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# Research and Learning Brief

## Improving School Attendance and Positive Feelings about Menstruation for Girls in Ghana through a Holistic Menstrual Health and Hygiene Management Approach



### Background

The USAID-funded Water, Sanitation and Hygiene for Health (WASH 4 Health) project, a 6-year program in Ghana, is establishing sustainable access to dignified, safe, and improved water supply and sanitation and teaching behaviors and attitudes necessary for healthy lifestyles. Global Communities, an international non-profit organization that works closely with communities worldwide to sustainably improve the lives and livelihoods of the vulnerable, is implementing WASH 4 Health in Ghana.

As part of the WASH 4 Health program, Global Communities partnered with Be Girl, a mission-driven US-based social enterprise that creates innovative, reusable menstrual protection products and age-appropriate menstrual education methodologies, to implement a six-month pilot project and survey (January through June 2018) and explore the effects of menstrual health and hygiene (MHH) interventions for girls in urban and rural Ghanaian communities. The pilot aimed to determine the impact of providing reusable BeGirl

### Key Findings

- Girls reporting difficulties in attending schools was reduced from 47% to 10% as a result of the pilot intervention, suggesting that a holistic MHH approach, that includes providing sustainable period products and education effectively reduced barriers to girls' school attendance.
- As a result of the intervention, 92% of girls reported positive feelings about menstruation and 88% of boys reported feeling more comfortable around girls during their period, suggesting that SmartCycle® MHH education increased boys' and girls' awareness of reproductive growth and menstruation as natural biological processes.
- The intervention was similarly impactful in rural and urban areas, with students in both regions experiencing a roughly five fold decrease in reported difficulties attending school during menstruation. However, there is an underlying rural-urban divide, with 58% of girls in rural areas reporting difficulties attending school prior to the intervention, as compared to 41% of girls in urban areas.

panties and Smart Cycle education on girls' involvement in school during their menstrual period and on girls' and boys' knowledge and perceptions of menstruation. The intervention was implemented in schools in the Volta, Greater Accra, and Western and Northern Regions of Ghana, and reached 1,142 girls and 276 boys. It consisted of the following components:

- Sustainable menstrual products: Girls each received two Be Girl PeriodPanties™, which are two-in-one sustainable menstrual products that combine underwear with built-in menstrual protection via a leakproof pocket into which users insert absorbent material for menstrual flow. The user may insert a towel (included) and/or other material of choice to adapt to heavy/irregular flows.
- Age-appropriate menstrual education: Both girls and boys received SmartCycle® menstrual education workshops with learning tools. The SmartCycle® is a menstrual cycle tracking tool designed as a wearable necklace for users to track three phases of the menstrual cycle: menstruation, ovulation, and preparation. A one-hour workshop designed around the SmartCycle® methodology enables girls and boys to understand menstruation, make decisions about their health, and reject myths about menstruation.



Be Girl PeriodPanties™ with built-in pocket for menstrual protection

Baseline and follow-up survey data were collected to understand the effect of the intervention on girls' knowledge and attitudes about menstruation as well as their experiences during menstruation. The project also piloted menstruation education workshops for boys, aiming to combat disinformation, stigmas, and taboos.

Global Communities developed this learning brief to make the pilot's initial findings and recommendations more accessible and actionable by local stakeholders and development partners working in sanitation and MHH in Ghana and the region.

## Key Terms

- **Menstrual hygiene management (MHM)** refers to management of hygiene associated with the menstrual process. WHO and UNICEF Joint Monitoring Programme (JMP) for WASH defines MHM as when “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.”<sup>1</sup>
- **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” including “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.”<sup>1</sup> This term will be used for the purposes of this brief, to acknowledge these broader, intersecting factors.

1 UNICEF (2019). Guidance on Menstrual Health and Hygiene. New York: UNICEF. Available from <https://www.unicef.org/wash/files/UNICEF-Guidance-menstrual-health-hygiene-2019.pdf>

## Problem Statement

When girls attend and remain in school, individuals, households, and countries benefit.<sup>1</sup> While there has been progress globally in keeping girls in school, menstruation often restricts girls and women from fully participating in social, educational, and professional activities. Menstruation is a frequently neglected yet critical aspect of girls' reproductive health; there is inadequate understanding of menstruation and menstrual hygiene among youth and adults. Limited access to adequate menstrual hygiene products due to unavailability and unaffordability means girls and women often use non-durable and/or unhygienic materials like cotton, cloth, or toilet paper to manage their periods. There are many myths and misconceptions about menstruation in Ghana that limit girls' participation in activities while they are menstruating. Fear of blood leaking onto school uniforms and lack of knowledge of the menstrual cycle, in addition to stigma surrounding menstruation and related teasing from boys, can prevent girls from attending or actively engaging in school, which can have long-term consequences on girls' education outcomes, confidence, and independence.

In Ghana, Global Communities, with technical support from Be Girl, conducted a baseline study in schools prior to the intervention. They found that 47% of girls reported that they had difficulties going to school during menstruation; while 29% reported that they had been absent due to their menses. Additionally, 81% of boys reported that they are uncomfortable around girls during their period. These findings underline the need for a targeted intervention that aims at both boys and girls.

## Research Goals and Methodology

Introducing MHH education and products is one of the ways in which WASH 4 Health is contributing to gender mainstreaming efforts. Because a family's financial capacity to pay for menstrual hygiene materials impacts a girls' ability to properly manage menstruation, the project focused on economically vulnerable populations. By empowering girls to better manage their menstrual hygiene and become more confident, we expected girls' school attendance and concentration in class to improve in order to influence long-term outcomes. Additionally, by educating boys about menstruation, we expected a reduction in stigma and misconceptions about menstruation and increased comfort in interacting with girls while they have their periods. This may contribute to an environment that better enables girls to confidently manage their menstruation and actively participate in school without fear of being teased.

This pilot aimed to determine the impact of providing reusable PeriodPanties™ and SmartCycle® tool and education on girls' involvement in school during their period and on girls' and boys' knowledge and perceptions of menstruation. Objectives included:

1. Determine girls' level of usage of PeriodPanties™ and the SmartCycle® tool;
2. Determine the impact of PeriodPanties™ on girls' school attendance;
3. Determine the impact of PeriodPanties™ and SmartCycle® education on girls' concentration levels in school;



**A girl in the WASH 4 Health program in Ghana learns how to use PeriodPanties™**

<sup>1</sup> Barbara Herz and Gene B. Sperling, *What Works in Girls' Education: Evidence and Policies from the Developing World*, New York City: Council on Foreign Relations, 2004.

4. Understand other potential effects of the interventions for girls;
5. Compare the outcomes of the comparison school to those of the treatment school; and
6. Determine boys' and girls' perception of menstruation after receiving SmartCycle® menstruation education.

The pilot study was conducted in 12 schools in both rural and urban settings; girls in the treatment group received both sustainable period products and education, and boys received education. Simultaneously, a separate case study was conducted between two schools to determine the specific impact of sustainable menstrual products (compared to only menstrual education). Manhean Presby School students received only menstrual products, while Padmore Street School received only menstrual education.

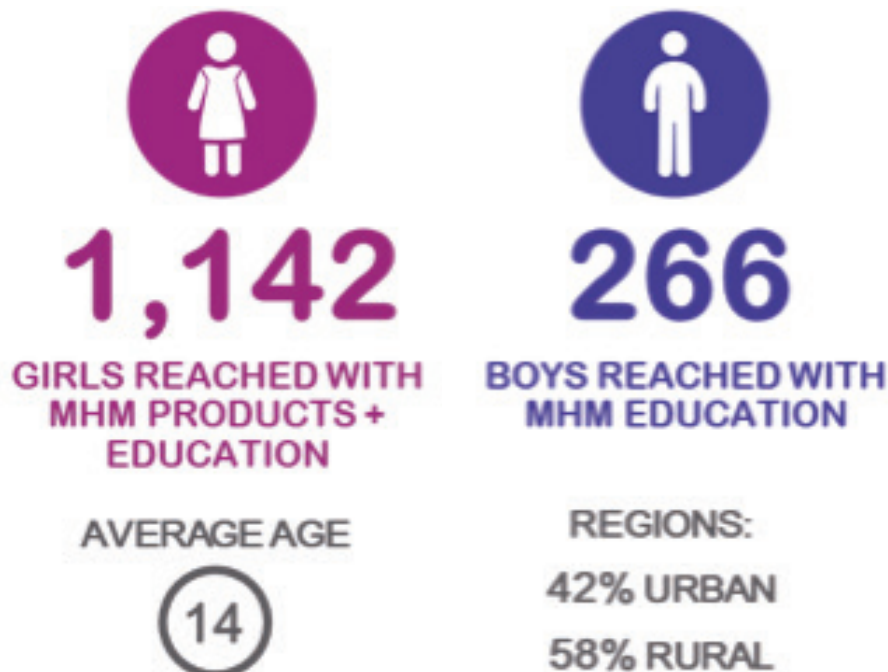
The study was conducted in two phases. First, a baseline survey was conducted on girls' and boys' perceptions and knowledge about menstruation. Second, after Be Girl PeriodPanties™ and SmartCycle® education was provided, follow-up data was collected using a structured questionnaire, informal one-on-one interviews with participants, and informal interviews with schoolteachers. Of the 1,142 girls included in the pilot, 1,024 provided data at both baseline and follow-up, and of the 276 boys surveyed, 266 received MHH education.

Surveys and interviews with girls addressed the following themes:

- Difficulties with school attendance during menstruation
- Difficulties concentrating in class during menstruation
- Negative feelings interactions with boys during menstruation
- Knowing when to expect menstrual bleeding each month

Surveys and interviews with boys addressed the following themes:

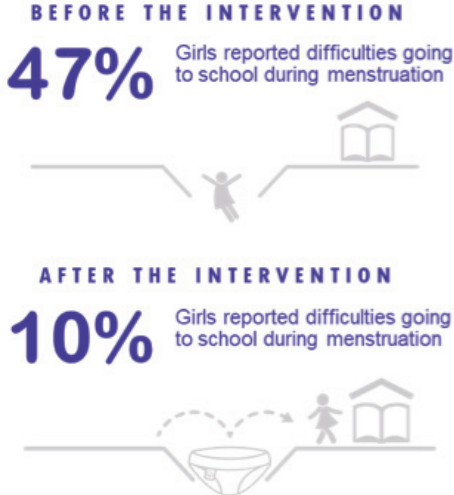
- Level of comfort being around menstruating girls
- Acceptability of interacting with menstruating girls



# Key Findings from the Research

## 1. A holistic MHH approach effectively reduced barriers to girls' school attendance

Initial findings from the pilot indicate that using a holistic MHH approach that includes providing sustainable period products and education effectively reduced barriers to girls' school attendance. In a post intervention survey, the number of girls who reported difficulties attending school during menstruation was reduced to 10% (as compared to 47% of girl surveyed prior to the intervention), indicating a nearly five-fold reduction. In addition, before the intervention, 56% of girls reported difficulty concentrating in class during their period; after the intervention, this was reduced to 18%, indicating a three-fold reduction.



## 2. SmartCycle® MHH education with learning tools helped both girls and boys better understand menstruation

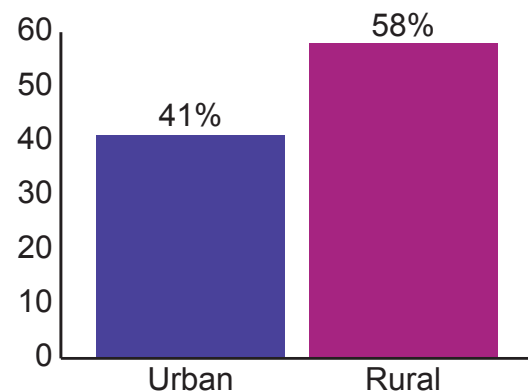
The pilot findings indicate that MHH education increased both boys' and girls' awareness of reproductive growth and menstruation as natural biological processes. The pilot findings show that after receiving the intervention, more girls reported knowing when to expect their periods each month, and 92% of girls reported positive feelings about menstruation. Post intervention, 88% of boys reported feeling more comfortable around menstruating girls, and 84% reported that it was acceptable to interact with girls who are menstruating. Among boys, there was a reduction in other misconceptions and stigma around menstruation. For example, post-intervention, fewer boys accepted the following menstruation-related myths: 1) that girls

**Be Girl SmartCycle® menstrual education methodology and learning tool**

cannot be around boys during menstruation; 2) girls cannot touch water during menstruation; and 3) girls cannot cook or touch animals during menstruation. However, at both baseline and follow-up, 50% of boys said that girls should stay home while menstruating. These initial results indicate that education may be an effective tool for reducing stigma and taboos related to menstruation but that longer-term education may be needed.

### 3. The intervention was similarly impactful in rural and urban areas, however a rural-urban divide exists for girls' difficulty attending school during menstruation

Despite a rural-urban difference in the percentages of girls who reported facing difficulty attending school during menstruation (41% in urban areas vs. 58% in rural areas), both groups saw a roughly five-fold decrease post-intervention, indicating that the intervention is likely similarly impactful in both environments. One potential explanation for this disparity is that girls in rural areas reported less access to disposable menstrual hygiene products. Depending on the region, girls in rural areas were 15–45% less likely to use disposable products than girls in urban areas.



## Recommendations

To increase girls' ability to attend and actively participate in school during menstruation, and to improve their educational outcomes:

- MHH education should be provided on a continuous basis for girls and boys in schools.
- Messaging around MHH should highlight menstruation as a natural biological process in order to reduce stigma and norms that are detrimental to girls.
- Menstrual hygiene products like Be Girl's reusable PeriodPanties™ should be made more widely available, including in schools and in poorer communities.
- More research should be done on the impacts of education and product provision interventions on girls' attendance and participation in school, as well as on their levels of comfort and confidence. More research should also be done on the impacts of MHH education on boys' perceptions and knowledge of menstruation and whether this can better support an enabling environment for girls to actively participate in school.

# Acknowledgments

This knowledge product was written by Sarah Goddard, Former Program Officer of Governance and Global Health at Global Communities, and Rebecca Wener, Program Officer of Governance and Global Health at Global Communities. It was based on data collected by Global Communities Ghana with technical support from Be Girl. The research brief benefitted from contributions and comments by Eduardo Perez, Technical Director for Global Health and WASH at Global Communities; Marjan Ehsassi, Senior Director of Governance and Global Health at Global Communities, Audrey Anderson Duckett, Chief Operating Officer at Be Girl; and Hannah McKinney, Operations and Research Manager at Be Girl. Special thanks go to the WASH for Health management team in Ghana, including Alberto Wilde, Chief of Party, and Dominic Osei, Deputy Chief of Party.

*Global Communities is an international non-profit organization that works closely with communities worldwide to bring about sustainable changes that improve the lives and livelihoods of the vulnerable. Development is not something we do for people; it is something we do with them. We believe that the people who understand their needs best are the people of the community itself.*

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