, it may be better to have male enumerators. The target group(s) for interviews should be consulted to understand their preferences and comfort levels to help identify the most appropriate enumerators.



^{26.} As an example, a pre-test report template is included as part of UNICEF MICS6. Available at: https://mics.unicef.org/tools

2.2.4 COLLECTING DATA

For surveys, appropriate sample sizes should be used to ensure target groups are adequately represented. Resources for designing and selecting the sample are available from the UNICEF MICS programme, including a sample size calculator [45] and a sample design guide [46].

Appropriate guides should be provided with surveys or questionnaires to ensure understanding and improve accuracy of collected data. These may include photo guides for observation questions and/ or preparatory activities for paper and pencil questionnaires (Box 5). For example, where appropriate, data should be collected through participatory processes [17], [19]. This could include observational checklists conducted by school girls themselves.

Box 5. Example preparatory activity to improve data from paper-and-pencil questionnaires

A study of girls' self-efficacy to address their menstrual needs collected data from girls using questionnaires which asked respondents to provide answers on an 11-point response scale between 0 and 100 per cent (increments of 10). In order to ensure respondents understood the response scale in the questionnaire, enumerators provided detailed instructions and conducted an example activity by placing a pen on the desk near a girl and asking how confident she is that she can grab the pen from her seat, then moving the pen farther away and repeating the question a few times until it was undoubtedly completely out of reach [6], [47], [48]. This allowed the enumerator to assess respondents' understanding of the response scale, including that the responses were moving in the correct direction (i.e. the closer the pen, the higher the number) and that 50 per cent represented a medium response (i.e. 'I am 50 per cent sure I can reach the pen from my seat'). The study found this preparatory step to be critical to the resulting data quality.



2.2.5 ANALYSING AND USING RESULTS

Many programmes collect a large amount of data on MHH, but data analysis and using the data to make changes in programmes are often lacking. Any monitoring framework should consider how question responses will be analysed from the beginning, including how data will be used and by whom. Data analysis tables should be developed before data collection and should include disaggregation by institution type, sex, grade, disability and age, as appropriate [36]. The questions and response categories should also consider the data analysis process and how results can be best presented to inform programming and/or policy. For example, multiple-response questions (such as questions that ask to 'tick all that apply') are more challenging to analyse, and a clear plan is needed for how the responses will be collapsed and used (see Annex 3 for example data tabulation for multiple-response and scale questions).

Respondents' time should be respected by ensuring that data are analysed, clearly interpreted and communicated to multiple audiences including government, programme staff, and the wider MHH research and programme community. Information from people who menstruate regarding how their environment and their menstruation influences their lives is not useful stored on a computer: results need to be analysed and used for feedback loops so that data improve programming (Figure 2). Data must be shared, regardless of the results; it is unethical not to report findings just because they are not as positive as hoped, or do not paint the picture that was expected. Failure to report what does not work or an accurate picture of the current situation can lead to repeated mistakes and ineffective use of limited resources.

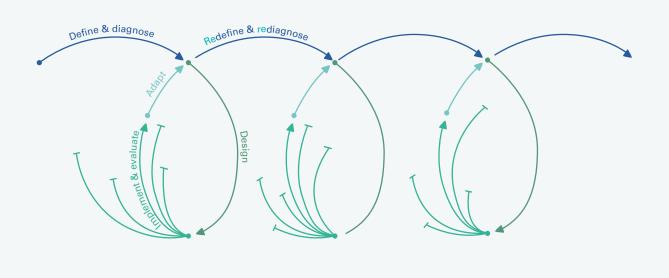


Figure 2. Illustration of the iterative monitoring process where results are used to improve subsequent programming [49]

It is important to use the data and report findings accurately. Findings from a small sub-set or non-representative sample should not be generalised to a larger sample (e.g. findings from a study of school girls in a specific geographic region should not be assumed to provide information about school girls throughout a country) [18]. Clear definitions of the concepts being measured, as well as the question-naires used, should be made publicly available alongside monitoring results to support appropriate interpretation of findings and potential comparison to other contexts [2]. Data quality and challenges during data collection (i.e. where plans needed to be changed) should also be transparent when sharing results.

2.3 EQUITY AND INCLUSION

The needs of all people who menstruate should be considered and monitored in MHH programmes, including all age groups, those with disabilities or HIV, transgender men, indigenous persons, out-of-school children, migrants, people experiencing homelessness, displaced people and refugees, and those from remote locations and the poorest wealth quintiles. People who menstruate and have HIV, a disability, a different gender identity, or other minority identity often face 'double-stigma' and are discriminated against on many levels [50].

Reporting data disaggregated for groups that may be stigmatised should be done responsibly to ensure that data do not reveal identifying information about a respondent. For example, if there is only one person with a disability and data are reported by disability, that person would not be anonymous and such data should not be reported at this level of disaggregation. Specific considerations for disabilities, gender and participation in MHH monitoring are briefly discussed in the following sections, but more research is needed to better understand how inclusivity can be better monitored.

DISABILITIES

Disabilities include physical, visual, auditory, and intellectual impairments, which can create additional MHH challenges, such as a need to sit to change menstrual materials, limited access to WASH facilities, and/or difficulty seeing leaks or communicating pain or discomfort [51], [52]. Programmes that aim to include people who menstruate and have disabilities will need to be monitored to check whether the target group is actually being reached. This might include using inclusive monitoring approaches such as using varying formats, including oral, written, pictorial or activity-based data collection methods.

Disaggregating data by those with and without various types of disabilities may enable monitoring of MHH programme inclusivity. Stigma associated with disability and the range of impairments can make it challenging to collect data accurately on disabilities. Rather than asking about 'disabilities', some questionnaires collect information on a range of disabilities by asking about difficulties seeing, hearing, walking, communicating, learning and playing.²⁷ For those in school, school administrations may track the number of pupils with disabilities, often by sex and type of disability, and these data may be reported in the national education monitoring information system (EMIS). While these data are not able to be disaggregated with MHH data at the student level, they may be helpful in identifying special schools or schools that serve students with disabilities.

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Gender equality does not imply that women and men are the same, but refers to equal rights, responsibilities and opportunities of women, men and all persons. Monitoring gender equality and gender relations can be challenging, but there are examples of assessment tools that measure attitudes toward gender norms such as the Gender Equitable Men (GEM) scale [53], [54] and the Global Early Adolescent Study (GEAS), which explores gender norms for adolescents aged 10-14 [55], [56]. These could be adapted to understand the extent to which MHH programmes are gender transformative, though further research is needed.

Some people do not identify with the gender assigned to them at birth. For example, people who menstruate but who identify as 'transgender' or 'non-binary' are often faced with even greater challenges during their menstrual periods, including public and institutional single-sex toilets and the provision

^{27.} The London School of Hygiene and Tropical Medicine / Washington Group questions related to difficulties seeing, hearing, walking, communicating, learning and playing and has been adapted for inclusion in the MICS6 questionnaires for children (age 5-17, including those out of school) and individual women [27], [40], [77]. The questions are available at: www.washingtongroup-disability.com/washington-group-question-sets/short-set-of-disability-questions/

^{28.} Persons who identify themselves as a different gender than that assigned to them at birth. They may express their identity differently to that expected of the gender role assigned to them at birth. Trans/transgender persons often identify themselves in ways that are locally, socially, culturally, religiously, or spiritually defined [119].

of MHH facilities in girls' and women's toilets but not in the boys' and men's toilets [57], [58]. While the importance of sex-segregated toilets has been highlighted by many people who menstruate, monitoring the provision of single-sex toilets in institutions, without considering transgender men and non-binary people who menstruate, could create additional challenges for them. The JMP core questions for WASH in health care facilities consider the needs of transgender men who menstruate by monitoring if institutions have single-sex or gender-neutral sanitation facilities and notes that toilets in rooms with multiple stalls should all be dedicated for use by either women or men, but a gender-neutral room with a single toilet is also considered as single-sex as it allows women and men to use toilets separately.

Monitoring services for these people, who may face high levels of discrimination or stigma, should always follow the principle of 'do no harm'. Consultations should be conducted ensuring there is no additional risk of harm or exposure to stigma, and in a way that guarantees they are not publicly identified, if it is not safe to do so.

PARTICIPATION

All people who menstruate – including children and adolescents – should be provided with opportunities to participate²⁹ in the monitoring process, along with others who are involved in programmes, such as parents or teachers. Safe and ethical participation in monitoring can improve accuracy and empower participants by enabling them to analyse their situation, own the data collected, and use it themselves. Participation is particularly important for early adolescents (10-to14-year-olds), since this age group is often ignored in decision-making processes; understanding their experiences has been a gap in MHH monitoring that needs further attention and research³⁰ [59]. People who menstruate could be involved in the development or review of the indicators, data collection through participatory processes (such as observational checklists conducted by school girls), or the validation of the findings. For example, adolescent health centre peer educators collected programme monitoring data at health centres in Zambia to help the health centre assess adolescent perceptions of the quality of their services [19].



^{29.} UNICEF defines 'meaningful adolescent participation' as adolescent girls and boys, individually or collectively, forming and expressing their views and influencing matters that concern them directly or indirectly [81].

^{30.} The WHO Global Early Adolescent Study (GEAS) is one of the few studies which targets the 10- to 14-year-old age group. More information available at: www.who.int/reproductivehealth/publications/adolescence/geas-tool-kit/en



MONITORING MHH OUTSIDE THE HOME THROUGH NATIONAL INFORMATION SYSTEMS



MONITORING MHH OUTSIDE THE HOME THROUGH NATIONAL INFORMATION SYSTEMS

3.1 OVERVIEW OF MONITORING OUTSIDE THE HOME

While many countries have anecdotal information or small studies on MHH in institutions, few have an evidence-based understanding of how the MHH situation in schools, health care facilities and workplaces varies across the country. Systematic data collection on basic elements of MHH through existing national information systems can provide regular and consistent data on programme status and progress.

Many governments routinely collect data through sector management information systems. For example, ministries of education may use an education management information system (EMIS) to collect demographic information, attendance, facility status, or financial information about each school. Such information can be used by the ministry to facilitate better education system planning and policy dialogue. Similarly, ministries of health may maintain a health management information system (HMIS) or annual facility inventory survey to collect data from each health care facility on the number of births, deaths and diseases, as well as the available infrastructure, medical supplies and staff to deliver quality health care.

EMIS, HMIS and similar systems provide opportunities to monitor MHH in institutions. However, because these systems collect data on a wide variety of indicators, they may be able to include only one or a few questions on MHH. Examples that have been used in or recommended for use in national management information system questionnaires are included in the tables below. They include the JMP core and expanded questions on MHH in schools [26] and health care facilities [24]. These questionnaires are typically completed by institutional administration (e.g. head teachers or health care facility administrators); such information should be complemented with data on personal experiences gathered directly from people who menstruate including students and teachers, and patients and health care workers (see Section 4 and Section 5).

3.2 EXAMPLE QUESTIONS FOR MONITORING OUTSIDE THE HOME

This section presents a 'menu' of example questions for monitoring MHH in institutions. Many of the questions focus on schools (where many monitoring resources have been used) but could be modified for other institutional settings, including health care facilities, workplaces, and penal institutions. The list of questions is not intended to be prescriptive and will most likely require adaptation and pre-testing for each setting.

Many national monitoring systems will have very limited space for additional questions. In these cases, one or two questions might be selected and adapted from the example questions in this section, informed by formative research into the specific challenges facing people who menstruate in that country or adapted to fit with existing national programme priorities related to MHH. Some questions could be combined to monitor multiple elements of MHH in one question, but bear in mind that questions that allow multiple responses are more complicated to analyse.

The questions outlined below were selected based on existing institutional monitoring tools, expert opinion, and the following assumptions: (1) that questions will be answered by institutional administrators that are not WASH or MHH professionals, meaning that they will be unable to report on adolescent girls' and women's perspectives and experiences, or technical details of facilities; and (2) that surveys already include questions on important facility information such as location (e.g. district or province), level (e.g. primary school, secondary school, health post, referral hospital), area (urban or rural), management (e.g. public, private), and type (e.g. boarding school or day school, in-patient or out-patient), which will support data disaggregation.

In addition to MHH-specific questions, core WASH questions, which have direct influence on MHH, are also included based on global guidance [24], [26]. Questions about social support are not included in the examples due to the limitations of collecting data from administrators and not directly from people who menstruate; there is inherent bias in asking teachers, staff or administrators if they are creating a positive social environment, as would be the case for any leading question.



Knowledge and skills ledge an	d skills	Notes
IK1. Have any staff members been trained on menstruation education?	Yes	Adapted from 2011 school guidelines in Afghanistan [60] as reported in [52]. This was highlighted as an important question by key informants as it suggests that accurate information is likely to be provided by trained staff who are more able to support people who menstruate.
IK2. Are boys and girls taught about menstruation?	Yes, boys and girls	Adapted from programme evaluation surveys in Indonesia [61] and Nepal [62].
IK3. Is menstruation education part of the regular school curriculum?	Yes	Adapted from a programme evaluation survey in Indonesia [61], Save the Children guidelines [33] and Menstrual Hygiene Matters [52].
IK4. Is menstruation education taught by staff (e.g. teacher, nurse)?	Yes	Adapted from a programme evaluation survey in Indonesia [61] and simplified based on expert feedback.
IK5. What information is included in menstruation education? (select all that apply)	 Biological processes and reasons for menstruation Myths and misconceptions about menstruation Training on how to safely use menstrual materials Training on how to safely dispose of menstrual materials Training on how to take care of your body during menstruation 	Adapted from a programme evaluation survey in Indonesia [61]. The response options on how to use and dispose of products are based on an indicator in the MHM in emergencies toolkit [63]. The response option about taking care of your body is based on a question used in the Global Early Adolescent Study [64]. Note: multiple response questions are more challenging to analyse. This question could be split into multiple yes/no questions to ease analysis.

Facilities and services		
IF1. Is water and soap available in a private space for women and girls to manage menstruation?	Yes, water and soap	JMP expanded question for WASH in schools [26] and part of the JMP core questions for WASH in health care facilities [24].
IF2. Are there toilets / latrines in sex-separated or gender-neutral rooms?	Yes	JMP core question for WASH in health care facilities [24] and a similar question for WASH in schools [26]. Single-sex toilets mean separate female and male toilets are available, or it is a single-sex institution. An enclosed gender-neutral room with a single toilet may also be considered single-sex as it allows female and males to use toilets separately. The exact definition should be based on what is appropriate in the given country.
IF3. Do the toilets/latrines used by women and girls prevent others from looking in?	Yes	From the Nigeria WASH NORM survey [65].
IF4. Are the girls'/women's individual toilet compartments lockable from the inside?	All 1 Some 2 None 3 Not applicable (no toilets) 4	From the Emory University and UNICEF 'Tools for assessing menstrual hygiene management in schools' [66].
IF5. How many times per week are the toilets cleaned?	At least once per day 1 2-4 days per week 2 Once per week 3 Less than once per week 4	JMP expanded question for WASH in schools [26].
IF6. Are there handwashing facilities at the institution?	Yes	Adapted from JMP core question for WASH in schools [26].
IF7. Are both soap and water currently available at the handwashing facilities?	Yes, water and soap	JMP core question for WASH in schools [26].
IF8. Is there a functional hand hygiene facility at points of care on the day of the survey?	Yes	JMP core question for WASH in health care facilities [24]. Points of care are any location where care or treatment is delivered (e.g. consultation/exam room). For facilities with multiple rooms or areas, one can be selected at random. Hand hygiene facilities include soap and water or alcohol-based hand rub (ABHR).

Facilities and services		
IF9. Is there a functional hand-washing facility at one or more toilets on the days of the survey?	Yes	JMP core question for WASH in health care facilities [24]. Handwashing facilities at toilets must include water and soap, rather than ABHR alone snice ABHR does not remove faecal matter.
IF10. Are there covered bins for disposal of menstrual materials in the toilets used by women and girls?	Yes	JMP expanded question for WASH in schools [26] and part of the JMP core ques- tions for WASH in health care facilities [24].
IF11. Are there disposal mechanisms (e.g. incinerator) for used menstrual materials at the institution?	Yes	JMP expanded question for WASH in schools [26].
IF12. Is there a designated space for drying reusable menstrual materials?	Yes	Based on the WSSCC Outcome Assessment Analytical Guide [67].
IF13. Is there a toilet with facilities to manage menstruation that is accessible to persons with limited mobility?	Yes	Based on recommendations in Menstrual Hygiene Matters [5]. An example question was not identified in existing tools.

Materials		
IM1. Are menstrual materials (e.g. sanitary pads) available on premises?	Yes, for free 1 Yes, for purchase 2 Yes, to borrow 3 No 4	Based on survey in Bhutan [68], JMP expanded question [26], and draft question proposed for the Indonesia EMIS (unpublished).





4.

MONITORING MHH IN HOUSEHOLDS THROUGH NATIONAL SURVEYS



MONITORING MHH IN HOUSEHOLDS THROUGH NATIONAL SURVEYS

4.1 OVERVIEW OF HOUSEHOLD MONITORING

Household monitoring through national surveys provides an opportunity to ask adolescent girls and boys, women, and men about their experiences because they rely on questionnaires administered directly to individuals. Typically, the government administers national surveys every few years (in some cases every year) on a set schedule and uses the surveys to gather information on a large array of indicators. These surveys therefore provide an opportunity to understand and track experiences of people who menstruate at a national level and assess MHH against other social and health data. Household surveys also support information gathering from marginalised populations that are excluded from institutions, including out-of-school girls.

MHH questions have recently been included in multiple international survey programmes, such as the UNICEF Multiple Indicator Cluster Survey (MICS), the USAID Demographic Health Survey (DHS), and the Johns Hopkins University Performance Monitoring and Accountability 2020 survey (PMA2020), in addition to the globally recommended JMP core questions on WASH in households [25], [27], [28], [69]. Results from MHH questions included in national surveys feed into global tracking of SDG 6.2, which seeks to ensure 'universal access to adequate and equitable sanitation and hygiene for all...paying special attention to the needs of women and girls...'.

The broad scope of these national surveys limits the number of questions that can be included on MHH specifically, so cross-cutting questions that provide a wide-view perspective on MHH may be most useful here, while more comprehensive, targeted surveys (see Section 5) may be more appropriate for evaluating programmes or identifying specific elements of MHH for the target intervention.

4.2 EXAMPLE QUESTIONS FOR NATIONAL HOUSEHOLD SURVEYS

Example questions are provided in this section for a woman's questionnaire and a man's questionnaire. The list is not intended to be prescriptive; rather, questions should be selected and modified based on the context (see Section 2). The questions for women and men (aged from 15-49 years' old) could also be adapted for early adolescents, or out-of-school children surveys to gather information from 10- to 14-year-olds who are often not interviewed in national surveys. The questions could also be adapted for transgender men or non-binary persons who might otherwise not have the opportunity to share challenges around menstruation and be excluded from or misrepresented in the categories of 'woman' and 'man'. In addition to the questions listed, household and personal information such as location (e.g. district or province), area (urban or rural), and age should be collected to support data disaggregation. Core WASH questions, which have direct influence on MHH, are also included in the woman's questionnaire though these could be asked in a general household questionnaire. Question skip logic should be added as needed, based on the questions being used.

4.2.1 WOMAN'S QUESTIONNAIRE

Background		Notas
HWB1. How old were you when you had your first menstrual period?	Age Never	From the DHS8 woman's questionnaire [28] and the Global Early Adolescent Study [64].
HWB2. How long ago did your last menstrual period start? Note: If less than 1 day: record '00' for days If less than 1 week: record days If less than 1 month: record weeks If less than 1 year: record months Otherwise, record years.	Days Weeks Months Years In menopause or has had a hysterectomy	Based on the DHS8 woman's questionnaire [28] and MICS6 woman's questionnaire [27]. This question should be included if asking question about recent experiences managing menstruation to support assessment of potential recall bias.

Social support		Notes
HWS1. Before you first started menstruating, did anyone talk to you about menstruation? Who did you talk to? Anyone else? Record all mentioned	Mother / female caregiver Father / male caregiver Sister Brother Other family member Friend/peer Doctor/nurse or other person at a health centre Teacher Religious leader Other No one	Adapted from the Indonesia DHS7 woman's questionnaire [70]. Multiple response questions are more challenging to analyse. This question could be simplified by asking about the main person.

Social support		Notas
HWS2. The first time you menstruated, did you talk to anyone? Who did you talk to? Anyone else? Record all mentioned	Mother / female caregiver Father / male caregiver Sister Brother Other family member Friend/peer Doctor/nurse or other person at a health centre Teacher Religious leader Other No one	Adapted from the Indonesia DHS7 woman's questionnaire [70]. Multiple response questions are more challenging to analyse. This question could be simplified by asking about the main person.
HWS3. Have you talked with anyone about how to take care of yourself during your menstrual period? Who did you talk to? Anyone else? Record all mentioned	Mother / female caregiver Father / male caregiver Sister Brother Other family member Friend/peer Doctor/nurse or other person at a health centre Teacher Religious leader Other No one	Adapted from the Global Early Adolescent Study [64]. Multiple response questions are more challenging to analyse. This question could be simplified by asking about the main person.
HWS4. During your last menstrual period, did you miss any of the following activities due to your menstrual period (Y/N/NA for each) Select N/A (not applicable) if the woman would not normally do this activity, for example she does not normally attend school, work, or social activities.	a Attending school? Yes (1) No (2) N/A (99) b. Paid work? Yes (1) No (2) N/A (99) c. Participating in social activities? Yes (1) No (2) N/A (99) d. [Other context specific activity]? Yes (1) No (2) N/A (99)	Adapted from the JMP core question on WASH in households [25]. While additional research would be needed to understand why people who menstruate are missing activities to inform policy/intervention, this question supports tracking a change in experience on a large-scale. Specific activities could be adapted according to local culture (such as religious activities, cooking food for others, eating with others, bathing in regular place, or sowing seeds).

Social support		Notes
HWS5. Due to your menstrual period, were there any works days in the last month that you did not attend? Read response options	Yes 1 No 2 N/A, Aside from my own housework, I have not done any work in the last month 99 No response 98	Adapted from two questions in PMA2020 [69]. There is a similar question in the WSSCC and University at Buffalo analytical guide [67] and MICS6 woman's questionnaire [27].
HWS6. Due to your menstrual period, were there any school periods/classes in the past 12 months that you did not attend? Read response options	Yes	Adapted from two questions in PMA2020 [69]. There is a similar question in the WSSCC and University at Buffalo analytical guide [67] and MICS6 woman's questionnaire [27].
Knowledge and skills		
HWK1a. Before you had your first menstrual period, were you aware of menstruation?	Yes	This question is cross-cutting and has links to social support and implications for sexual and reproductive health, family planning, education and psychosocial well-being. A version of this question has been included in several surveys. The phrasing here is based on the MHH Global Advisory Group March 2019 meeting.
HWK1b. If yes, where did you get information about menstruation? Any other source? Record all mentioned	Mother/female caregiver Father/male caregiver Sister Brother Other family member Friend/peer Doctor/nurse or other person at a health centre Teacher Health service provider Religious leader Television Radio Book, magazine or newspaper Internet Other Don't know No one / no source	Based on programme surveys in Ethiopia [71], Indonesia [61] and Nepal [62]. Multiple response questions are more challenging to analyse. This question could be simplified by asking about the main source.

Knowledge and skills		
HWK2a. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	Yes	Based on DHS8 survey [28].
HWK2b. If response is yes: Is the time when a woman is more likely to become pregnant just before her period begins, during her period, right after her period has ended, or halfway between two periods?	Just before her period begins 1 During her period 2 Right after her period has ended 3 Halfway between two periods 4 Other 5 Don't know 98	Based on DHS8 survey [28]. Correct knowledge of the fertile period is defined as 'halfway between two menstrual periods'.
HWK3. After the birth of a child, can a woman become pregnant before her menstrual period has returned?	Yes	Based on DHS8 survey [28].



Facilities and services			
HWF1. During your last menstrual period were you able to wash and change in privacy while at home?	Yes	2	Adapted from JMP core questions [25], MICS6 [27], DHS8 [28], and a question from the MPNS-36 [16].
HWF2. During your last menstrual period, was the place you most often changed your menstrual materials at home: Multiple response. Record if the answer is 'yes'	Clean? Private (you did not worry you could be seen)? Safe (you did not worry you could be harmed)? Able to be locked? Supplied with water? Supplied with soap? None of the above	No (2)	Privacy and safety can be subjective, difficult to define, and include many factors beyond the presence of a lockable door, and facilities may be considered private and safe even without a locking mechanism depending on the context [72]. Asking about worries of being seen or harmed, respectively, may be a more effective way to assess the privacy and safety of MHH facilities [16], [73]. Analysis of this question could be simplified by asking each as separate yes/no question.
HWF3. Where do you most often change your used sanitary pads, cloths, or other menstrual materials while at home?	Household toilet/latrine	2 3 4 5 6	Adapted from PMA2020 [69].
HWF4. During you last menstrual period, where did you most often dispose of menstrual materials after use while at home?	Toilets/latrine	2 3 4 5	Adapted from PMA2020 [69]. A question on disposal should be included if there are questions on menstrual materials. Question order could be modified to ask this as a follow-up question for those using disposable materials

Facilities and services		Notes
HWF5. During your last menstrual period, were you able to dispose of your used menstrual materials in the way that you wanted to while at home?	Yes	Adapted from the MPNS-36 [16].
HWF6. What kind of toilet facility do members of your household usually use?	Flush / pour flush Flush to piped sewer system	JMP core question on WASH in households [25]. This question can be asked in a general household survey and does not need to be asked specifically of women.
HGF7. Do you share this facility with others who are not members of your household?	Yes	JMP core question on WASH in households [25]. This question can be asked in a general household survey.
HGF8. Where is this toilet facility located?	In own dwelling 1 In own yard / plot 2 Elsewhere 3	JMP core question on WASH in households [25]. This question can be asked in a general household survey.
HGF9. Can you please show me where members of your household most often wash their hands?	Fixed facility observed (sink/tap) 1 a. In dwelling	JMP core question on WASH in households [25]. This question can be asked in a general household survey.

Facilities and services		Note
HGF10. Observe availability of water at the place for handwashing. Verify by checking the tap /pump, or basin, bucket, water container or similar objects for presence of water	Water is available	JMP core question on WASH in households [25]. This question can be asked in a general household survey.
HGF11. Observe availability of soap or detergent at the place for handwashing.	Soap or detergent available 1 Soap or detergent not available 2	JMP core question on WASH in households [25]. This question can be asked in a general household survey.

Materials		Note
HWM1. During your last menstrual period, what materials did you use most often to absorb or catch menstrual blood? Read options	Cloth 1 Reusable sanitary pads 2 Single-use sanitary pads 3 Tampons 4 Menstrual cup 5 Toilet paper 6 Cotton wool 7 Underwear alone 8 Other 9 No materials used 10	Based on JMP core question on WASH in households [25], DHS8 [28] and MICS6 [27] woman's questionnaires, and the MPQ [74]. This question can be used to track if people who menstruate use menstrual materials (including cloth, pads, tampons, and cups). It does not provide information on sufficiency, appropriateness or hygiene/safety [75]. If absorbent underwear such as 'period panties' are common, could add 'Absorbent underwear' and 'Underwear alone (non-absorbent)'.
HWM2. During your last menstrual period, could you get more of your menstrual materials when you needed to?	Yes	Adapted from the MPNS-36 [16].
HWM3a. Did you wash and reuse pads, cloths, or other menstrual materials during your last menstrual period?	Yes	Adapted from PMA2020 [69] and MPQ [74].
HWM3b. If yes, during your last menstrual period, were the menstrual materials that you washed and reused completely dry when you needed them?	Yes	Adapted from the MPNS-36 [16].

4.2.2 MAN'S QUESTIONNAIRE

HMS1. Do you strongly agree, agree, disagree, or strongly disagree that women/girls should participate in the following activities during their menstrual period?

Social support

- a). Attend school?
- b). Paid work?
- c). Participating in social activities?
- d). [Other context-specific activity]?

Note: Strongly agree means the respondent feels strongly that women/girls should participate, while Strongly disagree means the respondent feels strongly that women/girls should NOT participate during their period.

Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4

No response 98

Notes

This question has not been tested. It is based on the JMP core question that asks about women's participation during menstruation [25], a KAP survey of adolescent school girls and nuns in Bhutan [39] and a question on social norms and gender roles in the Young Lives Survey [76]. Specific activities could be adapted according to local culture (such as religious activities, cooking food for others, eating with others, bathing in regular place, or sowing seeds). This could be further adapted to focus on boys' perceptions of girls' participation.

Knowledge and skills

HMK1a. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?

Yes 1 No 2 Don't know 12

From the Indonesia DHS7 married and never-married man's questionnaires [70].

HMK1b. If the response is yes: Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?

Just before her period begins ..61 During her period 62 Right after her period has ended 63 Halfway between two periods 64 Other 21 Don't know 12

From the Indonesia DHS7 married and never-married man's questionnaires [70]. Correct knowledge of the fertile period is defined as 'halfway between two menstrual periods'.

HMK2a. After the birth of a child, can a woman become pregnant before her menstrual period has returned?

Yes 1 No 2 Don't know 12

From the Indonesia DHS7 married and never-married man's questionnaires [70].

Knowledge and skills

HMK2b. Where did you get the information about menstruation and pregnancy? Any other source?

- ☐ Mother/female caregiver
- ☐ Father/male caregiver
- Sister
- Brother
- Other family member
- Friend/peer
- Doctor/nurse or other person at a health centre
- Teacher
- ☐ Health service provider
- Religious leader
- Television
- Radio
- Book, magazine or news
- paper Internet
- _ IIIteIIIet
- OtherDon't know
- ☐ No one / no source

Adapted from the Indonesia DHS7 never-married man's questionnaire [70].

Multiple response questions are more challenging to analyse. This question could be simplified by asking about the main source.



5. MHH PROGRAMME MONITORING



MHH PROGRAMME MONITORING

5.1 OVERVIEW OF PROGRAMME MONITORING

For most MHH programmes (and individual projects), a more in-depth survey is needed to assess whether the programme has been carried out according to plan. National monitoring through incorporating questions on MHH into national systems (such as those in Section 3 and Section 4) will enable a basic understanding of MHH in the country and tracking progress over time, but may not generate sufficient information to make programmatic decisions.

This section includes a list of example questions that could be selected from and modified for large-scale thematic surveys and programme monitoring. Many of these questions have not been rigorously tested and validated for large-scale data collection, and should be pre-tested before use in monitoring instruments.

5.2 EXAMPLE QUESTIONS FOR PROGRAMME MONITORING

This section provides options for questions that use observational data and information from people who menstruate and their influencers. The menu of questions focuses on quantitative data, since they are less-resource intensive to collect and analyse compared to qualitative data. For programmes with additional resources, quantitative questions could be complemented with qualitative data collected via other instruments such as the Emory University and UNICEF 'Tools for assessing menstrual hygiene management in schools' and the Save the Children 'Menstrual Hygiene Management Operational Guidelines' [33], [66].

This section consists of question options for monitoring the four 'pillars' of MHH programming identified by UNICEF: social support, knowledge and skills, facilities and services, and materials. Where appropriate, questions from the previous two sections have been reused. Additionally, examples of monitoring cross-cutting outcomes are provided based on emerging research. See sub-section 2.2.1 for guidance on selecting appropriate indicators and questions.

The example questions in this section were selected with inputs from MHH sector experts. They draw on existing tools which were primarily used in the school setting but could be adapted for use in health care facilities, households, workplaces, penal institutions and others. Potential data sources (including source coding in brackets) might include women/girls (W/G), men/boys (M/B), institutional administration (A), observation (O), teachers (T), health care providers (H), parents (P), community members (C), and government officials (G). The questions are not presented in a particular order; they are intended to be examples which could be selected from, reorganised and modified based on the specific context and resources available for data collection. Question skip logic should be added as needed based on the questions being used.

5.2.1 BACKGROUND INFORMATION

Background information requested may vary by country and programme and should be modified as needed. Most surveys already request some of these data at the beginning of the questionnaire. Information that should be collected considering data disaggregation and specific MHH questions are included below.

SOURCE	QUESTIONS	RESPONSE OPTIONS	NOTES
	Woman/girl background		
W/G	BW1. Location (e.g. district, province)		
W/G	BW2. Area	Urban 1 Rural 2	
W/G	BW3. Age		
W/G	BW4. Grade (if in school)	Grade Not in school 99	
W/G	BW5. How old were you when you had your first menstrual period?	Age 99 Don't know 98	From the DHS8 woman's questionnaire [28] and the Global Early Adolescent Study [64].
W/G	BW6. When did your last menstrual period start? Note: If less than 1 day: record '00' for days If less than 1 week: record days If less than 1 month: record weeks If less than 1 year: record months Otherwise, record years.	Days Weeks Months Years In menopause or has had a hysterectomy	Based on the DHS8 [28] and MICS6 [27] woman's questionnaires. This question should be included if asking question about recent experiences managing menstruation to support assessment of potential recall bias.
W/G	BW7. For each of the following, would you say that (you / name of child or person being cared for) has: 1) no difficulty, 2) some difficulty, 3) a lot of difficulty, or 4) that (you/he/she) cannot at all?	Difficulty seeing even with glasses or contact lenses 1 2 3 4 Difficulty hearing even with a hearing aid 1 2 3 4 Difficulty walking without equipment or assistance 1 2 3 4 Difficulty learning or understanding things 1 2 3 4 Difficulty with self-care such as feeding or dressing 1 2 3 4	Based on a simplified version of the questions included in the MICS6 module on child functioning, which can be asked of a parent or care giver [40], [77]. The question can be rephrased to ask the menstruator directly but should be adapted to maintain sensitivity.

SOURCE	QUESTIONS	RESPONSE OPTIONS	NOTES
	Institutional background (if	survey is administered at an	institution)
А	BI1. Name of institution		
А	BI2. Location (e.g. district, province)		
А	BI3. Area	Urban	
А	BI4. Facility management	Public 70 Private 71 Religious institution 72 Community 73	
А	BI5. Facility type (e.g. primary school, secondary school, health post, referral hospital)	Primary school	
А	BI6. Facility use (e.g. day school/boarding school, in-patient/out-patient)	Day school	
Α	BI7. Facility population (e.g. male and female student enrolment, number of male and female teachers, current number of inpatients, number of hospital staff)	on weekdays only)	
Α	BI8. Population with physical disabilities (e.g. number of students by type of disability)		

Note: women/girls (W/G), institutional administration (A) Social support.



5.2.2 SOCIAL SUPPORT

The social support pillar includes access to supportive resources such as emotional, informational and tangible support. This can include: promotion of equitable gender norms that allow freedom of movement for people who menstruate,³¹ and the ability to make and act on decisions including control of resources (an element of empowerment); agency to seek support when needed; reduced stigma and taboos; access to emotional and practical support from trusted others; and reduced fear, stress and worry related to menstruation, including menstrual-related bullying. These elements are important before and after menarche and throughout the reproductive life course [15].

Elements of the social support 'pillar', particularly for adolescent girls, are an important part of all MHH-related interventions. Where consideration of social support is integrated into programme design, the quality of implementation will need to be monitored. Monitoring social support, however, can be challenging. It is recommended to begin by clearly defining the concept being measured and selecting indicators and questions to collect data based on that definition.³²

Example indicators and questions that might be appropriate for monitoring various aspects related to social support, including outputs and outcomes,³³ are provided below. The indicators and questions listed are intended to be illustrative, not exhaustive or prescriptive. Figure 3 provides one example of where elements of the social support 'pillar' might fit into a theory of change for an MHH programme focused on improving girls' education.

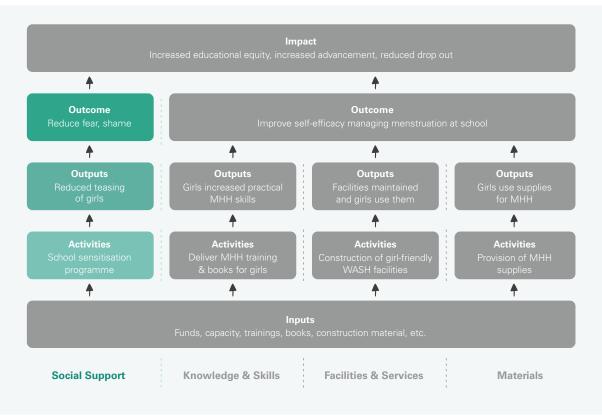


Figure 3. Example 'social support' elements for MHH in relation to educational impact (adapted from ToC prepared by B. Caruso) [3]

^{31.} The JMP defines menstrual exclusion as activities that women and girls do not participate in due to their menstrual period [25]. Note that a lack of participation could be due to societal restrictions placed on people who menstruate, but it could also be due to inadequate facilities or in response to pain; causal pathways should be assessed to understand why people who menstruate do not participate in activities.

^{32.} See the definitions section at the beginning of this document for examples.

^{33.} Activity indicators for the social support pillar were not identified as part of this review and is an area in need of further research.

XAMPLE INDICATORS*	RELEVANT DEFINITIONS / NOTES	
ear, stress and worry		
Outcome indicator 1. Prevalence of fear, stress and worry amongst girls due to their menstruation	These could be used to monitor the highlighted elements of the example ToC in Figure 3.	
Output indicator 1.1 Proportion of girls who experienced or witnessed teasing during menstruation		
Output indicator 1.2 Proportion of girls who worry about being teased during menstruation		
Output indicator 1.3 Proportion of girls who worried about using the school bathroom during their last menstrual period		
Social norms		
Outcome indicator 2. Prevalence of positive social norms related to menstruation amongst the target population (e.g. girls, boys, parents, teachers, community members, government officials)	'Social norms': Individuals' belief that a sufficiently large subset of th group or society believes something or behaves a certain way in a given	
Output indicator 2.1 Proportion of the target population that disagrees or strongly disagrees that [girls should not go to school when menstruating]	situation and a sufficiently large subset of the group or society either expects them to conform to that norm or prefers them to conform [78], [79].	

Output indicator 2.2 Proportion of people who menstruate that believe other people in the community disagree or strongly disagree that [girls should not go to school when menstruating]

Output indicator 2.3 Proportion of women/girls who can [attend church/temple] while menstruating

Elements in brackets should be modified to focus on a specific aspect that the programme aims to shift. For broader indicators, composite measures or scales may be more appropriate (see sub-section 5.2.6 for example scales used to measure cross-cutting outcomes).

Outcome indicator 3. Prevalence of menstrual stigma amongst the target population

Output indicator 3.1 Proportion of target population who disagree or strongly disagree that [menstruation should be kept secret]

Output indicator 3.2 Proportion of women/girls that agree or strongly agree that [they feel embarrassed to purchase menstrual materials]

Stigma': A social process with cognitive, attitudinal and behavioural elements that lead to discrimination and inequities [80]. Output indicators should be modified based on formative research in the context. Examples are included in brackets.

EXAMPLE INDICATORS*

RELEVANT DEFINITIONS / NOTES

Taboos

Outcome indicator 4. Prevalence of menstrual taboos amongst the target population

Output indicator 4.1 Proportion of target population who disagree or strongly disagree that [during menstruation, women and girls are susceptible to evil spirits]

'Taboos': Customs (religious or non-religious) that limit actions or even the discussion of a particular topic. Output indicators should be modified based on formative research in the context.

An example is included in brackets.

Emotional and practical support

Outcome indicator 5. Proportion of women/girls who have emotional and practical support for menstruation

Output indicator 5.1 Proportion of girls who feel they could ask a teacher or staff member if they needed advice about how to manage their menstruation at school

Output indicator 5.2 Proportion of girls who feel they could ask someone in their household if they needed advice about how to manage their menstruation at home

Output indicator 5.3 Proportion of girls who have sought or feel they could seek medical advice if they were experiencing abnormal menstruation

Agency

Outcome indicator 6. Proportion of women/girls who believe in their capacity to act and to make free choices or to control their actions related to menstruation

Output indicator 6.1 Proportion of women/girls who did not miss [social activities or school] due to their last menstrual period for a reason other than menstrual pain or discomfort

Output indicator 6.2 Proportion of women/girls who make their own decisions about how to manage their menstruation

Based on elements of agency as defined in the UNICEF Adolescent Participation Conceptual Framework [81].

Elements in brackets should be modified based on programme aims.

Not participating in activities due to menstrual pain should not be considered a lack of agency since women/ girls may be exhibiting agency by choosing not to participate due to pain or discomfort.

Disabilities

Outcome indicator 7. Proportion of women/girls with intellectual disabilities who receive emotional support for their menstruation

Output indicator 7.1 Proportion of women/girls with intellectual disabilities whose carer provides reassurance when she is upset because of her menstruation

Based on the WaterAid Bishesta Campaign. Training manuals and other information can be found online³⁴. The specific questions should be modified based on the programme implemented.

^{*}Significant examples of activity level indicators and associated questions for the social support pillar were not identified.

SOURCE	QUESTIONS	RESPONSE OPTIONS	NOTES
	Outcome indicator 1. Prevalence of fear, stress and worry amongst women and girls due to their menstruation Output indicator 1.1 Proportion of girls who experienced or witnessed teasing during menstruation		For programmes with a strong focus on bullying, more detailed questions could be adapted from the USAID conceptual framework for measuring school-related gender-based violence [82].
W/G	S1.1a Have you been teased for having your menstrual period in the past 6 months? If yes, who teased you? Select all that apply	Yes	Adapted from the UNICEF U-Report draft questionnaire [83]. The question was revised to ask about the past 6 mon- ths to reduce recall bias and support progress tracking.
W/G M/B	S1.1b Have you witnessed teasing of girls because of their menstrual period in the past 3 months? How often in the past 3 months have you witnessed teasing of girls because of their menstrual period?	Yes 1 No 2 Once a week 1 Once a month 2 Once in 2 months 3 Once in 3 months 4 Not experienced or observed in past 3 months 5	Adapted from a programme evaluation in Nepal [62]. The question was revised to ask about the past 3 months to match the follow-up question, reduce recall bias and support progress tracking.
	Output indicator 1.2 Proportion of girls who worry about being teased during menstruation		
W/G	S1.2a When you have your menstrual period in school do you worry about being teased?	Never	Adapted from a programme evaluation in Nepal [62].
	Output indicator 1.3 Proportion of girls who worried about using the school bathroom during their last menstrual period		
W/G	S1.3a The last time you had your menstrual period at school, did you worry about using the school bathroom	Never	Adapted from the Save the Children MENSES (previously MR-SSS) questions [84],[85].

Note: women/girls (W/G), men/boys (M/B)

 $^{34. \ \ \}text{Available at: www.washmatters.wateraid.org/publications/bishesta-campaign-menstrual-health-hygiene.}$

SOURCE	QUESTIONS	RESPONSE OPTIONS	NOTES
	Outcome indicator 2. Prevalence of positive social norms related to menstruation amongst the target population (e.g. girls, boys, parents, teachers, community members, government officials)		Should focus on something the programme aims to shift. For broader indicators, composite measures or scales may be more appropriate (see sub-section 5.2.6 for example scales used to measure cross-cutting outcomes). Questions are needed to understand both elements of social norms (what they believe and what they think others believe).
		ee that [girls should not go to	Specific indicator should be based on what the programme aims to shift. Examples are provided below. 2.1 captures the first part of social norms (what do they believe). 2.2 captures the second part of social norms (what do they think others believe).
W/G (M/B A,T,	S2.1a Do you strongly agree, agree, disagree, or strongly disagree with the following statement: Girls should not go to school when they are menstruating?	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 5	Based on a KAP survey of adolescent school girls and nuns in Bhutan [39] and a question on social norms and gender roles in the Young Lives Survey [76]. These questions could be asked of people who menstruate only
H, C, G, P)	S2.2a Do you believe others in your community strongly agree, agree, disagree, or strongly disagree withthe following statement: Girls should not go to school when they are menstruating?	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 5	or people who menstruate and their influencers (in parentheses in the first column).
W/G (M/B A,T, H, C, G, P)	S2.1b Do you strongly agree, agree, disagree, or strongly disagree with the following statement: It is ok to talk freely about menstruation?	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 5	Based on a KAP survey of adolescent school girls and nuns in Bhutan [39] and a question on social norms and gender roles in the Young Lives Survey [76]. These
	S2.2b Do you believe others in your community strongly agree, agree, disagree, or strongly disagree with the following statement: It is ok to talk freely ab	Strongly agree	questions could be asked of people who menstruate only or people who menstruate and their influencers (in parentheses in the first column).

SOURCE	QUESTIONS	RESPONSE OPTIONS	NOTES
W/G (M/B A,T,	S2.1c Do you strongly agree, agree, disagree, or strongly disagree with the following statement: It is ok to remain a virgin after a girl starts menstruating?	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 98	Based on education and HIV research in Kenya [86] as cited in the J-PAL guide to measuring empowerment [87]. These questions could be asked of people who menstruate only or people who menstruate and their
H, C, G, P)	S2.2c Do you believe others in your community strongly agree, agree, disagree, or strongly disagree with the following statement: It is ok to remain a virgin after a girl starts menstruating?	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 98	influencers (in parentheses in the first column).
W/G (M/B A T	S2.1d Do you strongly agree, agree, disagree, or strongly disagree with the following statement: It is ok to remain unmarried after a girl starts menstruating?	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 98	Based on education and HIV research in Kenya [86] as cited in the J-PAL guide to measuring empowerment [87]. These questions could be asked of people who menstruate only or people who menstruate and their
A,T, H, C, G, P)	S2.2d Do you believe others in your community strongly agree, agree, disagree, or strongly disagree with the following statement: It is ok to remain unmarried after a girl starts menstruating?	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 98	influencers (in parentheses in the first column).
W/G (M/B A,T, H, C, G, P)	S2.1e Do you strongly agree, agree, disagree, or strongly disagree with the following statement: Women should not work while they are menstruating?	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 98	Based on a KAP survey of adolescent school girls and nuns in Bhutan [39] and a question on social norms and gender roles in the Young Lives Survey [76]. These questions could be asked of people who menstruate only or people who menstruate and their influencers (in parentheses in the first column).
	S2.2e Do you believe others in your community strongly agree, agree, disagree, or strongly disagree with the following statement: Women should not work while they are menstruating?	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 98	

Note: women/girls (W/G), men/boys (M/B), institutional administration (A), observation (O), teachers (T), health care providers (H), parents (P), community members (C), and government officials (G)

SOURCE	QUESTIONS	RESPONSE OPTIONS	NOTES
agree, disagree, or strongly disagree with the following statement: It is embarrassing to be seen buying menstrual Agree Disagree Strongly disagree	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 5	Based on a KAP survey of adolescent school girls and nuns in Bhutan [39]. These questions could be asked of people who menstruate only or people who menstruate and their influencers (in parentheses	
A, T, H, C, G, P)	S2.2f Do you believe others in your community strongly agree, agree, disagree, or strongly disagree with the following statement: It is embarrassing to be seen buying menstrual materials?	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 5	in the first column)
W/G (M/B	S2.1g Do you strongly agree, agree, disagree, or strongly disagree with the following statement: It is unacceptable for a man to see a woman buying menstrual materials?	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 5	Based on a KAP survey of adolescent school girls and nuns in Bhutan [39]. These questions could be asked of people who menstruate only or people who menstruate and their
A, T, H, C, G, P)	S2.2g Do you believe others in your community strongly	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 No response 5	influencers (in parentheses in the first column).
W/G (M/B	S2.1h Do you strongly agree, agree, disagree, or strongly disagree with the following statement: Women/girls should continue their social activities as usual during menstruation?	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 Don't know/No response 98	Based on the Menstrual Health Seeking Behaviours Questionnaire (MHSBQ-42). While the scale has not been validated in multiple contexts, the individual questions are useful examples [88]. These questions could be asked of people who menstruate only
A, T, H, C, G, P)	S2.2h Do you believe others in your community strongly agree, agree, disagree, or strongly disagree with the following statement: Women/girls should continue their social activities as usual during menstruation?	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 Don't know/No response 98	or people who menstruate and their influencers (in parentheses in the first column).

SOURCE	QUESTIONS	RESPONSE OPTIONS	NOTES
	indicator 2.3 Proportion of wome while menstruating	n/girls who can [attend church/	The activity and phrasing should be modified based on programme aims.
W/G	S2.3a When you are menstruating, can you attend church/temple? (Y/N) If no, why not? (main reason) Other example activities include: Attend religious occasion (wedding, blessing) / Attend household prayers / Touch male family members / Cook/enter the kitchen / Go outside as much as normal / Eat any foods or drinks (without restrictions) / Sleep in the same place as usual / Bathe	Yes 1 No 2 You don't feel well 1 You fear divine retribution 2 Your family don't allow you 3 You don't want to 4 You feel it is the right thing to do 5 Other 6	From a WaterAid study in Nepal. The activities and responses should be modified for the particular programme and context. The questions are cross-cutting and provide insight into multiple elements including social norms (e.g. feel it's the right thing to do), taboos (e.g. fear of divine retribution), locus of control (e.g. family won't allow).

Note: women/girls (W/G), men/boys (M/B), institutional administration (A), observation (O), teachers (T), health care providers (H), parents (P), community members (C), and government officials (G)



M/B	SOURCE	example indicator/question		NOTES
disagree or strongly disagree that [menstruation should be kept secret] W/G M/B A, T, H, C, G, P S3.1a Menstruation should be kept secret Agree 2 Disagree 3 Strongly disagree 4 Don't know/No response 98 S3.1b I care if people know when I have my menstrual period Disagree 3 Strongly agree 1 Adapted from a programme aims. [61] and Ethiopia [71], and the Global Early Adolescer Study survey [64]. W/G S3.1b I care if people know when I have my menstrual period Disagree 3 Strongly agree 1 Agree 2 U-Report draft questionnai [83] and the Menstrual Sel Evaluation Scale [89]. W/G M/B M/B A, T, H, C, G, P S3.1c Women and girls often feel ashamed about menstruation M/B A, T, H, C, Disagree 3 Strongly agree 1 Agree 2 University at Buffalo Globa Sanitation Fund Outcomes Assessment [67]. Sanitation Fund Outcomes Assessment [67]. W/G W/G W/G W/G Output indicator 3.2 Proportion of women/girls that agree The activity and phrasing				with cognitive, attitudinal and behavioural elements that lead to discrimination
M/B		disagree or strongly disagree that		should be modified based
W/G period Disagree	M/B A, T, H, C,		Agree 2 Disagree 3 Strongly disagree 4	[61] and Ethiopia [71], and the Global Early Adolescent
M/B often feel ashamed about menstruation Mightail Might	W/G	when I have my menstrual	Agree 2 Disagree 3 Strongly disagree 4	Adapted from the UNICEF U-Report draft questionnaire [83] and the Menstrual Self Evaluation Scale [89].
when you are having your menstrual period? W/G No	M/B A, T, H, C,	often feel ashamed about	Agree 2 Disagree 3 Strongly disagree 4	University at Buffalo Global Sanitation Fund Outcomes
	W/G	when you are having your		and University at Buffalo Global Sanitation Fund Out- comes Assessment [67]. The phrasing was changed from 'ever felt ashamed' to current perspective to support pro-
menstrual materials] should be modified based purchase should be modified based programme aims.		or strongly agree that [they feel e		should be modified based on
W/G S3.2a Do you strongly disagree, disagree, agree, or strongly agree with the following statement: I am embarrassed when I have to purchase menstrual materials? Strongly agree	W/G	disagree, disagree, agree, or strongly agree with the following statement: I am embarrassed when I have to	Agree 2 Disagree 3 Strongly disagree 4	Self Evaluation Scale [89]. While the scale has not been validated, the individual questions may be quite
following statement: I would Strongly disagree	W/G	disagree, disagree, agree, or strongly agree with the following statement: I would prefer not to talk openly	Agree 2 Disagree 3 Strongly disagree 4	

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES
	Outcome indicator 4. Prevalence the target population	Taboos: customs (religious or non-religious) that limit actions or even the discussion of a particular topic.	
	Output indicator 4.1 Proportion gree or strongly disagree that [digirls are susceptible to evil spirit:	Elements in brackets should be modified to a taboo that the programme aims to reduce.	
W/G M/B A, T, H, C, G, P	S4.1a During menstruation, women and girls are susceptible to evil spirits Note: substitute with a taboo in the local context	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 Don't know/No response 98	Adapted from a KAP survey of adolescent school girls and nuns in Bhutan [39]. Should be modified based on programme aims.

Note: women/girls (W/G), men/boys (M/B), institutional administration (A), observation (O), teachers (T), health care providers (H), parents (P), community members (C), and government officials (G)



SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES
	Outcome indicator 5. Proportion emotional and practical support		
	Output indicator 5.1 Proportion ask a teacher or staff member if to manage their menstruation at	they needed advice about how	
W/G	S5.1a If you were at school and needed advice about how to manage your menstruation, could you ask a teacher or other staff member?	Never	From the UNICEF U-Report draft questionnaire [83]. Conditional questions (e.g. 'if you were') do not always translate clearly and this question should be modified, or an alternate used, where it is unclear.
	Output indicator 5.2 Proportion ask someone in their household how to manage their menstruation	if they needed advice about	
W/G	S5.2a If you were at home and needed advice about how to manage your menstruation, could you ask someone in your household?	Never	Adapted from the UNICEF U-Report draft questionnaire [83]. Conditional questions (e.g. 'if you were') do not always translate clearly and this question should be modi- fied, or an alternate used, where it is unclear.
	Output indicator 5.3 Proportion sought or feel they could seek mexperiencing irregular menstruates	Very few questions were identified around abnormal menstruation. Additional work is needed in this area in partnership with reproductive health experts.	
W/G	S5.3a Have you ever talked to a nurse, doctor or other health care provider about your menstrual periods?	Yes	
W/G	S5.3b If no, would you feel comfortable talking to a health care provider about your menstrual periods if you experienced a significant change in your menstrual flow or worried that something was abnormal?	Yes	Conditional questions (e.g. 'if you were') do not always translate clearly and this question should be modified, or an alternate used, where it is unclear.
W/G	S5.3c If no, why not? Select the main reason	 □ Too expensive □ Scared to go □ Embarrassed to discuss my menstrual period □ No need, pain or issues related to menstrual periods are normal □ Other: 	

SOURCE	example indicator/question	RESPONSE OPTIONS	NOTES
	Outcome indicator 6. Proposin their capacity to act and to their actions related to mens	Based on elements of agency as defined in the UNICEF Adolescent Participation Conceptual Framework [81].	
	Output indicator 6.1 Propor miss [social activities or scho period for a reason other than	Elements in brackets should be modified based on pro- gramme aims. Not partici- pating in activities due to menstrual pain should not be considered a lack of agency since women/girls may be exhibiting agency by choo- sing not to participate due to pain or discomfort.	
W/G	S6.1a During your last menstrual period, did you miss any of the following activities due to your period (Y/N/NA for each)	a. Attending school? Yes (1) No (2) N/A (99) b. Paid work? Yes (1) No (2) N/A (99) c. Participating in social activities? Yes (1) No (2) N/A (99) d. [Other context specific activity]? Yes (1) No (2) N/A (99)	Based on JMP core question on WASH in households [25].
W/G	S6.1b What was the reason that you missed [insert activity from S6.1a]? Record main reason	I felt ashamed to go while menstruating	While this question is not needed to measure the output indicator, it provides additional information to support intervention changes. It should be modified based on context specific challenges and asked for each activity missed.

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES
	Output indicator 6.2 Propor their own decisions about ho		
W/G	S6.2a Who usually makes decisions about the materials you use to absorb or catch menstrual blood: you, your (husband/partner), you and your (husband/partner) jointly, your parents, you and your parents jointly, or someone else?	Myself	Adapted from questions on agency regarding health and spending decisions [93], [94].
W/G	S6.2b. Who pays for your menstrual materials?	Self Mother/female caregiver Father/male caregiver Husband/boyfriend/partner Sister Brother School Friend Other N/A (I do not use purchased materials)	Adapted from the draft UNICEF U-Report SMS-based survey questions [83].

Note: women/girls (W/G)



SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES
	Outcome indicator 7. Proportio lectual impairments who receive menstruation		
	Output indicator 7.1 Proportion of women/girls with intellectual impairments whose carer provides reassurance when she is upset because of her menstruation		Examples of what is meaningful and appropriate support or reassurance should be determined through participatory approaches with people with intellectual impairments and their carers.
Carers	S7.1a When the person you care for is angry, sad, or upset because of her menstruation, what do you do?	Leave her alone 1 Keep her at home 2 Reassure her 3 Do nothing 4 N/A 99	Adapted from the WaterAid Bishesta Campaign. Training manuals and other information can be found online ³⁵ . The specific questions should be modified based on the programme implemented and could expand on the response option 'reassure her'. The question is designed to be answered by the person caring for the woman/girl.



5.2.3 KNOWLEDGE AND SKILLS

Monitoring MHH knowledge and skills should assess whether people who menstruate understand the basic facts related to menstruation and sexual reproductive health, as well as practical knowledge regarding how to hygienically manage menses. Accurate and comprehensive information should be accessible before and after menarche from knowledgeable and gender-sensitive professionals, including those providing puberty education in schools [1], [3], [8], [9], [52], [95]-[100]. Knowledge of secondary audiences (e.g. boys, parents, teachers, health professionals) is also important, as it has links with social support as well as impacting the knowledge and skills of people who menstruate [3].

Example indicators and questions that might be appropriate for monitoring elements of knowledge and skills are provided below. Figure 4 provides an example of where aspects of knowledge and skills might fit into a theory of change for an MHH programme focused on educational impact.

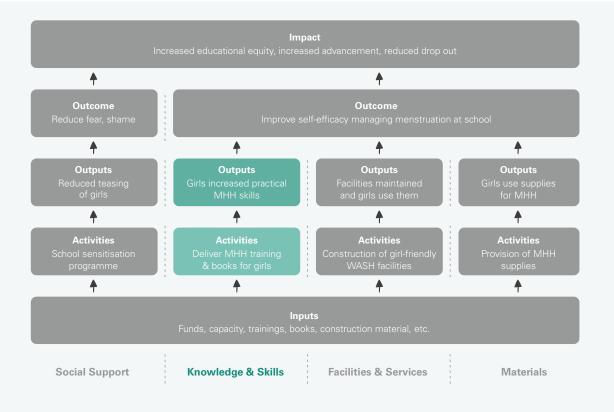


Figure 4. Example 'knowledge and skills' elements for MHH in relation to educational impact (adapted from ToC prepared by B. Caruso) [3]



Table 3. Example MHH output and activity indicators for the knowledge and skills pillar

EXAMPLE INDICATORS

RELEVANT DEFINITIONS/NOTES

Practical skills

Output indicator 1. Proportion of girls that feel confident or very confident that they have the practical skills needed manage their menstruation

These could be used to monitor the highlighted elements of the example theory of change in Figure 4.

Activity indicator 1.1 Proportion of schools where menstruation education for girls includes training on practical skills

Links between menstruation and pregnancy

Output indicator 2. Proportion of girls (and boys) that correctly answer questions about the relationship between menstruation and pregnancy

A reasonable target should be set for Output 2 based on formative research. 100% may not be realistic.

Activity indicator 2.1 Proportion of schools where menstruation education for boys and girls includes information about the relationship between menstruation and pregnancy

Myths and misconceptions

Output indicator 3. Proportion of girls that correctly answer questions about common myths and misconceptions about menstruation

A reasonable target should be set for Output 3. 100% may not be realistic.

Activity indicator 3.1 Proportion of schools where menstruation education for girls includes information to clarify myths and misconceptions about menstruation

Practical knowledge

Output indicator 4a. Proportion of girls that correctly answer questions about how to take care of one's body during menstruation

Activity indicator 4.1a Proportion of schools where menstruation education for girls includes information about how to take care of one's body during menstruation

A reasonable target should be set for Output 4. 100% may not be realistic. This indicator could be adapted with the help of reproductive health experts to focus on menstrual disorders and when to seek health care services.

Awareness

Output indicator 5. Proportion of the target population (e.g. girls, boys, teachers) who know about menstruation

Activity indicator 5.1 Proportion of schools that provide menstruation education to boys and girls

EXAMPLE INDICATORS

RFLFVANT DEFINITIONS/NOTES

Staff knowledge

Output indicator 6a. Proportion of staff members that correctly answer questions about menstruation, including biological processes, common myths, and practical skills

Output indicator 6b. Proportion of staff members who feel comfortable talking about menstruation with students

Activity indicator 6.1 Proportion of staff members who have received training on menstruation education

The output indicator could be separated out based on each component. They are combined here to save space. Note: in some cases, asking how staff think others feel may be more effective than asking how they feel themselves.

Practical skills of girls with intellectual disabilities

Output indicator 7. Proportion of women/girls with intellectual disabilities who understand when to change their menstrual product, know where to get clean menstrual materials, and are able to change independently

Activity indicator 7.1 Proportion of enrolled households that are participating in the MHH programme to support women/girls with intellectual disabilities

Activity indicator 7.2 Proportion of schools (or other institution) that provide inclusive menstruation education

Note: Examples of outcome level indicators and associated questions for the knowledge and skills pillar are included in section 5.2.6 (cross-cutting outcomes).



SOURCE	example indicator/question	RESPONSE OPTIONS	NOTES
	Output indicator 1. Proportion of gi confident that they have the practical menstruation		
	KO1a How confident do you feel that you have the skills to change and dispose of or wash your menstrual materials?	Very confident 1 Confident 2 Unconfident 3 Very unconfident 4 No response 99	Adapted from the Simavi Ritu baseline survey [101].
	Activity indicator 1.1. Proportion of education for girls includes training of		
A 0	KA1.1a Does the menstruation education include training on how to change, and wash or dispose of materials used to absorb or catch menstrual blood?	Yes	Adapted from the MHM in emergencies toolkit [63].

Note: institutional administration (A), observation (O)

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES	
	Output indicator 2. Proportion of the boys, teachers) that correctly and tionship between menstruation a			
	KO2a From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	Yes	Based on DHS8 survey [28]. Correct knowledge of the fertile period is defined as 'halfway	
W/G M/B T, H	KO2b Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	 Just before her period begins Durinw period Right after her period has ended Halfway between two periods Other Don't know 	between two menstrual periods.'	
	Activity indicator 2.1. Proportion of schools where menstruation education for boys and girls includes information about the relationship between menstruation and pregnancy			
A 0	KA2.1a Does the menstruation education include clarifying information about the relationship between menstruation and pregnancy? Is this information provided to both boys and girls?	Yes, boys and girls	Adapted from a programme evaluation survey in Indonesia [61]. The specific question could be modified based on programme aims.	

Note: women/girls (W/G), men/boys (M/B), institutional administration (A), observation (O), teachers (T), health care providers (H)

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES
	Output indicator 3. Proportion of questions about common myths menstruation		
W/G T, H	KO3a I am going to read you some sentences between two people who are arguing and you have to tell me whose sentence is correct. One girl is named Maria and the other is named Martha. Sometimes Maria is correct and sometimes Martha is correct. You have to pay attention to tell me who is correct and who is making a mistake.		Adapted from the 'creative MHM KAP questions for basic facts' in the Save the Children guidelines [33] and the 2019 Simavi Ritu baseline survey [101] which used two dolls to
	Maria: A few days of pain just before and/or during menstruation is normal; it happens because the uterus is contracting. Martha: A few days of mild pain just before and/or during menstruation is dangerous.	Maria is correct*	represent the two girls. The names and details should be adapted to the context and programme aims. The questions on pain have been modified for clarity between primary dysmenorrhea (pain just before and during the menstruation that typically lasts 2-3 days) and secondary dysmenorrhea (pain that typically lasts longer than 2-3 days, including the end or after the menstruation phase which could be related to other health issues such as endometriosis, fibroids, or pelvic inflammatory diseases) [102], [103].
	Maria: Menstruation always happens as soon as you turn 13 years old. Martha: Menstruation commonly starts between 10 and 15 years of age, sometimes earlier or later.	Maria is correct	
	Maria: Menstruation happens every month on the same date. Martha: Menstruation happens every 21 to 35 days, depending on the woman.	Maria is correct	*Correct responses are noted with an asterisk.
	Activity indicator 3.1. Proportion tion education for girls includes in misconceptions about menstrua	nformation to clarify myths and	
A O	KA3.1a Does the menstruation education include clarifying information about common myths and misconceptions about menstruation?	Yes	Adapted from a programme evaluation survey in Indonesia [61]. Specific myths or misconceptions could be asked about based on the context.

Note: women/girls (W/G), men/boys (M/B), institutional administration (A), observation (O), teachers (T), health care providers (H)

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES
	Output indicator 4a. Proposition answer questions about how during menstruation		
	KO4a. I am going to read you some sentences between two people who are arguing and you have to tell me whose sentence is correct. One girl is named Maria and the other is named Martha. Sometimes Maria is correct and sometimes Martha is correct. You have to pay attention to tell me who correct and who is making a mistake.		Adapted from the 'creative MHM KAP questions for basic facts' in the Save the Children guidelines [33]. The names and details should be adapted to the context
	Maria: A girl should visit the health clinic if menstrual pain lasts more than a few days. Martha: A girl should not visit the health clinic even	Maria is correct*	and programme aims. The questions on pain have been modified for clarity between primary dysmenorrhea (pain just before and during the menstruation that typically
	if menstrual pain lasts the entire month.		lasts 2-3 days) and seconda- ry dysmenorrhea (pain that typically lasts longer than
W/G T, H	Maria: A girl who is menstruating can wash her hands but not her genitals.	Maria is correct 1 Martha is correct* 2 Don't know 98	2-3 days including the end or after the menstruation phase which could be related to
	Martha: You should wash the area around your vagina at least once a day when you are menstruating.		other health issues such as endometriosis, fibroids, or pelvic inflammatory diseases) [102], [103]. *Correct responses are noted with an asterisk. Note: This question could be adapted with the help of reproductive health experts to focus on menstrual disorders and when to seek health care services by describing the menstrual experiences of two people and asking who should talk to a health professional.
	Maria: The inside of the vagina is self-cleaning and does not need to be washed.	Maria is correct 1 Martha is correct* 2 Don't know 98	
	Martha: Menstrual blood makes the inside of the vagina dirty and it should be washed after menstruating.		
	Activity indicator 4.1a. Proposition of the menstruation education for girls how to take care of one's body	includes information about	
A O	KA4.1a Does the menstruation education include information about how to take care of one's body during menstruation?	Yes	Adapted from a question used in the Global Early Adolescent Study [64]. Specific actions could be asked about based on programme aims. Note: This question could be adapted with the help of reproductive health experts to ask about information on menstrual disorders.

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTE
	Output indicator 5. Proportion about menstruation	of girls (and boys) who know	
W/G M/B T, H	KO5a Do you know about menstruation?	Yes	Adapted from the UNICEF U-Report draft questionnaire [83] and programme eva- luations in Ethiopia [71] and Nepal [62].
W/G M/B T, H	KO5b Where did you learn about menstruation? (Check all that apply)	Mother/female caregiver Father/male caregiver Sister Brother Other family member Friend/peer Doctor/nurse or other person at a health centre Teacher Health service provider Religious leader Television Radio Book, magazine or news paper Internet Other Don't know No one / no source	Adapted from programme evaluations in Ethiopia [71], Indonesia [61] and Nepal [62]. This multiple response question could be simplified by asking about the main source of information. This question may be useful if the programme is using a particular way to share information such as through teachers.
	Activity indicator 5.1. Proportion menstruation education to boys		
A, O	KA5.1a Are boys and girls taught about menstruation?	Yes, boys and girls	Adapted from programme evaluation surveys in Indonesia [61] and Nepal [62].

Note: women/girls (W/G), men/boys (M/B), institutional administration (A), observation (O), teachers (T), health care providers (H)



SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES
	Output indicator 6a. Proportion tly answer questions about men processes, common myths, and	Responses from staff members to questions KO2a, KO3a, KO3b and KO4a could be used to measure this indicator.	
	Output indicator 6b. Proportion comfortable talking about menst		
	KA6b How comfortable do you feel sharing information about menstruation with students (or patients)?	Very comfortable	Based on UNESCO puberty education and menstrual hygiene management guidelines [9].
T H	How do you think most staff members (e.g. teachers) feel about teaching menstruation? If not taught, ask how they think staff would feel if asked to teach about menstruation related topics.	Very comfortable	
	Activity indicator 6.1. Proportion received training on menstruation table talking about menstruation	n education and feel comfor-	
A T H	KA6.1a Is menstruation education taught by school staff (e.g. teachers, school nurse)?	Yes	Adapted from a programme evaluation survey in Indonesia [61] and simplified based on expert feedback.
A T H	KA6.1b Have any staff members been trained on menstruation education?	Yes	Adapted from 2011 school guidelines in Afghanistan [60] as reported in [52]. This was highlighted as an important question by key informants as it suggests that accurate information is likely to be provided by trained staff who are more able to support people who menstruate.
А Т Н	KA6.1c What is included in staff member (e.g. teacher) training on menstruation education?	 Biological processes and reasons for menstruation Myths and misconceptions about menstruation Training on how to use and dispose of menstrual materials Training on how one should take care of their body during menstruation Training on how to support women and girls during menstruation 	Based on baseline survey on MHM interventions in schools in Indonesia [61]. A response option on training to support women and girls during menstruation was added based on MHH Global Advisory Group priorities [1].

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES
	Output indicator 7. Proportion of impairments who understand w product, know where to get clear able to change independently.	hen to change their menstrual	
Carers	KO7a Is the person you care for able to understand when she needs to change her menstrual product?	Yes	Based on the WaterAid Bishesta Campaign. Training manuals and other information can be found online. ³⁶ The specific
Carers	KO7b Does the person you care for know where to get clean menstrual materials?	Yes 1 No 2 N/A 99	questions should be modified based on the educational pro- gramme implemented. These questions are designed to be
Carers	KO7c Is the person you care for able to change her menstrual product independently?	Yes	answered by the person caring for a woman/girl with intellectual impairments.
	Activity indicator 7.1. Proportio are participating in the MHH progirls with intellectual impairment	gramme to support women/	Participation is based on a yes response to all items in the checklist below.
0	Menstrual storage bag near self-advocate's bed	Yes	Based on the WaterAid Bishes- ta Campaign. Training manuals and other information can be
0	Menstrual storage bag is well stocked	Yes	found online. ³⁷ The specific items should be modified
0	Carers using menstrual calendar to track menstruation	Yes	based on the programme implemented
	Activity indicator 7.2. Proportio tion) that provide inclusive mens		
Α	KA7.2a Is menstruation education available to students with disabilities in an accessible format? (select all that apply)	Yes, visual materials for hearing impaired Yes, oral/touch-based materials for visually impaired Yes, visual, interactive and simple materials for intellectually impaired No	Based on guidance in 'Menstrual Hygiene Matters' and expert input. No example questions were identified.
А	KA7.2b Is menstruation education provided to students with disabilities that is adapted to their specific needs (e.g. how to change pads with limited mobility)?	Yes	Based on guidance in 'Menstrual Hygiene Matters' [52] and expert input. No example questions were identified.

Note: institutional administration (A), observation (O)

 $^{36. \ \ \}text{Available at: https://washmatters.wateraid.org/publications/bishesta-campaign-menstrual-health-hygiene}$

^{37.} Ibid.

5.2.4 FACILITIES AND SERVICES

Facilities and services should allow for changing, washing, and/or disposing of materials and clothing, and for handwashing and bathing when needed. They should be private, clean, have water and soap available, and be acceptable to users during menstruation. Facilities or mechanisms for drying and/or disposing of used materials should be discrete, hygienic, safe and environmentally friendly. Adequacy of facilities and services is dependent on menstruator perspectives and is best monitored through interviews or questionnaires directly with people who menstruate, including assessment of stress and insecurity related to sanitation, as well as their confidence to use facilities [1], [16].

The JMP defines a 'private place to wash and change' as 'access to a private space for changing and disposing of materials and for washing hands, body and clothes with soap and water' which can be a bathroom or another place used by people who menstruate [25]. A number of guidelines and minimum requirements for female-friendly sanitation facilities in different contexts have been developed and published. They include ensuring that there is access to water and soap, adequate privacy, gender segregation, adequate lighting where appropriate, that toilets have an acceptable and appropriate menstrual waste disposal mechanism, and that bathing spaces have a discreet and appropriate drainage system [105], [106].

Questions on WASH facilities are available in existing literature for household, school and health care facilities, which could be adapted to other settings [24]-[26], [107]. The example questions for this section focus on facilities and services for menstrual health and hygiene that are beyond the existing recommended core questions on WASH. Questions should consider facilities and services at home and away from home (e.g. school), and the different needs of those using reusable and disposable products.

Each example indicator below is followed by questions that could be selected for (and adapted to) the context. Figure 5 provides an example of where facilities and services might fit into a theory of change for an MHH programme focused on educational impact.

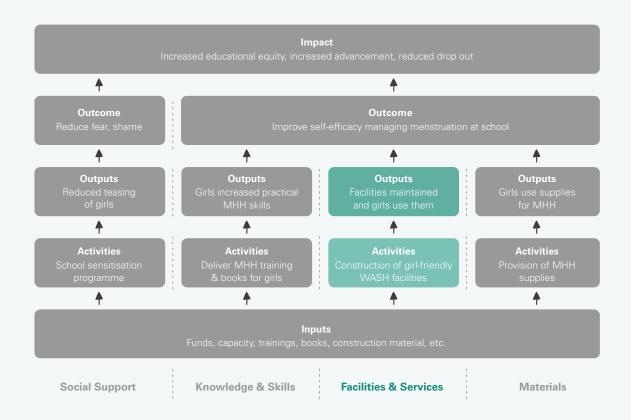


Figure 5. Example 'facilities and services' elements for MHH in relation to educational impact (adapted from ToC prepared by B. Caruso) [3]

Table 4. Example MHH output indicators for the facilities and services pillar

EXAMPLE INDICATORS* Female-friendly sanitation and changing facilities Output indicator 1. Proportion of [schools/health Indicators 1, 2 and 3 could be used to monitor the care facilities/households] with female friendly sanihighlighted elements of the example theory of tation change in Figure 5. Output indicator 2. Proportion of women/girls with female-friendly changing space at home and away from home (e.g. school) Output indicator 3. Proportion of women/girls who were able to change their menstrual materials when they wanted to while at [home/school/elsewhere] Output indicator 4. Proportion of women/girls using disposable products that are comfortable disposing their menstrual waste with the available methods Output indicator 5. Proportion of women/girls using Monitoring different settings may be needed. For reusable materials who were able to wash and dry example, some people who menstruate may use their reusable materials how and when they needed commercial sanitary pads during the school day and during their last menstrual period while at home and inexpensive cloth at home where they can change away from home (e.g. school) and wash more easily [108]. Output indicator 6. Proportion of [schools/health care facilities/workplaces/other] with a private area with facilities to manage menstruation that is accessible to those with limited mobility Output indicator 7. Proportion of women/girls with

disabilities (e.g. limited mobility) who were able to change when they wanted to while at home and

away from home

^{*}Examples of activity level indicators and associated questions for the facilities and services pillar were not identified. Examples of outcome level indicators and associated questions are included in section 5.2.6 (cross-cutting outcomes).

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTION			NOTES		
	Female-friendly sanitation and changing facilities						
	Output indicator 1. Proportion of households] with female friendly						
O	F1a. Observe if the toilets and/or changing spaces used by women and girls have the following attributes. If there are multiple toilets or changing rooms, respond yes if at least one has the attribute.	Covered bin for disposal of menstrual materials Clear sign instructing users to dispose of menstrual waste in the bin Private (others are prevented from looking in) Lock or door latch that is reachable by users Clean (no strong smell, flies, or visible faeces on floor, walls, pan) Lighting (functional lighting or natural light if day-use only) Shelf or hook for hygienically storing belongings during use Mirror where users can check clothing for stains Water Soap	Y		Elements of 'female-friendly' or 'menstruation-friendly' toilets are included based on existing literature [63], [106].		



SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTION		NOTES
	Output indicator 2. Proportion changing space at home and aw	of women/girls with female-friendl /ay from home (e.g. school)	У	
W/G	F2a. During your menstrual period, while at home, was the place you changed your menstrual materials: Check 'yes' or 'no' for each	Clean? Private (you did not worry you could be seen)? Safe (you did not worry you could be harmed)? Able to be locked? Supplied with water? Supplied with soap? Supplied with a mirror so you could check clothing for stains? Supplied with a shelf and hook for storing belongings during use? Well-lit (have sufficient lighting to comfortably see)? Supplied with a covered	Y N	female friendly' or 'menstruation friendly' toilets are included based on existing literature [63], [106]. Privacy and safety can be subjective, difficult to define, and include many factors beyond the presence of a lockable door, and facilities may be considered private and safe even without a locking mechanism depending on the context [72]. Asking about worries of being
		bin for disposal of menstrual materials? Well-ventilated (had windows or outlets for some flow of air?)		seen or harmed, respectively, may be a more effective way to assess the privacy and safety of MHH facilities [16], [73].
	F2b. During your menstrual period, while at school , was the place you changed your	Clean? Private (you did not worry you could be seen)?		
	menstrual materials: Check 'yes' or 'no' for each	Safe (you did not worry you could be harmed)?		
		Able to be locked? Supplied with water?		
		Supplied with soap? Supplied with a mirror so you could check clothing for stains?		
		Supplied with a shelf and hook for storing belongings during use?		
		Well-lit (have sufficient lighting to comfortably see)?		
		Supplied with a covered bin for disposal of menstrual materials?		
		Well-ventilated (had windows or outlets for some flow of air?)		

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTION		NOTES
0	F2c. Where are the toilets located?	Within the building Outside the building, but on-premises Off-premises	2	JMP expanded question for WASH in schools [26].
Α	F2d. How many times per week are the toilets cleaned?	At least once per day	2	JMP expanded question for WASH in schools [26].
W/G	F2e. During your last menstrual period, while you were at home, where did you most often change your used menstrual materials (pads, cloths, or other menstrual materials)? (select one)	Household toilet/latrine Toilet/latrine shared with others outside your household Sleeping area or bedroom Household bathroom/washing space (separate from toilet/latrine) Bathroom/washing space (separate from toilet/latrine) shared with others outside your household Outside/bush/field Other	1 2 3 4 5 6 7	Based on the PMA2020 and the draft MPQ [69], [74]. The term 'menstrual materials' should be modified as needed to ensure the term is understood by respondents in a particular context.
W/G	F2f. During your last menstrual period, while you were at school (or work), where did you most often change your menstrual materials?	Toilet/latrine		Based on the PMA2020 and the draft MPQ [69], [74]. The term 'menstrual materials' should be modified as needed to ensure the term is understood by respondents in a particular context.



SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTION	NOTES
		of women/girls who were able to change they wanted to while at [home/school/	
A W/G	F3a. When are students permitted to use the toilets/latrines?	At all times	JMP expanded question for WASH in schools [26].
W/G	F3b. During your last menstrual period, when at home, did you worry that you would not be able to change your menstrual materials when you needed to?	Yes	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally.
W/G	F3c. During your last menstrual period, when at school, did you worry that you would not be able to change your menstrual materials when you needed to?	Yes	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally.
W/G	F3d. During your last menstrual period, when at home, were you able to change your menstrual materials when you wanted to?	Yes	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally.
W/G	F3e. During your last menstrual period, when at school, were you able to change your menstrual materials when you wanted to?	Yes	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally.
W/G	F3f. During your last menstrual period, how many times did you change your menstrual material on the heaviest day of your period (day = 24 hours)? ³⁸ Select one	 1 time (wear until the next day) 2 times (e.g. morning and evening) 3 times (e.g. morning, evening and once during day) 4 times (e.g. morning, evening and twice during day) More than 4 times 	From the draft MPQ [74].

Note: women/girls (W/G), institutional administration (A), observation (O)

^{38.} Based on the draft Menstrual Practices Questionnaire (MPQ). More information is available at: www.menstrualpracticemeasures.org.

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTION	NOTES
	Facilities for disposal and reuse		
	Output indicator 4. Proportion of products that are comfortable diswith the available methods		
W/G	F4a. During your last menstrual period, while at home, where did you most often dispose of your used menstrual materials?	□ Into the toilet/latrine □ Burned □ Bin in latrine □ Bin elsewhere □ Community garbage collection point □ Buried/bush/waterway □ Other □ N/A – did not dispose of any materials (including reusables)	Based on the PMA2020 and the draft MPQ [69], [74]. The term 'menstrual materials' should be modified as needed to ensure the term is understood by respondents in a particular context
W/G	F4b. During your last menstrual period, while at school, where did you most often dispose of your used menstrual materials?	□ Into the toilet/latrine □ Burned □ Bin in latrine □ Bin elsewhere □ Community garbage collection point □ Buried/bush/waterway □ Other □ Took home to dispose of □ N/A – did not dispose of any materials (including reusables)	Based on the PMA2020 and the draft MPQ [69], [74]. The term 'menstrual materials' should be modified as needed to ensure the term is understood by respondents in a particular context.
W/G	F4c. During your last menstrual period, while at home, were you able to dispose of your used menstrual materials in the way that you wanted?	Yes	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally. The term 'menstrual materials' should be modified as needed to ensure the term is understood by respondents in a particular context.
W/G	F4d. During your last menstrual period, while at school, were you able to dispose of your used menstrual materials in the way that you wanted?	Away from school during last period	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally. The term 'menstrual materials' should be modified as needed to ensure the term is understood by respondents in a particular context.

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTION	NOTES
W/G A	F4e. How is menstrual waste (e.g. used sanitary pads) disposed of?	Combined with general waste and sent to landfill Incinerated Burned (with or separate from general waste) Buried (with or separate from general waste) Sent to special facility for disposal of medical waste N/A, used menstrual materials are not collected Don't know	Adapted from the Ban- gladesh National Hygiene Survey [109].

Note: women/girls (W/G), institutional administration (A), observation (O)



SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTION	NOTES
	Output indicator 5. Proportion of materials who were able to wash rials how and when they needed period while at home and away f	n and dry their reusable mate- during their last menstrual	For each, the term 'menstrual materials' should be modified as needed to ensure the term is understood by respondents in a particular context.
W/G	F5a. During your last menstrual period, did you wash and reuse any of your menstrual materials?	Yes	Adapted from the draft MPQ [74].
W/G	F5b. During your last menstrual period, were you able to wash your menstrual materials whenever you needed?	Yes	Adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally
W/G	F5d. During your last menstrual period, did you have enough water and soap or detergent to wash or soak your menstrual materials?	Yes	Adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally.
W/G	F5f. During your last menstrual period, was there a space to dry reusable menstrual materials that you were comfortable with?	Yes	Adapted from the draft MPQ [74].
0	F5h. Is there a space to dry reusable menstrual materials (at the school)?	Yes	Adapted from the draft MPQ [74].

Note: women/girls (W/G), institutional administration (A), observation (O)

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES		
Facilities for people who menstruate and have disabilities					
	Output indicator 6. Proportion of workplaces/other] with a private menstruation that is accessible to	area with facilities to manage			
0	F6a. Is there a toilet or private changing space that is accessible to those with limited mobility?	Yes	Based on guidance in 'Menstrual Hygiene Matters' [52] and expert input. No example questions were identified.		
0	F6b. Does this space have a covered bin?	Yes	Based on guidance in 'Menstrual Hygiene Matters' [52] and expert input. No example questions were identified.		
0	F6c. Does this space have water available inside?	Yes	Based on guidance in 'Menstrual Hygiene Matters' [52] and expert input. No example questions were identified.		
0	F6d. Does this space have soap available inside?	Yes	Based on guidance in 'Menstrual Hygiene Matters' [52] and expert input. No example questions were identified.		
	Output indicator 7. Proportion of (e.g. limited mobility) who were wanted to while at home and av	able to change when they			
W/G	F7a. For each of the following, would you say that (you/name of child or person being cared for) has: 1) no difficulty, 2) some difficulty, 3) a lot of difficulty, or 4) that (you/he/she) cannot at all? Select all applicable	 Difficulty seeing even with glasses or contact lenses Difficulty hearing even with a hearing aid Difficulty walking without equipment or assistance Difficulty learning or understanding things Difficulty with self-care such as feeding or dressing 	Based on a simplified version of the questions included in the MICS6 module on child functioning, which can be asked of a parent or care giver [40], [77]. The question can be rephrased to ask the menstruator directly but should be adapted to maintain sensitivity.		
W/G	F7b. During your last menstrual period, when at home, were you able to change your menstrual materials when you wanted to?	Yes	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally.		

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES
W/G	F7c. During your last menstrual period, when at school, were you able to change your menstrual materials when you wanted to?	Yes 1 No 2 Away from school during 1 last period 3 Don't know or don't remember 9	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally.

Note: women/girls (W/G), observation (O)



5.2.5 MATERIALS

Materials should be affordable, acceptable (and appropriate), and accessible to people who menstruate, including products for pain management. The JMP defines menstrual materials as hygienic materials used to absorb, collect and dispose of menstrual blood which may be disposable³⁹ or reusable [25]. Examples are sanitary pads, cloths, tampons or cups, and include purchased products as well as non-purchased materials.

Example indicators are presented below followed by questions that could be selected from and adapted to the context. Figure 6 provides an example of where materials might fit into a theory of change for an MHH programme focused on educational impact.

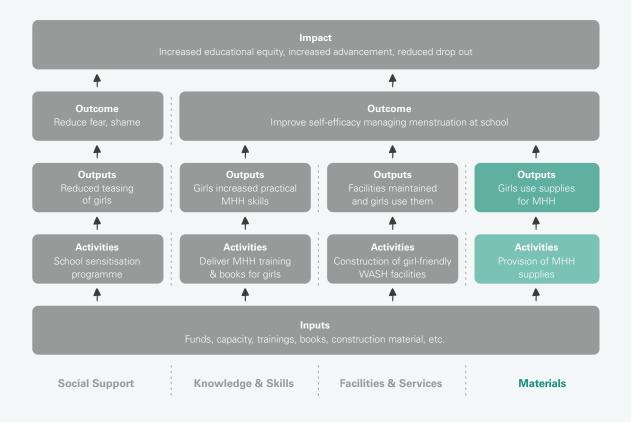


Figure 6. Example of where MHH materials might fit in relation to educational impact (adapted from ToC prepared by B. Caruso) [3]

^{39.} While the environmental impacts of disposable products is a topic that deserves greater research and consideration, women should be able to use their preferred materials without additional shame or judgement. Menstrual products are estimated to comprise approximately 0.5% of the solid waste produced by women on their menstrual period and significantly less when averaged across the entire solid waste stream [120], [121]. Reusable products may be more environmentally friendly, but research is still ongoing regarding health impacts, and while people who menstruate should have the option to use reusable products, they have a right to choose between reusable and other products based on what best meets their needs.

 Table 5. Example MHH output indicators for the materials pillar

EXAMPLE INDICATORS*	RELEVANT DEFINITIONS / NOTES
Accessibility of materials	
Output indicator 1. Proportion of women/girls who were able to access menstrual materials when they needed them during their last menstrual period	Indicator could be used to monitor the highlighted elements of the example ToC in Figure 6.
Acceptability of materials	
Output indicator 2 . Proportion of women/girls that used their preferred menstrual material during their last menstrual period	Questions M2a and M1d could also be used to inform an indicator on affordability specifically.
Output indicator 3. Proportion of women/girls who felt comfortable wearing their menstrual materials during their last menstrual period while at home and away from home (e.g. school)	Monitoring different settings may be needed. For example, some people who menstruate may use commercial sanitary pads during the school day and inexpensive cloth at home where they can change and wash more easily [108].
Pain management	
Output indicator 4. Proportion of women/girls who have access to resources for menstrual pain management	
Output indicator 5. Proportion of women/girls who are able to effectively manage menstrual pain with the resources available to them	

Note: Examples of activity level indicators and associated questions for the materials pillar were not identified. Examples of outcome level indicators and associated questions are included in section 5.2.6 (cross-cutting outcomes).



50	URCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES
		Accessibility of materials		
		Output indicator 1. Proportion of to access menstrual materials we their last menstrual period		
W	I/G	M1a. If you need to get menstrual materials, where would you get them?	 Shop, street vendor or pharmacy Health facility Family member Friend Teacher Don't know 	Adapted from Young Lives Survey question about contraception [76].
W	//G	M1b. During your last menstrual period, could you get more of your menstrual materials when you needed to?	Yes	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally.
	I/G A O	M1c. Are menstrual materials (e.g. pads) available on school (facility/work) premises?	Yes, for free 1 Yes, for purchase 2 Yes, to borrow 3 No 4 Don't know 98	Based on survey in Bhutan [68], JMP expanded question [26], and draft question proposed for the Indonesia EMIS (unpublished).
W	I/G	M1d. Is there a shop within 20 minutes walking distance of your home where you can buy materials to absorb or catch menstrual blood (e.g. pads, tampons, cups)?	Yes	Based on programme evaluation surveys in Ethiopia [71] and Nepal [62].
W	//G	If there is a shop, do you buy menstrual materials from the local shop?	Yes	
		If you do not buy menstrual materials from the local shop, why not? (select all that apply)	Someone else purchases them for me (e.g. mother provides, don't know where she gets them) Expensive Poor quality Embarrassed Prefer to use non-commercial materials No money Other (specify)	Multiple response questions are more challenging to analyse. This can be broken up into multiple yes/no questions for simplified analysis. This question and M2a could also be used to inform an indicator on affordability specifically.
W	I/G	M1e. Is the vendor where you purchase menstrual materials male or female?		Based on USAID experience that gender of vendors can influence purchasing.

SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES
W/G	M1f. If you start to menstruate when you are at school/work, how do you usually manage?	You do nothing but stay at school/work Use materials that you brought with you in case your menstruation starts Ask friends for materials Purchase material from canteen on premises Go home change and come back Other (please specify) Don't Know Not Applicable	Adapted from a WaterAid survey of MHH in schools in Pakistan (unpublished). This question can also be used to track participation in school/ work by analysing the proportion that stay on premises (i.e. do not go home).
W/G	M1g. During your last menstrual period, did you have enough materials to change them as often as you wanted?	Never	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally.
W/G	M1h. During your last menstrual period, did you worry about how you would get more menstrual materials if you ran out?	Never	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally.



SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES
	Acceptability of materials		
	Output indicator 2. Proportion of preferred menstrual material dur		
W/G	M2a. During your last menstrual period, what materials did you use most often to absorb or catch menstrual blood? Read options	Cloth 1 Reusable sanitary pads 2 Single-use sanitary pads 3 Tampons 4 Menstrual cup 5 Toilet paper 6 Cotton wool 7 Underwear alone 8 Other 9 No materials used 10	Based on JMP core question on WASH in households [25], DHS8 [28] and MICS6 [27] woman's questionnaires, and the MPQ [74]. Multiple response questions are more challenging to analyse. This question could be simplified by asking about the main type. This question can be used to track if people who menstruate use menstrual materials (including cloth, pads, tampons, and cups). It does not provide information on sufficiency, appropriateness or hygiene/safety [75].
	Of all the different menstrual material options, which one would you prefer if you could choose anything you wanted? Read options	Cloth 1 Reusable sanitary pads 2 Single-use sanitary pads 3 Tampons 4 Menstrual cup 5 Toilet paper 6 Cotton wool 7 Underwear alone 8 Other 9 No materials used 10	It may be helpful to ask about practices in different settings. For example, some people who menstruate may use commercial sanitary pads during the school day and inexpensive cloth at home where they can change and wash more easily [108]. If absorbent underwear such as 'period panties' are common, the underwear alone response could be separated into 'Absorbent underwear' and 'Underwear alone (non-absorbent)'.
	If the material reportedly used and preferred don't match: You mentioned that you mostly used [response from material used], during your last menstrual period, but [response from preferred material] is your preferred. What prevents you from using your preferred material?	Not available from reliable / local vendor	Adapted from the draft UNICEF U-Report SMS-based survey questions [83]. This question and M1d could also be used to inform an indicator on affordability specifically. Tracking the proportion that respond that they don't get a choice can also inform an indicator on decision-making, such as example output indicator 6.2.

SOURCE EXAMPLE INDICATOR/QUESTION RESPONSE OPTIONS

Output indicator 3. Proportion of women/girls who felt comfortable wearing their menstrual

		of women/girls who felt comfortal trual period while at home and awa	
W/G	M3a. During your last menstrual period, were the materials you used to absorb or catch menstrual blood comfortable?	Never	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally.
W/G	M3b. During your last menstrual period, did you worry that the materials you used to absorb or catch menstrual blood would allow blood to pass to through to your clothing?	Never	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally.
W/G	M3c. During your last menstrual period, did you worry that the materials you used to absorb or catch menstrual blood would move from place while you were wearing them?	Never	Question adapted from the MPNS-36 [16]. These questions should not be used to represent the measure more generally.

Note: women/girls (W/G)



	SOURCE	EXAMPLE INDICATOR/QUESTION	RESPONSE OPTIONS	NOTES
		Pain management		
		Output indicator 4. Proportion access to resources for menstru		
	W/G A O	M4a. What resources or products are available at school to help manage menstrual pain?	 Pain medication A room where they can rest Hot water pillow Hot drink Other (specify) 	Combination of various surveys from Lebanon [110] and Ethiopia [71]. This question has not been used previously.
		M4b. What resources or products are available at home to help manage menstrual pain?	 Pain medication A room where they can rest Hot water pillow Hot drink Other (specify) 	Combination of various surveys from Lebanon [110] and Ethiopia [71]. This question has not been used previously
		Output indicator 5. Proportion effectively manage menstrual parto them		
		M5a. Do you have pain during your menstrual period?	No hurt Hurts a little bit Hurts a little more Hurts even more Hurts a whole lot Hurts worst	Based on the 'Facial Pain Rating Scale' [111], [112]. Provides information to support disaggregation by pain level experienced for the following questions.
	W/G	Which resources, products or techniques do you use to manage menstrual pain	 □ Pain medication □ A room where they can rest □ Hot water pillow □ Hot drink □ Other (specify) 	Combination of various surveys from Lebanon [110] and Ethiopia [71]. This question has not been used previously.
	Do these resources, products or techniques reduce your pain enough that you are able to participate in activities as normal (i.e. when not menstruating	Yes	This question has not been used previously.	
		Are pain products or techniques readily available when you need them?	Yes, for free 1 Yes, for purchase 2 No 3 Don't know 98	Based on menstrual material availability question in a survey in Bhutan [68], JMP expanded question [26], and draft question proposed for the Indonesia EMIS (unpublished).

Note: women/girls (W/G), institutional administration (A), observation (O)

5.2.6 CROSS—CUTTING OUTCOMES

Impacts of MHH programmes may include increased learning achievement, improved informed decision-making around contraceptive practices, greater gender equality, and improved mental health and wellbeing [1], [4], [14]. These impacts – which are aligned to SDGs – are difficult to measure and change can be challenging to assess over the typical programme lifespan of three to five years. Though most programmes will identify these impacts in their theory of change, most programmes are not expected to monitor or evaluate these changes unless the programme is sufficiently long-term and resources (including funding and expert guidance) are available.

Most programmes expect to measure shorter-term outcomes. Some outcomes have already been identified under their corresponding programme pillar (sub-sections 5.2.2, 5.2.3, 5.2.4, and 5.2.5); other outcomes are cross-cutting. A cross-cutting outcome means that its achievement may depend on the delivery of multiple outputs and activities, across the theory of change. Examples include menstrual self-efficacy and perceptions that practices and environments meet the self-identified needs of people who menstruate [7], [16]. Outcomes of interest for a programme will vary based on the context, and the needs identified through review of existing evidence or formative research, and should be identified and included in the theory of change (sub-section 2.2.1 considers the selection and definition of appropriate indicators in more detail). Figure 7 provides an example of where cross-cutting outcomes might fit into a theory of change for an MHH programme focused on educational impact.

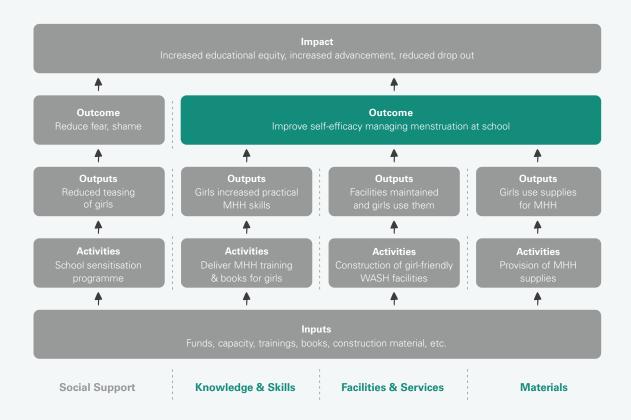


Figure 7. Example of cross-cutting outcomes in relation to educational impact (adapted from ToC prepared by B. Caruso) [3]

This section focuses on two example cross-cutting outcomes for MHH programmes: menstrual self-efficacy, and perceptions that practices and environments meet the self-identified needs of people who menstruate [7], [16], [81]. Tools from other sectors could also be adapted, such as the negative self-image and public attitudes sub-scales of the HIV self-stigma scale [113] which have been used to measure self-stigma related to MHH [6]. Though there may be other cross-cutting outcomes of interest (e.g. well-being or gender equality related to menstruation) these two measures are relatively more advanced in their development and validation. They could be used to measure outcomes as a programme goal, or to assess intermediate outcomes and assumptions in the theory of change between interventions and impacts, such as school attendance [16]. Educational outcomes, mainly absenteeism, have been a focus of many MHH programme assessments to date [114]-[116]. However, absenteeism related to menstruation is difficult to measure [1].

Some indicators of attitudes and beliefs have multiple dimensions and are not straightforward to assess. For example, individual questions, such as asking if boys and girls believe menstruation is a secret, can provide insight into stigma, but cannot, on their own, be used as an indicator of 'stigma' more generally. For these less-tangible aspects of MHH, 'measures' or 'scales' consisting of multiple questions can be helpful [21], [23].

One measure of girls' and women's experience of menstruation is the Menstrual Practice Needs Scale (MPNS-36)⁴¹ which measures the extent to which menstrual practices and environments meet perceived needs by asking girls and women directly, rather than using proxies such as the presence of facilities or materials [16]. The scale focuses on experiences of people who menstruate at home and at school, but the school-specific sub-scale could be adapted to understand experiences at workplaces or other settings away from home (**Box 6**).

Another measure is the Self-efficacy in Addressing Menstrual Needs Scale (SAMNS). Self-efficacy refers to beliefs that individuals hold about their capability to carry out actions to influence the events that affect their lives, making it an important dimension of empowerment and participation. The measure may therefore be a useful tool for programmes that want to track changes in the belief people who menstruate have in their ability to manage their menstruation [6]. The original scale includes 26 questions which are divided into three sub-scales: menstrual hygiene preparation and maintenance (seventeen questions), menstrual pain management (five questions), and executing stigmatised tasks (four questions), although a shorter version is also in development.⁴² Each question is answered on a response scale of 0 to 100 (increments of 10) after an enumerator conducts an activity to ensure that respondents understand the format of the questions and how to answer them using the response scale (see **Box 5** in sub-section 2.2.4). This measure may be a useful tool for monitoring programmes that aim to improve self-efficacy of people who menstruate or programmes where self-efficacy is an intermediate outcome, to achieve impacts such as increased school attendance or improved broader psychosocial well-being.

^{40.} Further discussion of evidence gaps and potential outcomes to measure is available in the literature [1], [4], [14].

^{41.} More information is available at www.menstrualpracticemeasures.org.

^{42.} Based on personal communication with Erin C. Hunter (University of Sydney). Publication and SAMNS questions forthcoming.

Box 6. Example of cross-cutting MHH measure: Menstrual Practice Needs Scale (MPNS-36)

The 36 questions of the MPNS-36 can be asked as a paper and pencil survey or other means. Each question has response options of never (0), sometimes (1), often (2), and always (3) with pie chart images to help clarify the scale. A mean is calculated for all 36 questions, as well as for each of the six sub-scales, including material and home environment needs (eleven questions), transport and school environment needs (five questions), material reliability concerns (three questions), change and disposal insecurity (nine questions), reuse needs (five questions), and reuse insecurity (three questions).

The sample questionnaire below is intended for example purposes only and the complete formatted tool, instructions and results of validation testing should be consulted before use [16].

	During my last menstrual period	Never	Sometimes	Often	Always
1	My menstrual materials were comfortable	0	1	2	3
2	I had enough of my menstrual materials to change them as often as I wanted to	0	1	2	3
3	I was satisfied with the cleanliness of my menstrual materials	0	1	2	3
4	I could get more of my menstrual materials when I needed to	0	1	2	3
10	I felt comfortable storing my menstrual materials until my next period	0	1	2	3
11	I was able to wash my hands <u>when</u> I wanted to	0	1	2	3
12	I was able to immediately dispose of my used menstrual materials	0	1	2	3
13	I was concerned that others would see my used menstrual materials in the place I disposed of them	0	1	2	3
16	When at home, I was able to change my menstrual materials when I wanted to	0	1	2	3
17	When at home, I was satisfied with the place I used to change my menstrual materials	0	1	2	3
18	When at home, I had a clean place to change my menstrual materials	0	1	2	3
	Material and home environment <u>needs</u>	Mean s	core of above	items:	
8	I felt comfortable carrying spare menstrual materials with me outside my home	0	1	2	3
9	I felt comfortable carrying menstrual materials to the place where I changed them	0	1	2	3
23	When at school, I was able to change my menstrual materials when I wanted to	0	1	2	3
24	When at school, I was satisfied with the place I used to change my menstrual materials	0	1	2	3
25	When at school, I had a clean place to change my menstrual materials	0	1	2	3
	Transport and school environment <u>needs</u>	Mean s	core of above	items:	
5	I worried that my menstrual materials would allow blood to pass through to my outer garments	3	2	1	0
6	I worried that my menstrual materials would move from place while I was wearing them	3	2	1	0
7	I worried about how I would get more of my menstrual material if I ran out	3	2	1	0

		Mean score of above items:			
14	I worried about where to dispose of my used menstrual materials	3	2	1	0
15	I was concerned that others would see my used menstrual materials in the place I disposed of them	3	2	1	0
19	When at home, I worried that I would not be able to change my menstrual materials when I needed to	3	2	1	0
20	When at home, I worried that someone would see me while I was changing my menstrual materials	3	2	1	0
21	When at home, I worried that someone would harm me while I was changing my menstrual materials	3	2	1	0
22	When at home, I worried that something else would harm me while I was changing my menstrual materials (e.g., animals, insects, unsafe structure)	3	2	1	0
26	When at school, I worried that I would not be able to change my menstrual materials when I needed to	3	2	1	0
27	When at school, I worried that someone would see me while I was changing my menstrual materials	3	2	1	0
28	When at school, I worried that someone would harm me while I was changing my menstrual materials	3	2	1	0
	Change and disposal insecurity	Mean s	core of above	items:	
	Those reusing materials				
29	Those reusing materials I had enough water to soak or wash my menstrual material	0	1	2	3
29		0	1	2	3
	I had enough water to soak or wash my menstrual material I had access to a basin to soak or wash my menstrual materials				
30	I had enough water to soak or wash my menstrual material I had access to a basin to soak or wash my menstrual materials whenever I needed it	0	1	2	3
30 31	I had enough water to soak or wash my menstrual material I had access to a basin to soak or wash my menstrual materials whenever I needed it I was able to wash my menstrual materials when I wanted to	0	1	2	3
30 31 32	I had enough water to soak or wash my menstrual material I had access to a basin to soak or wash my menstrual materials whenever I needed it I was able to wash my menstrual materials when I wanted to I had enough soap to wash my menstrual materials	0 0 0	1 1 1	2 2 2 2	3 3
30 31 32	I had enough water to soak or wash my menstrual material I had access to a basin to soak or wash my menstrual materials whenever I needed it I was able to wash my menstrual materials when I wanted to I had enough soap to wash my menstrual materials I was able to dry my materials when I wanted to	0 0 0	1 1 1	2 2 2 2	3 3
30 31 32 33	I had enough water to soak or wash my menstrual material I had access to a basin to soak or wash my menstrual materials whenever I needed it I was able to wash my menstrual materials when I wanted to I had enough soap to wash my menstrual materials I was able to dry my materials when I wanted to Reuse needs I worried that someone would see me while I was washing my	0 0 0 0 Mean s	1 1 1 1 core of above	2 2 2 2 items:	3 3 3 3
30 31 32 33 34	I had enough water to soak or wash my menstrual material I had access to a basin to soak or wash my menstrual materials whenever I needed it I was able to wash my menstrual materials when I wanted to I had enough soap to wash my menstrual materials I was able to dry my materials when I wanted to Reuse needs I worried that someone would see me while I was washing my menstrual materials I worried that my menstrual materials would not be dry when I needed	0 0 0 0 Mean s	1 1 1 1 core of above	2 2 2 2 items:	3 3 3 3
30 31 32 33 34 35 36	I had enough water to soak or wash my menstrual material I had access to a basin to soak or wash my menstrual materials whenever I needed it I was able to wash my menstrual materials when I wanted to I had enough soap to wash my menstrual materials I was able to dry my materials when I wanted to Reuse needs I worried that someone would see me while I was washing my menstrual materials I worried that my menstrual materials would not be dry when I needed them I worried that others would see my menstrual materials while they	0 0 0 0 0 Mean s 3 3 3	1 1 1 1 core of above 2 2	2 2 2 items: 1 1	3 3 3 3 0



MHH MONITORING GAPS AND AREAS REQUIRING FURTHER RESEARCH



MHH MONITORING GAPS AND AREAS REQUIRING FURTHER RESEARCH

This resource is based on relevant documents identified through internet searches, document review for secondary sources, and key informants. The questions and guidance included within were developed and/or reviewed by MHH experts from a variety of organisations and backgrounds⁴³. The questions build on work done by others and a variety of resource materials including guidance documents, education management information systems (EMIS) questionnaires, international survey programmes (such as MICS, DHS, PMA2020), programme level instruments, and others.

Indicators and questions were extracted from 101 survey instruments and guidance documents.⁴⁴ Resources were published between 1965 and 2019, with a median publication year of 2016. Sources span the WASH, education and health sectors, many with a specific focus on adolescent development and participation, gender, and child protection. Many are from the education sector and focus on the school setting, where a large number of MHH programmes have been implemented. The list of resources is not comprehensive.

The authors would like to stress that the process of compiling this guidance has confirmed there are significant gaps in MHH sector monitoring, which are not addressed by this guidance and which would benefit from increased research. These gaps include indicators and questions related to access to health care services, particularly for menstrual disorders; equitable gender norms; activity level indicators, particularly for market development and scale-up; and menstrual management for people with various types of disabilities. A future version of this document is planned, which aims to address these gaps, in collaboration with additional partners.

^{43.} A full list of contributors is in the Acknowledgements section.

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ANNEX I.

WAYS TO REVIEW AND STRENGTHEN THE ENABLING ENVIRONMENT FOR MHH

The following checklist is based on the UNICEF's 'Guidance on Menstrual Health and Hygiene' [3], the WSSCC 'Strategic Plan 2017-2020' [117] and key informant feedback, and is categorised based on the Sanitation and Water for All (SWA) 'Building Blocks'. While further research and review is needed to identify specific key elements of the MHH enabling environment, the following checklist can be used as a starting point to help understand and track progress toward an improved enabling environment for MHH in a given context.

SECTOR POLICY AND STRATEGY

Include references to MHH in relation to the achievement of associated SDGs, such as SDG6, 4, 5, 6 and 8, into National development targets and indicators.
Include MHH in education policy, costed plans, strategies and guidelines in both WASH in schools programmes and in community-based programmes for out-of-school girls.
Include MHH in WASH policies, strategies, guidelines, costed plans, and regulations and standards (such as for construction and maintenance).
Include MHH in national and sub-national programmes targeting WASH in households, schools, health care facilities and workplaces.
Include MHH in health sector policies, costed plans, strategies and guidelines, including standards for WASH in health care facilities and including linkages to HIV programmes.
Include MHH in occupational health and safety policies for work places.
Make reference to specify actions for reaching girls with disabilities, out of school girls, $\&$ transgender men or non-binary persons with MHH programmes.
Use gender-related data for decision-making and programme prioritisation
Include MHH in policies, strategies and/or regulatory frameworks that promote gender equality and the empowerment of women and girls.
Integrate Gender and WASH-related stigma and discrimination issues into sector deliberations and planning.

^{45.} The SWA 'Building Blocks' capture five key elements that the WASH sector must have in place, to be able to deliver sustainable services and progressively eliminate inequalities in access. They are seen as crucial for a well-functioning WASH sector.

INSTITUTIONAL ARRANGEMENTS
Identify lead agencies for MHH in households and in institutions at each level (national, regional, district and local) with clear accountabilities, roles and responsibilities for relevant ministries and other government departments – e.g. responsibility for planning, implementing and monitoring MHH in schools clearly allocated between health, education and WASH and central and local levels.
Establish a coordination mechanism for MHH for ministries responsible for education, health, and water and sanitation that regularly meets and discusses MHH.
Incorporate MHH into the work of ministry of health departments responsible for adolescent development, health and wellbeing, sexual and reproductive health and rights and HIV/AIDS prevention.
Produce a stakeholder mapping for MHH which includes government, civil society (including youth, women's, religious, and other relevant organisations).
Hold specific MHH-related advocacy events (such as participating in Menstrual Hygiene Day). Include MHH expertise at the ministry for women's affairs (or similar).
SECTOR FINANCING
SECTOR THINAINCHIO
Complete a costing for interventions required to promote MHH knowledge & skills, materials & services, social support, etc.
Include allocations for promoting MHH in households, schools, health care facilities and work- places into public sector budget line at national, regional or district level
Include references to MHH in bilateral and multilateral grants and loan agreements for the WASH, health, or education sectors, and associated monitoring frameworks.
Include an (adequate) allocation to support MHH in health, education and WASH sector budgets.
PLANNING, MONITORING AND REVIEW
Carry out formative research to establish MHH taboos, norms and practices and the priorities of girls and women.
Programmes that include MHH interventions have a clear theory of change and indicators for MHH.
Include indicators on MHH in education and health management information systems (EMIS/ HMIS) that are aligned with the JMP recommended indicators.
Ensure that education and health system incentives/recognition structure include gender outcomes.
Include MHH in evaluations of relevant education, health and WASH programmes (e.g. WASH in schools or workplaces).
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CAPACITY DEVELOPMENT
Produce information, education and communication campaigns designed to increase public awareness of MHH among girls and boys, adolescents, men and women.
Include MHH in regular government training programmes for education professionals.
Include MHH in regular government training programmes for health professionals. Create training opportunities for other professionals to learn about and gain confidence in supporting MHH.

ANNEX 2.

KEY RESOURCES

MHH measures

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- Hennegan, J., 'Menstrual practice measures (resource website)' 2019. Available at: www.menstrualpracticemeasures.org.

Global monitoring

- UNICEF and WHO, Core Questions and Indicators for Monitoring WASH in Schools in the Sustainable Development Goals (version June 2018), New York, 2016. Available at: www.washdata.org/sites/ default/files/documents/reports/2018-08/SDGs-monitoring-wash-in-schools-2018-August-web2.pdf.
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Participation

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Ethical considerations

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- UNICEF, UNICEF Procedure for Ethical Standards in Research, Evaluation, Data Collection and Analysis, 2015. Available at: www.unicef.org/media/54796/file.
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Formative research

 Emory University and UNICEF, 'WASH in Schools Empowers Girls' Education: Tools for Assessing Menstrual Hygiene Management in Schools', 2013. Available at: www.unicef.org/wash/schools/files/ WinS_Empowers_Girls_Education_Tools_For_MHM_Booklet(1).pdf.

Selecting indicators

WEDC, Selecting Water, Sanitation and Hygiene Indicators, 2012. Available at: https://www.wedc-knowledge.lboro.ac.uk/resources/booklets/G011-Selecting-WASH-indicators-on-line.pdf (WASH-focused but the guidance is applicable to MHH programmes).

Pre-testing data collection tools

- UNICEF, 'Pre-test Report Template and CAPI Test Checklist (5 May 2017)'. Available at: www.mics. unicef.org/files?job=W1siZiIsIjIwMTcvMDUvMDgvMTYvMzEvMTUvNzAvUHJIX3Rlc3RfUmVw-b3J0X1RlbXBsYXRIX2FuZF9DQVBJX3Rlc3RfY2hIY2tsaXN0XzIwMTcwNTA1LmRvY3giXV0&sha=372b508fbae05ef0.
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Calculating sample size

- UNICEF, MICS Sample Size Calculation Template (26 May 2017) Available at: https://mics.unicef. org/files?job=W1siZilsIjIwMTcvMDUvMjYvMTgvMjgvMTIvNDU1L01JQ1NfU2FtcGxIX1Npem-VfQ2FsY3VsYXRpb25fVGVtcGxhdGVfMjAxNzA1MjYueGxzeCJdXQ&sha=94c42e32275b5b2c.
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MHH in emergencies

 Columbia University and International Rescue Committee, 'A Toolkit for Integrating Menstrual Hygiene Management (MHM) into Humanitarian Response', 2017. Available at: www.mailman. columbia.edu/research/gate/menstrual-hygiene-management-emergencies.

MHH and Sexual Reproductive Health

 PSI, 'Technical Brief for the Integration of Menstrual Health in SRHR', 2019. Available at: www.psi. org/publication/technical-brief-for-the-integration-of-menstrual-health-in-srhr/.

Bullying

 USAID and RTI International, 'Conceptual Framework for Measuring School-related Gender-based Violence', 2016. Available at: www.ungei.org/srgbv/files/Conceptual_Framework_for_Measuring_ SRGBV_FINAL_(1).pdf.

Disabilities

WaterAid, 'The Bishesta Campaign', 2019. Available at: www.washmatters.wateraid.org/publications/bishesta-campaign-menstrual-health-hygiene.

Programme evaluation

- Save the Children, Menstrual Hygiene Management: Operational Guidelines', Fairfield, 2015. Available at: www.savethechildren.org/content/dam/global/reports/health-and-nutrition/mens-hyg-mgmt-guide.pdf.
- White, H., and D. A. Raitzer, 'Impact Evaluation of Development Interventions'. Available at: www. adb.org/sites/default/files/publication/392376/impact-evaluation-development-interventions-guide. pdf.
- Gertler, P.J., et al., 'Impact Evaluation in Practice', World Bank Group. Available at: https://openknowledge.worldbank.org/handle/10986/25030.

Menstrual disorders

- Sections titled 'Is it normal if...?' in Grow & Know country books: https://www.growandknow.org/ country-books
- Parker, M., A. Sneddon, and P. Arbon, 'The Menstrual Disorder of Teenagers (MDOT) Study: Determining Typical Menstrual Patterns and Menstrual Disturbance in a Large Popluation-based Study of Australian Teenagers (Supplemental material: The Parker Sneddon MDOT (Menstrual Disorder of Teenagers) Q)', BJOG, no. 117, pp. 185–192, 2010. Available at: https://obgyn.onlinelibrary.wiley.com/action/downloadSupplement?doi=10.1111%2Fj.1471-0528.2009.02407.x&file=BJO_2407_sm_AppendixS1.pdf.
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Gender

- Hillenbrand, E., N. Karim, and D. Wu, 'Measuring Gender-transformative Change: A Review of Literature and Promising Practices', 2015. Available at: https://ideas.repec.org/b/wfi/wfbook/40647.html.
- Johns Hopkins and WHO, 'GEAS Training Suite (website)'. Available at: www.geastudy.org/geastraining-suite.
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- Kågesten A., and V. Chandra-Mouli, 'Gender-transformative Programmes: Implications for Research and Action', Lancet Glob. Heal., vol. 8, no. 2, pp. e159–e160, 2019. Available at: www.thelancet.com/ journals/langlo/article/PIIS2214-109X(19)30528-5/fulltext.



ANNEX 3.

EXAMPLE DATA TABULATION

Example data tabulations are provided below for multiple response and scale questions.

Outcome indicator S2. Proportion of wom	en/girls with female-friendly changing space	at school	
F2b. During your menstrual period,	Clean?	☐ Yes	□No
while at school, was the place you changed your menstrual materials:	Private (you did not worry you could be seen)?	☐ Yes	□No
	Safe (you did not worry you could be harmed)?	☐ Yes	□No
	Able to be locked?	☐ Yes	□No
	Supplied with water?	☐ Yes	□No
	Supplied with soap?	☐ Yes	□No
	Supplied with a mirror so you could check clothing for stains?	☐ Yes	□No
	Supplied with a shelf and hook for storing belongings during use?	☐ Yes	□No
	Well-lit (have sufficient lighting to comfortably see)?	☐ Yes	□No
	Supplied with a covered bin for disposal of menstrual materials?	☐ Yes	□No



Table EX: Female-friendly sanitation at school

Proportion of women/girls whose school has female-friendly spaces to wash and change during their menstruation, [Country Survey Year]

Washing and changing space A at school												Percentage			
	Clean	Private ^B	Safe ^c	Able to be locked	Sup- plied with water	Sup- plied with soap	Sup- plied with a mirror	Supplied with a shelf and hook	Well lit	Sup- plied with a covered bin	No space for washing and chan- ging	with female-frien- dly space for washing and changing at school			
Total															
Age 10-14 15-19															
School level Primary Secondary															
Area Rural Urban															

- $^{\rm A}\,\,$ Spaces for washing and changing might be a toilet, latrine or other space
- $^{\rm B}$ $\,$ Did not worry they could be seen
- ^c Did not worry they could be harmed

Outcome indicator S2. Prevalence of positive social norms related to menstruation and virginity amongst secondary school girls

S2.1c Do you strongly agree, agree, disagree, or strongly disagree with the following statement: It is ok to remain a virgin after a girl starts menstruating	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 Don't know/No response 98
S2.2c Do you believe others in your community strongly agree, agree, disagree, or strongly disagree with the following statement: It is ok to remain a virgin after a girl starts menstruating	Strongly agree 1 Agree 2 Disagree 3 Strongly disagree 4 Don't know/No response 98

Table S2: Supportive norms around menstruation and sexual activity

Per cent distribution of school girls by their agreement and belief in others' agreement that it is ok to remain a virgin after a girl starts menstruating, [Country Survey Year]

Agreement that it is ok to remain a virgin after a girl starts menstruating (% of respondents)								Belief in others' agreement that it is ok to remain a virgin after a girl starts menstruating (% of respondents)					Percentage that agree or strongly agree
	Strongly agree	Agree	Disagree	Strongly disagree	Don't know / No response	Total	Strongly agree	Agree	Disagree	Strongly disagree	Don't know / No response	Total	and believe others agree or strongly agree
Total						100						100	
Age 10-14 15-19						100 100						100 100	
School level Primary Secondary						100 100						100 100	
Area Rural Urban						100 100						100 100	

EXAMPLE CONSENT AND ASSENT FORMS

The first two examples below are adapted from those created by Emory University for the WinS4Girls e-course. More information and additional editable forms can be found in Module 3 on the e-course website, including templates for a parent consent form, a teacher consent form, assent scripts for focus group discussions, and adult key informant interview assent template. The last example is adapted from the MICS6 individual women's questionnaire.

ORAL ASSENT SCRIPT FOR INTERVIEWS WITH SCHOOL GIRLS

Introduction/purpose: Hello, my name is **[insert name]**. I work with **[insert organisation name]** on a project about **[insert what project is about, e.g. schools and menstruation]**. You are being asked to participate in an interview. We would like to talk to you about a few different topics, including **[insert topics of discussion]**.

Procedures: Our discussion today will last between [insert range of time that the interview will last and description of what will happen].

Participation: Your participation is completely voluntary. Your teachers cannot force you to participate. If you do not like a question you do not have to answer it. You are free to stop at any time. [If recording, include: We would like to tape record what you say so that we do not miss anything. We are going to take notes too. I'm going to put the recorder here. If at any time, you feel uncomfortable, tell me and I will press this button on the microphone and the recorder will be off. You may also turn the recorder off yourself. Once you have finished saying what you need to say without the microphone on, I will press this button again and resume recording].

Confidentiality: We will not collect your name or any identifiable information from you. The only time we will share information with others outside of our team is if we think your safety or the safety of others is in danger. Members of the data collection teams will be the only ones to see your responses. Are there any questions?

Contact information: If you have any questions or concerns about this interview, you may contact **[insert contact name and information]**. If you have any questions about your rights as a participant, please contact **[insert IRB board contact information]**.

Assent: Are you willing to participate in this interview? If you would not like to participate, you do not have to say anything. You may excuse yourself from the interview. If you are willing to participate, please say 'Yes, I will participate'.

SCHOOL PRINCIPAL PERMISSION

Introduction: [Insert organisation name(s)] are working to improve their programmes. We are interested in **[insert programme focus, e.g. challenges during menstruation]**. We want to understand pupil needs, concerns, and knowledge. We are asking permission to speak with pupils.

Procedures: Individual interviews with girls will take [insert range of time for each interview]. Questions will be about [insert topics, e.g. personal experiences and knowledge around menstruation]. [If recording, including: these will be recorded. Recordings will be written down after.] This is a school programme and getting parental consent is difficult. We are asking for your permission for us to speak with the pupils here.

Risks and discomforts: There are few risks. Some aspects of menstruation are uncomfortable to talk about. Pupils will be told that they do not have to answer questions if they are uncomfortable. They are free to stop the discussion at any time. There is a risk that the conversation may not stay private. Others may overhear. Pupils may share what is talked about in discussions. If not kept private, pupils may be talked about or teased. We will encourage everyone to respect privacy to prevent this.

Benefits: This study is designed to improve [insert name of organisation(s)] programmes. The findings may be used to help improve school policies and programmes.

Compensation: Participants will not be offered payment.

Confidentiality: We will not collect names. Members of the data collection teams will be the only ones to listen to the interviews. The only time we would share information with others outside of our team is if we think your safety or the safety of others is in danger. We will ask students to not share any part of the conversations.

Voluntary participation: Participation in this study is voluntary. Pupils do not have to participate. They can stop at any time.

Contact information: If you have any questions or concerns about this research or the rights of the children, you may contact **[insert contact name and information]**. If you have any questions about your rights as a participant, please contact **[insert IRB board contact information]**.

Consent: Please print your name and sign below if you agree to participation of your school in this research. We will give you a copy of the signed consent form to keep.

Signature
Print Name
School
Date

WOMAN'S INTERVIEW ORAL CONSENT SCRIPT

[Note: Consent can only be obtained if the interviewee is 18 years of age or older. For those under 18, assent of the interviewee and consent of the parent or guardian is needed. If consent/assent is not obtained, the interview must not commence.]

Hello, my name is **[your name]**. We are from **[insert organisation or government office, e.g. National Statistical Office]**. We are conducting a survey about the situation of children, families and households. I would like to talk to you about your health and other topics. This interview usually takes about **[insert number]** minutes. We are also interviewing mothers about their children. All the information we obtain will remain strictly confidential and anonymous. If you wish not to answer a question or wish to stop the interview, please let me know. May I start now?

Yes 1 No 2



ANNEX 5.

EXAMPLE THEORIES OF CHANGE AND MODELS

Example MHH theories of change are provided below from global and programme-level resources, followed by a recently developed model of menstrual experience that can support the development of a theory of change.

GRAND CHALLENGES CANADA THEORY OF CHANGE / PATH TO SCALE: MENSTRUAL HEALTH									
Foundational elements		Scale-UP Ac	tivities	Outcomes	Impact				
Strategic buy-in and collab- oration from relevant policy makers, goverment ministries and community leaders.		Production Maintain product quality & consistency	Distribution Deliver effectively through identified channels (local	IMMEDIATE Access to a quality & affordable menstrual product	Lives of girls & wom- an imporved through engaging effectively in school and work during menstruation, and achieving life				
Understanding of MHM landscape for scale-up context(s), including relevant policies, programs & varying cultural practices.	EDUCATIONS	Ensure machinery & workforce com- pliance and that the product quality main- tained & standards met as production increases & innova- tion scales	or countrywide) Consistent & appropiate delivery to users via partner organizations / businesses community workers in rural and urban localities.	Access to a quality & appropriate MHM education	INTERMEDIATE Increased a acceptance by girls and woman, boys and men, community that menstruation is normal and healthy				
Equipament procured, livensing obtained (and maintained) and production hubs in place Workforce mobilized of workforce (prodution, HR, sales, marketing)		Include sufficient printed instruction on product usage		Improved knowledge attitudes and behaviors on menstrual hygiene management, including reduced negative menstrual taboos & myths.	Increased end-user demand for menstrual products in target pop- ulation (in-out school, community, work, rural/urban)				
Relevant educational training plan (including for staff), educational materials, and/ or instructions developed that address product use, menstrual health & hygiene, and menstrual beliefs and taboos.		Adapt and Produce Materials Adapt materials to new incountry target populations (urban v. rural, age, girls in and out of school, special needs)	Expand partner- ships to deliver content (school, workplace, com- munity groups)	Increased knowledge and confidence about sexual & reproductive health (SRH) and rights of woman and girls in the given context	Increased woman's participation in employment and livelihood opportunities				
Refined product model and delivery system plan		Tailor delivery of educational content (school, workplace, community aware- ness)	Address negative social norms and barries through sensitizing gate-keepers.	Enhanced employment opportunities beneficiaries in given context	Increased girls' participation and attendance in school				
Environmental impact of scaling assesed including menstrual waste disposal				Enhanced employment opportunities & experiences for intermediaries (i.e. woman developing pads and / or assisting with distributation)					
	Innovation is contextualized in local menstrual hygiene managment practices and beliefs								
Enabling	Innovation empowers girls and woman through education, employment and access								
context		Innovation maintains compliance with government standards over time							
	Innovation reaches low-invome and hard-to-reach girls and woman								

Figure A1. Theory of change for menstrual product innovations developed by Sommer, et al. [118]



Figure A2. Theory of change from UNICEF global guidance on MHH [3].

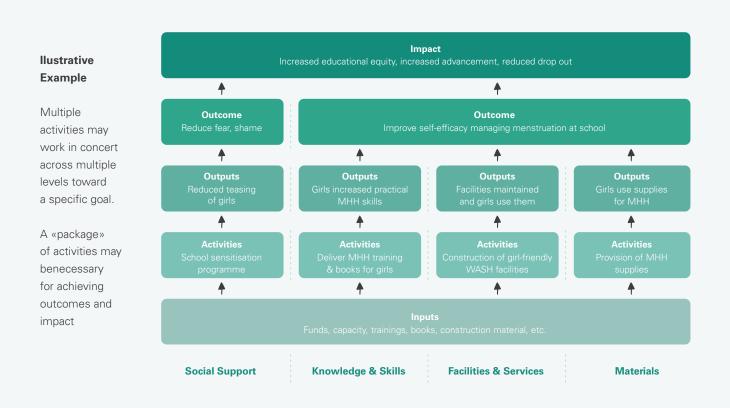


Figure A3. Illustrative example of a theory of change from the MHH Global Advisory Group [1]

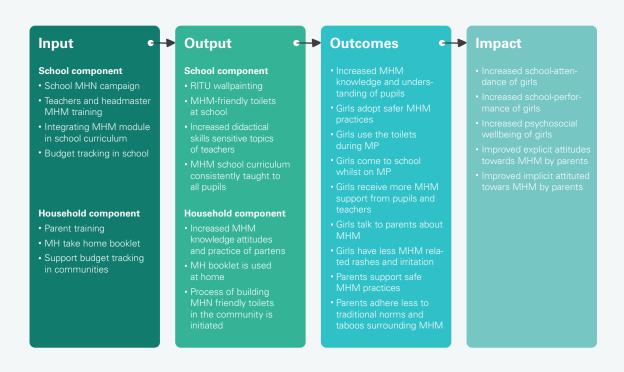


Figure A4. Theory of change from the Simavi Ritu programme [101]

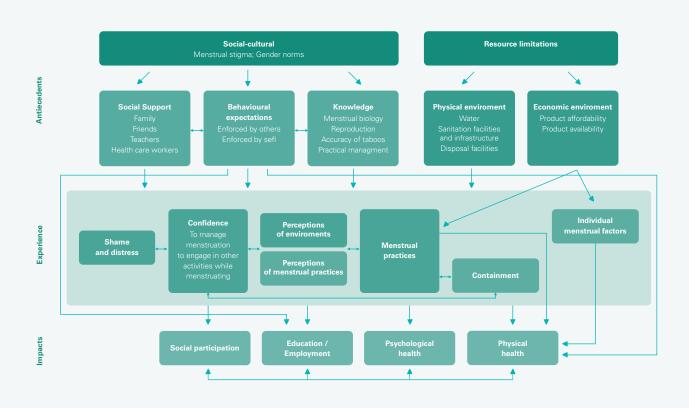


Figure A5. Integrated model of menstrual experience developed by Julie Hennegan, et al. (original image available at: www.doi.org/10.1371/journal.pmed.1002803.g002.)

