

Menstrual Pain Experienced and Support for Managing Menstrual Pain Supplement

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Introduction

Experiences of menstrual pain and symptoms have significant implications for wellbeing and quality of life. Menstrual health requires individuals to access care for discomforts or disorders associated with the menstrual cycle.¹ This may include engaging with health care services, or using self-care practices such as pharmaceutical pain relief or heat.

Heavy menstrual bleeding is prevalent around the world and has significant implications for health and wellbeing. Heavy bleeding is also likely to intersect with challenges for managing menstrual bleeding, seeking health care and experiencing pain.

Seeking care for menstrual-related concerns happens in a context of broader health care accessibility and availability. Thus, in the AMEHC study we assess girls' general health care seeking behaviours and access to contextualise menstrual-related health care seeking.

Reasons to include **menstrual pain, heavy menstrual bleeding, and pain management** measures in your work:

- To describe the current level of menstrual pain, heavy bleeding and pain management that participants experience
- To explore the relationship between menstrual pain, heavy bleeding and pain management and health and social outcomes
- To explore the relationship between menstrual pain, heavy menstrual bleeding, pain management and health care seeking and support

Reasons to include measures of **access to healthcare** in your work:

- To describe the current level of support for menstrual pain and access to healthcare providers that participants experience

The Adolescent Menstrual Experiences and Health Cohort (AMEHC) Study will measure menstrual pain and healthcare for menstruation over time to increase our understanding of how these experiences change for girls throughout adolescence and to understand their influence on girls' life outcomes.

Overview of Pain Experienced During Menstruation (Dysmenorrhea) and Pain Management

Definition	<p>Dysmenorrhea: “A symptom that relates to several diagnosis of pelvic pain; it is manifested prior to the menstrual period and occasionally extends 72 hours after its completion.”²</p> <p>Pain Management: The ability of an individual to regulate or limit the amount of menstrual pain they experience.</p>
Importance to Menstrual Health	<p>Dysmenorrhea can interrupt activities of normal life such as attending school or work.² The intensity of pain while menstruating leads one in three young women to miss school or work.^{3,4}</p> <p>Measuring the intensity of pain experienced and the ways that girls cope with the pain can provide a more comprehensive picture of girls’ experiences and eventually lead to interventions that help girls manage the pain they experience.</p>
Measurement Method	<p>All questions: Self-reported by girls on an enumerator-administered survey</p>
General Considerations	
Question Source	<p>P1-2,5: Teherán AA, Piñeros LG, Pulido F, Mejía Guatibonza MC. WaLIDD score, a new tool to diagnose dysmenorrhea and predict medical leave in university students. <i>Int J Womens Health</i>. 2018;10:35-45. doi:10.2147/IJWH.S143510 <i>Note that we updated P5 to capture impacts on sleep rather than school/work to avoid overlap with education outcomes.</i></p> <p>P3: Was developed based on pilot and preparatory work for AMEHC to ensure response options were relevant in the study context.</p> <p>P4: 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</i>, 73(6), 992-1001.</p>

Construct’s Main Use in the AMEHC Study			
Proximal Exposure for:	Distal Exposure for:	Covariate for:	Outcome for:
Mental Health Social Participation Education			Physical Health

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.**

Pain Experienced During Menstruation (Dysmenorrhea) and Pain Management Survey Questions in AMEHC

Question Number	Question	Response Options
P1	During your most recent period, did you experience cramping or pain in the abdomen, back or legs during or just before your period?	<ul style="list-style-type: none"> • No • Yes
P1_where	Where did you experience pain? <i>Select all that apply</i>	<ul style="list-style-type: none"> • Lower abdomen [0/1] • Lower back [0/1] • Pelvis/groin [0/1] • Legs [0/1] • Other [0/1]
P1_days	For how many days during (or just before) your period, did you experience cramping or pain?	<ul style="list-style-type: none"> • ____ days
P2	How severe was this pain. Would you say it was mild pain, moderate pain, or severe pain?	<ul style="list-style-type: none"> • Mild pain • Moderate pain • Severe pain
P3	During your most recent period, did you do anything to relieve your menstrual pain? Anything else? <i>Select all that apply.</i>	<ul style="list-style-type: none"> • Nothing [0/1] • Medication from pharmacy [0/1] • Homeopathic remedy [0/1] • Spiritual remedy or holy water [0/1] • Apply heat [0/1] • Hot drink [0/1] • Drink water (room temperature) [0/1] • Stretching [0/1] • Resting [0/1] • Changing diet [0/1] • Apply pressure (e.g., tie something around waist) [0/1] • Other [0/1]

P4	Were you able to reduce your menstrual (menstruation-related) pain during your most recent menstrual period?	<ul style="list-style-type: none">• Not at all• Yes, some pain• Yes, most pain
P5	During your most recent period, did the pain prevent you from sleeping?	<ul style="list-style-type: none">• Never• Once• 2-3 times• 4 or more times

Overview of Heavy Menstrual Bleeding

Definition	Heavy menstrual bleeding is defined as excessive menstrual blood loss that interferes with a woman's physical, social, emotional, or material quality of life. It can occur alone or in combination with other symptoms. ¹
Importance to Menstrual Health	Heavy menstrual bleeding is a condition that compromises menstrual health and can have consequences for broader physical and mental health as well as education, employment and social participation.
Measurement Method	All questions: Self-reported by girls on an enumerator-administered survey
General Considerations	The measurement of heavy menstrual bleeding has varied across contexts and efforts. Self-perceived heavy bleeding has been determined as the most appropriate measure, at times this is also contrasted with measures of blood loss such as counting the number of menstrual products used in a period of time. Such a question is unlikely to yield consistent results in our population where girls' use of menstrual products is also heavily influenced by their accessibility and affordability.
Question Source	M7, HMB2-7: Sinharoy, S. S., Chery, L., Patrick, M., Conrad, A., Ramaswamy, A., Stephen, A., ... & Caruso, B. A. (2023). Prevalence of heavy menstrual bleeding and associations with physical health and wellbeing in low-income and middle-income countries: a multinational cross-sectional study. <i>The Lancet Global Health</i> , 11(11), e1775-e1784.

Construct's Main Use in the AMEHC Study			
Proximal Exposure for:	Distal Exposure for:	Covariate for:	Outcome for:
Menstrual health care seeking	Mental Health Social Participation Education		Menstrual health care seeking

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
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.

Heavy Menstrual Bleeding Survey Questions in AMEHC

Question Number	Question	Response Options
M7	How many days did your most recent menstrual period last?	<ul style="list-style-type: none">• Number of days
HMB2	Do you experience 3 or more days of heavier menstrual bleeding during your menstrual period?	<ul style="list-style-type: none">• No• Yes
HMB3	In general, does menstruation bother you due to its abundance?	<ul style="list-style-type: none">• No• Yes
HMB6	In general, during your heavier menstrual bleeding days, do you avoid, as far as possible, some activities, trips, or leisure-time plans because you frequently need to change your menstrual materials?	<ul style="list-style-type: none">• No• Yes
HMB7	Do you feel excessively tired or short of breath during your menstrual period?	<ul style="list-style-type: none">• No• Yes

Overview of Access to Healthcare

Definition	<p>Support for Menstrual Pain: A network of people who are available to provide practical and psychological help when an individual experiences menstrual pain.⁵</p> <p>Accessing Healthcare: The ability to obtain appropriate healthcare resources to preserve or improve menstrual health.⁶</p>
Importance to Menstrual Health	The social environment, including gender norms and menstrual stigma, can limit social support for menstruation from family members, friends, and healthcare providers. ⁷ With lower social support and access to healthcare, more restrictive behaviours around menstruation may be expected that lead to less effective self-care practices and more painful experiences with menstruation. ⁷
Measurement Method	All questions: Self-reported by girls on an enumerator-administered survey
General Considerations	
Question Source	<p>HC1-HC4: World Health Organisation ‘Adolescent Friendly Healthcare Survey tools’</p> <p>HC5: Drafted for the AMEHC study</p>

Construct’s Main Use in the AMEHC Study			
Proximal Exposure for:	Distal Exposure for:	Covariate for:	Outcome for:
Menstrual health care seeking	Mental Health Social Participation Education SRH Physical Health		

Included in the Following AMEHC Study Activities*					
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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.

Accessing Healthcare Survey Questions in AMEHC

Question Number	Question	Response Options
PH4	Have you ever discussed menstruation with a health care provider?	<ul style="list-style-type: none"> • No • Yes

HC1	In the past 6 months, have you visited any health facility or care provider for your health?	<ul style="list-style-type: none"> • No • Yes
HC2	What type of health care provider(s) did you visit?	<ul style="list-style-type: none"> • General practitioner/ family doctor [0/1] • Pharmacist [0/1] • Community health worker [0/1] • School nurse [0/1] • Traditional healer [0/1] • Gynaecologist [0/1] • Nurse [0/1] • Midwife [0/1] • Other [0/1]

<p>HC3</p>	<p>What type of health problem or service did you go for?</p> <p>Anything else?</p>	<ul style="list-style-type: none"> • Temporary illness or injury (e.g., gastric, respiratory, fever, accident, broken bone) [0/1] • STIs (including HIV) [0/1] • Ongoing illness or condition (chronic condition such as an ongoing disability or cancer) [0/1] • Mental health [0/1] • General health advice (e.g., nutrition, activity, preventative health care) [0/1] • Immunisation [0/1] • Anaemia [0/1] • Menstrual health problems [0/1] • Contraception [0/1] • Other [0/1]
<p>HC4</p>	<p>Did someone accompany you to the health facility/provider? (Who?)</p>	<ul style="list-style-type: none"> • Parents/guardian [0/1] • Sister or sister-in-law [0/1] • Friend [0/1] • Spouse [0/1] • Mother-in-law [0/1] • Went alone [0/1] • Other [0/1]
<p>HC5</p>	<p>If you had a concern about your health, how confident do you feel that you could access and talk to a health care provider?</p>	<ul style="list-style-type: none"> • Very unconfident • Unconfident • Confident • Very Confident

Overview of Healthcare for Menstrual Concerns

Definition	Menstrual health care: Support from health care providers, and broader social support to engage with menstrual health care services and self-care.
Importance to Menstrual Health	Care for menstrual discomforts and disorders is a requirement for menstrual health. Around the world, difficulties accessing care, inadequate care and an environment dismissive of women’s and girls’ health concerns, particularly related to menstruation, can inhibit the timely receipt of effective healthcare.
Measurement Method	All questions: Self-reported by girls on an enumerator-administered survey
General Considerations	
Question Source	P4: Developed for the AMEHC study 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</i> , 73(6), 992-1001.

Construct’s Main Use in the AMEHC Study			
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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.

Accessing Menstrual Healthcare Survey Questions in AMEHC

Question Number	Question	Response Options
PH4	Have you ever discussed menstruation with a health care provider?	<ul style="list-style-type: none">• No• Yes
MHL6	If you had a concern about your menstrual period, would you feel comfortable seeking help from a health care provider such as a school nurse, community health worker, or doctor?	<ul style="list-style-type: none">• Yes• Maybe• No

References

1. ACOG Committee Opinion No. 785, Screening and Management of Bleeding Disorders in Adolescents With Heavy Menstrual Bleeding: Correction. *Obstetrics & Gynecology*. 2023;141(1).
https://journals.lww.com/greenjournal/fulltext/2023/01000/acog_committee_opinion_no__785,_screening_and.32.aspx
2. Teherán AA, Piñeros LG, Pulido F, Mejía Guatibonza MC. WaLIDD score, a new tool to diagnose dysmenorrhea and predict medical leave in university students. *Int J Womens Health*. 2018;10:35-45. doi:10.2147/IJWH.S143510
3. De Sanctis V, Soliman A, Bernasconi S, et al. Primary Dysmenorrhea in Adolescents: Prevalence, Impact and Recent Knowledge. *Pediatr Endocrinol Rev*. 2015;13(2):512-520.
4. Singh A, Kiran D, Singh H, Nel B, Singh P, Tiwari P. Prevalence and severity of dysmenorrhea: a problem related to menstruation, among first and second year female medical students. *Indian J Physiol Pharmacol*. 2008;52(4):389-397.
5. National Cancer Institute. Definition of Social Support. February 2, 2011. Accessed March 11, 2024. <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/social-support>
6. Gulliford M, Figueroa-Munoz J, Morgan M, et al. What does “access to health care” mean? *J Health Serv Res Policy*. 2002;7(3):186-188.
doi:10.1258/135581902760082517
7. Hennegan J, Hasan MT, Jabbar A, et al. Protocol for the Adolescent Menstrual Experiences and Health Cohort (AMEHC) Study in Khulna, Bangladesh: A Prospective cohort to quantify the influence of menstrual health on adolescent girls’ health and education outcomes. *BMJ Open*. 2024;14(4):e079451. doi:10.1136/bmjopen-2023-079451