

Household WASH Supplement

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Introduction

Household WASH is fundamental to the way people who menstruate care for themselves during their periods. Adequate WASH infrastructure within households ensures access to safe water, improved sanitation facilities, and hygienic practices. Such infrastructure can include drinking water sources, toilet facilities, and the quality of materials used for floors and walls. WASH infrastructure also influences the sense of safety and comfort individuals experience during activities like bathing, using the toilet, and changing menstrual materials. Additionally, household WASH experiences include factors such as the availability and quality of water, individuals' interactions with sanitation facilities, and their ability to effectively maintain hygiene practices.

Reasons to include **household WASH infrastructure** measures in your work:

- To describe the WASH infrastructure in participants' households
- To assess household WASH disparities among participants
- To understand the influence of household WASH infrastructure and characteristics on menstrual health

Reasons to include **household WASH security and experiences** measures in your work:

- To understand participants' access and quality of water at home
- To describe how participants feel about WASH facilities at home
- To understand the influence of WASH security and experiences on menstrual health

The Adolescent Menstrual Experiences and Health Cohort (AMEHC) Study will measure household WASH infrastructure and household WASH security and experiences to increase our understanding of the ways in which this infrastructure impacts on girls' menstrual health.

Overview of Household WASH Infrastructure: Structures and Resources

Definition	The structures and resources necessary to sustain systems of water, sanitation, and hygiene in the household. ¹
Importance to Menstrual Health	WASH infrastructure such as handwashing stations, toilets, and water sources are all necessary structures for menstrual hygiene (menstrual blood management). The absence of toilets with secure doors, disposal systems of used menstrual materials, or water for handwashing presents difficulties for people who menstruate. ²
Measurement Method	DHS1-4: Self-reported by parents/guardians on an enumerator-administered survey W4: self-reported by girls on an enumerator-administered survey
General Considerations	Administering these questions requires enumerators to have an understanding of different sanitation infrastructure options, and what these may look like in the study context, along with probing questions that may help clarify the type of sanitation being used.
Question Source	DHS1-4, W4: Joint Monitoring Programme. <i>Multiple Indicator Cluster Surveys: Household Questionnaire</i> . UNICEF; 2017. Accessed March 11, 2024. https://washdata.org/unicef-multiple-indicator-cluster-surveys-mics And the Demographic and Household Surveys https://dhsprogram.com/

Construct's Main Use in the AMEHC Study			
Proximal Exposure for:	Distal Exposure for:	Covariate for:	Outcome for:
Menstrual health experience (specifically, menstrual blood management experience)	Education Mental Health SRH 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.

Household WASH Infrastructure Survey Questions in AMEHC

Question Number	Question	Response Options
DHS1	What is the main source of drinking water for members of your household?	<p>Piped Water</p> <ul style="list-style-type: none"> • Piped into Dwelling • Piped to Yard/Plot • Piped to Neighbor • Public Tap/Standpipe • Tube Well or Borehole <p>Dug well</p> <ul style="list-style-type: none"> • Protected Well • Unprotected Well <p>Water from spring</p> <ul style="list-style-type: none"> • Protected Spring • Unprotected Spring • Rainwater • Tanker Truck • Cart with Small Tank • Surface Water (River/Dam/Lake/Pond/Stream/Canal/Irrigation Channel) • Bottled Water • Other (Specify)

DHS2	What kind of toilet facility do members of your household usually use?	<ul style="list-style-type: none"> • Flush/pour flush toilets connected to: Piped sewer system • Flush/pour flush toilets connected to: Septic tank • Flush/pour flush toilets connected to: Pit latrine • Flush/pour flush toilets connected to: Elsewhere • Flush/pour flush toilets connected to: Unknown / Not sure / Don't know • Ventilated improved pit latrine • Pit latrine with slab • Pit latrine without slab/open pit • Bucket/pan • Composting toilet • Hanging toilet /Hanging latrine • No facility / bush / field • Other • No Response
DHS3	Where is this toilet facility located?	<ul style="list-style-type: none"> • In own dwelling • In own yard/plot • Elsewhere • No response
DHS4	Do you share this toilet facility with other households or the public?	<ul style="list-style-type: none"> • Not shared • Shared with less than ten households • Shared with more than ten households • No response

W4	Over the last 30 days when washing your body, what water source do you use?	<ul style="list-style-type: none"> • Piped water to household • Piped water (public location) • Shallow Tube well (<250 feet) • Deep tube well (250+ feet) • Protected ring/dug well • Unprotected dug well • Shallow Tara pump • Deep Tara pump • Water from protected spring • Water from unprotected spring • Rainwater • Tanker truck • Lake/river/dam/stream/canal • Bottled water • Pond • Don't know • No response
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Overview of Household WASH Security & Experience

Definition	<p>WASH Security: A household's ability to consistently access safe and reliable water sources, adequate sanitation facilities, and hygienic practices to meet its basic needs.⁴</p> <p>WASH Experience: The perceptions, attitudes, behaviors, and lived experiences of households regarding their WASH conditions and practices.⁴</p>
Importance to Menstrual Health	<p>Inadequate access to private and adequate toilets and functioning handwashing stations can contribute to experiences of stress,⁵⁻⁷ shame,⁸ physical discomfort, and gender-based violence^{9,10} among people who menstruate. Negative experiences with WASH at home, including feeling unsafe, can increase anxiety and contribute to a sense of powerlessness and stigmatization.⁹</p>
Measurement Method	<p>HWISE1-2: Self-reported by parents/guardians on an enumerator-administered survey</p> <p>W1-5: Self-reported by girls on an enumerator-administered survey</p>
General Considerations	
Question Source	<p>HWISE1-2: Young SL, Boateng GO, Jamaluddine Z, et al. The Household Water InSecurity Experiences (HWISE) Scale: development and validation of a household water insecurity measure for low-income and middle-income countries. <i>BMJ Glob Health</i>. 2019;4(5):e001750. doi:10.1136/bmjgh-2019-001750</p> <p>W1-3 – we drew from the following studies</p> <p>Caruso, B. A., Clasen, T., Yount, K. M., Cooper, H. L., Hadley, C., & Haardörfer, R. (2017). Assessing women’s negative sanitation experiences and concerns: The development of a novel sanitation insecurity measure. <i>International journal of environmental research and public health</i>, 14(7), 755.</p> <p>Hennegan, J., Bukenya, J. N., Makumbi, F. E., Nakamya, P., Exum, N. G., Schwab, K. J., & Kibira, S. P. (2022). Menstrual health challenges in the workplace and consequences for women’s work and wellbeing: a cross-sectional survey in Mukono, Uganda. <i>PLOS Global Public Health</i>, 2(7), e0000589.</p> <p>W5: Developed for the AMEHC study based on concerns about salinity in the study area.</p>

Construct's Main Use in the AMEHC Study			
Proximal Exposure for:	Distal Exposure for:	Covariate for:	Outcome for:
Menstrual health experiences	Education Mental Health Physical Health	Physical health (urogenital infection)	

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	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.

Household WASH Security & Experience Survey Questions in AMEHC

Question Number	Question	Response Options
FOR PARENTS/GUARDIANS:		
HWISE1	In the last 4 weeks, how frequently has your main water source been interrupted or limited (eg, water pressure, less water than expected, high salinity)?	<ul style="list-style-type: none"> • Never (0 times) • Rarely (1-2 times) • Sometime (3-10 times) • Often or always (11+ times)
HWISE2	In the last 4 weeks, how frequently have you or anyone in your household had to go without washing their body because of problems with water (eg, not enough water, dirty, unsafe)?	<ul style="list-style-type: none"> • Never (0 times) • Rarely (1-2 times) • Sometime (3-10 times) • Often or always (11+ times)
FOR GIRLS:		
W1	Over the last 30 days when you were at home, was the place you used to urinate and defecate clean?	<ul style="list-style-type: none"> • Always • Often • Sometimes • Never
W2	Over the last 30 days when you were at home, were you worried that someone would see you urinating or defecating?	<ul style="list-style-type: none"> • Always • Often • Sometimes • Never
W3	Over the last 30 days when you were at home, did you feel safe when you were urinating and defecating?	<ul style="list-style-type: none"> • Always • Often • Sometimes • Never
W5	Over the past 30 days, has the water you use for bathing been salty?	<ul style="list-style-type: none"> • Yes • No • Don't know

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