

Menstrual Education, Knowledge, and Literacy Supplement

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Introduction

Menstrual education, knowledge, and literacy represent different constructs relevant to understanding the extent to which women, adolescent girls and people who menstruate have access to the information that they need to understand their menstrual cycle, care for their body and make decisions for their menstrual health.

In the AMEHC study, we hypothesise that these represent steps along a causal pathway. Menstrual education includes questions about participants' access to information. Menstrual knowledge refers to participants' factual knowledge menstruation, the menstrual cycle, and menstrual hygiene. Finally, menstrual health literacy draws on the broader body of work on health literacy. Our questions seek to capture the extent to which participants can access, understand, appraise and apply menstrual health information for themselves.

Reasons to include **menstrual education** measures in your work:

- To describe the education that participants receive around menstruation at school
- To understand the influence of available menstrual education on menstrual knowledge, menstrual health literacy and menstrual health experience.

Reasons to include **menstrual knowledge** measures in your work:

- To describe the level of knowledge that participants have about menstruation
- To understand what common misconceptions and gaps in knowledge are around menstruation
- To understand the influence of menstrual knowledge on the lived menstrual experience.

Reasons to include **menstrual health literacy** measures in your work:

- To understand if participants feel that they have sufficient information about menstruation
- To explore how menstrual literacy affects life outcomes such as sexual and reproductive health and mental health

The Adolescent Menstrual Experiences and Health Cohort (AMEHC) Study will measure menstrual education, knowledge, and literacy over time to increase our understanding of their changes over time, influencing factors, and impact on girls' lives.

Overview of Menstrual Education at School

Definition	The process of providing information, guidance, and support to individuals, typically adolescents and young adults, about menstruation and the menstrual cycle.
Importance to Menstrual Health	Menstrual education can help increase menstrual knowledge and menstrual health literacy, which can help increase positive menstrual experiences and promote safe menstrual practices. ¹⁻³ Additionally, girls who have received menstrual education may be more likely to seek social support for problems related to menstruation. ⁴ Providing accessible and age appropriate menstrual education is a key requirement for menstrual health.
Measurement Method	Wash11: Self-reported by girls on an enumerator-administered survey SEN1-2: Self-reported by parents/guardians on an enumerator-administered survey Sch_M5-8, Sch_M5_class: Self-reported by school staff on an enumerator-administered survey
General Considerations	
Question Source	Sch_M5: UNICEF. <i>Guidance for Monitoring Menstrual Health and Hygiene</i> . UNICEF; 2020. https://www.unicef.org/media/85461/file/MHM-Monitoring-Resource.pdf WASH11, Sch_M5_class, Sch_M6: Hennegan, J., Caruso, B. A., Zulaika, G., Torondel, B., Haver, J., Phillips-Howard, P. A., ... & Sommer, M. (2023). Indicators for national and global monitoring of girls' menstrual health and hygiene: development of a priority shortlist. <i>Journal of Adolescent Health, 73</i> (6), 992-1001. and Global MHH Monitoring Group. <i>Priority List of Indicators for Girls' Menstrual Health and Hygiene: Technical Guidance for National Monitoring</i> . Columbia University; 2022. https://www.publichealth.columbia.edu/file/8002/download?token=AViwoc5e

Construct's Main Use in the AMEHC Study			
Proximal Exposure for:	Distal Exposure for:	Covariate for:	Outcome for:
Menstrual health experience	Mental Health Education SRH Physical Health		

	Social Participation		
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Included in the Following AMEHC Study Activities*					
Baseline Girls Survey	Baseline Guardians Survey	Baseline School Audit	Sub-cohort 1 Survey	Sub-cohort 2 Survey	Sub-cohort 3 Survey
	X	X	X	X	
Wave 1 Survey	Wave 1 School Audit	Wave 2 Survey	Wave 2 Guardian Survey	Wave 2 School Audit	
	X			X	

***Specific questions varied over different data collection activities according to study needs.**

Menstrual Education at School Survey Questions in AMEHC

Question Number	Question	Response Options
FOR GIRLS:		
Wash11	During the past two months (since our last survey) did you receive any education from your school about menstruation?	<ul style="list-style-type: none"> • Yes • No
FOR PARENTS/GUARDIANS:		
SEN1	Do you think that schools in [Khulna city/Dumuria] provide enough information about puberty and menstruation to girls?	<ul style="list-style-type: none"> • Yes • Maybe • No
SEN2	Do you think that schools in [Khulna city/Dumuria] provide enough information about puberty and menstruation to boys?	<ul style="list-style-type: none"> • Yes • Maybe • No
FOR SCHOOL STAFF:		
Sch_M5	Does this school provide menstrual education?	<ul style="list-style-type: none"> • Yes, girls only • Yes, girls and boys
Sch_M5_class	At what class level do students start getting menstrual education?	<ul style="list-style-type: none"> • 6 • 7 • 8 • 9 • 10 • 11 • 12
Sch_M6	Do teachers receive training on menstruation education as part of pre-service training or in-service training?	<ul style="list-style-type: none"> • Yes • No
Sch_M7	How many teachers (in total) at this school have received training to educate students about menstruation?	<ul style="list-style-type: none"> • <i>[number]</i>
Sch_M8	Does this school have a teacher assigned to oversee issues related to menstruation?	<ul style="list-style-type: none"> • Yes • No

Overview of Menstrual Knowledge

Definition	<p>Girls' accuracy in recalling factual information about menstruation, the menstrual cycle, and menstrual hygiene.⁷</p> <p>In the AMEHC study we differentiate between different groups of menstrual-related knowledge. We include:</p> <ul style="list-style-type: none"> • Menstrual biology: Basic facts about menstruation, menstrual anatomy, and the menstrual cycle • Links with reproduction: Knowledge about the linkages between the menstrual cycle and pregnancy • Practical management: Facts about hygienic menstrual practices • Myths and taboos: Girls' endorsement of factual beliefs about restrictions and taboos surrounding menstruation (relevant to the study context)
Importance to Menstrual Health	<p>Knowing about menstruation and the menstrual cycle is essential for understanding the body, reducing anxiety around menstruation and informing menstrual self-care practices and care seeking. Insufficient knowledge may contribute to vulnerability to misinformation, the perpetuation of harmful taboos around menstruation, and a weak foundation for sexual and reproductive health and contraceptive education.⁸ Additionally, lower levels of menstrual knowledge may lead sub-optimal menstrual practices that may increase girls' vulnerability to urogenital irritation or infection.^{2,3}</p>
Measurement Method	All questions: Self-reported by girls on an enumerator-administered survey
General Considerations	
Question Source	<p>KB_1,3-5: UNICEF. <i>Guidance for Monitoring Menstrual Health and Hygiene</i>. UNICEF; 2020. https://www.unicef.org/media/85461/file/MHM-Monitoring-Resource.pdf</p> <p>KB_2, KR_1-2, KM_2: Kansime C, Hytti L, Nalugya R, et al. Menstrual health intervention and school attendance in Uganda (MENISCUS-2): a pilot intervention study. <i>BMJ Open</i>. 2020;10(2):e031182. doi:10.1136/bmjopen-2019-031182</p>

Construct's Main Use in the AMEHC Study			
Proximal Exposure for:	Distal Exposure for:	Covariate for:	Outcome for:
Menstrual health experience	Mental Health Education SRH		Menstrual education

	Physical Health Social Participation		
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Included in the Following AMEHC Study Activities*					
Baseline Girls Survey	Baseline Guardians Survey	Baseline School Audit	Sub-cohort 1 Survey	Sub-cohort 2 Survey	Sub-cohort 3 Survey
X					
Wave 1 Survey	Wave 1 School Audit	Wave 2 Survey	Wave 2 Guardian Survey	Wave 2 School Audit	
X		X			

***Specific questions varied over different data collection activities according to study needs.**

Menstrual Knowledge Survey Questions in AMEHC

Instructions: We would like to understand what girls know about menstruation. I am going to read you some statements about menstruation. I will ask you if you believe the statement is TRUE (correct) or FALSE (incorrect)

Question Number	Question	Response Options
Menstrual Biology		
KB1	Menstruation happens as soon as a girl turns 13 years old	<ul style="list-style-type: none"> • False • True • Don't know
KB2	Menstrual blood comes from the stomach where food is digested	<ul style="list-style-type: none"> • False • True • Don't know
KB3	The menstrual cycle (the number of days between the start of one period until the next period) varies between girls	<ul style="list-style-type: none"> • False • True • Don't know
KB4	For all women and girls, menstruation happens every month on the same date	<ul style="list-style-type: none"> • False • True • Don't know
KB5	Some pain in the lower abdomen during menstruation is normal	<ul style="list-style-type: none"> • False • True • Don't know
Links with reproduction		
KR1	Pregnant women menstruate	<ul style="list-style-type: none"> • False • True • Don't know
KR2	When a girl gets her first period it means it is possible for her to become pregnant	<ul style="list-style-type: none"> • False • True • Don't know
Practical management		
KM1	When washing and before reusing cloths to absorb menstrual blood, drying them in the sun helps to kill bacteria	<ul style="list-style-type: none"> • False • True • Don't know

KM2	To reduce pain from menstrual cramping, it is safe for girls to use medication (painkillers) from the – pharmacy	<ul style="list-style-type: none"> • False • True • Don't know
	Myths/taboo	
KT1	Girls should not go out at night during menstruation to avoid attracting bad spirits	<ul style="list-style-type: none"> • False • True • Don't know
KT2	Menstruating women and girls should not prepare food for the family as it can harm them	<ul style="list-style-type: none"> • False • True • Don't know

Overview of Menstrual Health Literacy: Accessing, Understanding, and Applying Menstrual Information

Definition	The extent to which people who menstruate can access, understand, appraise, and apply menstrual health information for themselves. ¹⁰
Importance to Menstrual Health	While knowledge about menstruation is important for understanding the body, a knowledge quiz alone cannot tell us about how girls' access, appraise or apply menstrual health knowledge in their own lives. The extent to which girls can access and use information is likely to influence their attitudes towards themselves and their body, their problem solving and strategies around menstrual care, and support seeking.2/10/2025 3:55:00 PM
Measurement Method	All questions: Self-reported by girls on an enumerator-administered survey
General Considerations	
Question Source	Questions were developed for the AMEHC study drawing on several definitions of menstrual health literacy and the study team's considerations about operationalisation. The questions were tested through cognitive interviews and in pilot survey data collection. MHL6: Hennegan, J., Caruso, B. A., Zulaika, G., Torondel, B., Haver, J., Phillips-Howard, P. A., ... & Sommer, M. (2023). Indicators for national and global monitoring of girls' menstrual health and hygiene: development of a priority shortlist. <i>Journal of Adolescent Health, 73</i> (6), 992-1001.

Construct's Main Use in the AMEHC Study			
Proximal Exposure for:	Distal Exposure for:	Covariate for:	Outcome for:
Mental Health SRH	Education		

Included in the Following AMEHC Study Activities*					
Baseline Girls Survey	Baseline Guardians Survey	Baseline School Audit	Sub-cohort 1 Survey	Sub-cohort 2 Survey	Sub-cohort 3 Survey
X					
Wave 1 Survey	Wave 1 School Audit	Wave 2 Survey	Wave 2 Guardian Survey	Wave 2 School Audit	
X		X			

*Specific questions varied over different data collection activities according to study needs.

Menstrual Literacy Survey Questions in AMEHC

Instructions: The next questions ask about how you feel about your knowledge of menstruation and your body. There are no right or wrong answers. We just want to understand how you feel about the information and support you have.

Question Number	Question	Response Options
M6	Were you expecting your most recent menstrual period when it started?	<ul style="list-style-type: none"> • Yes • No
MHL1	Do you feel like you have enough information about changes that happen to girls' bodies during puberty?	<ul style="list-style-type: none"> • Yes • Maybe • No
MHL2	Do you think you have enough information about how to manage your menstrual bleeding?	<ul style="list-style-type: none"> • Yes • Maybe • No
MHL3	Do you think you have enough information about strategies to reduce pain during menstruation?	<ul style="list-style-type: none"> • Yes • Maybe • No
MHL4	Do you think you could get more information about menstruation if you needed to?	<ul style="list-style-type: none"> • Yes • Maybe • No
MHL5	Do you think you could identify if something was wrong with your menstrual period?	<ul style="list-style-type: none"> • Yes • Maybe • No
MHL6	If you had a concern about your menstrual period, would you feel comfortable seeking help from a healthcare provider such as a school nurse, community health worker, or doctor?	<ul style="list-style-type: none"> • Yes • Maybe • No

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