

Ethiopia Menstrual Health Literature Review

2020



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Acronyms

AGYW Adolescent Girls and Young Women CGD Child, Gender, and Differently-abled

CLTSH Community Led Total Sanitation and Hygiene

CSO Civil Society Organization

ESDP Education Sector Development Program

GEQIP General Education Quality Improvement Program

GTP Growth and Transformation Plan HSTP Health Sector Transformation Plan

IUSHSAP-A Integrated Sanitation and Hygiene Strategy Action Plan- Actions

LMIC Low- and Middle-Income Country

M&E Monitoring and Evaluation
MHM Menstrual Health Management

MoE Ministry of Education MoH Ministry of Health

MoWIE Ministry of Water, Irrigation, and Energy

NGO Non-Governmental Organization
OWNP One WASH National Program
SDG Sustainable Development Goal
SIP School Improvement Plan

UNESCO United Nations Educational, Scientific and Cultural Organization

UNICEF United Nations International Children's Emergency Fund

WASH Water, Sanitation, and Hygiene

Executive Summary

The topic of menstrual health first gained international attention through the Millennium Development Goals as a way to support girls in achieving universal primary education. Now, amidst the Sustainable Development Goals, menstrual health is supported by 6 of 17 goals. In recent years there has been increased momentum from donors, governments, and other stakeholders to address issues around menstrual health in low- and middle-income countries, as well as recognition of menstrual health as a multi-sectoral issue not limited to education. However there continues to be a dearth of rigorous systematic and longitudinal research on the issue and how it impacts the lives of young girls.

Existing research has often narrowly focused on provision of menstrual products. However, Splash, a nonprofit enterprise that supports water, sanitation, and hygiene (WASH) programs for kids in urban Asia and Africa, believes this focus should be broadened. In addition to product provision, factors such as menstrual health education, supportive built environment, stigma and normative change, and policy and advocacy must be considered. This literature and landscape review for Ethiopia has been structured around these above five domains. Menstrual health is an incredibly complex topic given that it touches multiple sectors and is framed by inextricable factors such as social norms, cultural taboos, and stigma. Without this research, targeted interventions and approaches can often miss the mark.

This literature review aims to synthesize existing academic literature, program approaches, and country-level context for menstrual health in schools in order to inform the development of a formative research protocol to address gaps in existing approaches and knowledge base in Ethiopia. The review will: 1) summarize the existing menstrual health policy environment by sector in Ethiopia, 2) establish significant knowledge, attitudes, and practices for menstrual health-related behaviors in a school setting, 3) identify gaps in existing school-based menstrual health research and areas for further investigation, 4) review existing menstrual health program approaches and interventions implemented in schools. This review will end with recommendations for further research, development, and actualization of menstrual health program approaches in Ethiopia.

1.0 Introduction

Splash, a nonprofit enterprise, believes every child should have clean water, clean hands, and clean toilets. Through water, sanitation, and hygiene (WASH) programs for kids in urban Asia and Africa, Splash supports the United Nation's Sustainable Development Goal 6, to ensure the

availability and sustainable management of water and sanitation for all¹. Splash serves children of all ages, catering to different demographics based on the institution being served.

As can be gathered from the Splash Theory of Change (figure 1), Splash works towards the achievement of six outcomes: 1) improved WASH infrastructure, 2) changed behavior in kids, 3) shifted norms in adults, 4) leveraged partnerships, 5) supportive government practices, and 6) localized transitions. Menstrual health touches each of these outcomes and is a critical factor to achieving better health for kids, and more specifically for young girls.

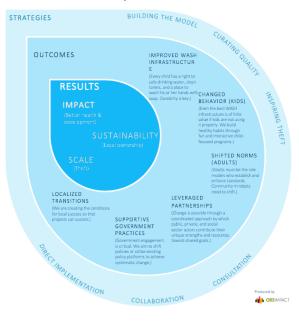


Figure 1: Splash 2016-2020 Theory of Change

2.0 Purpose and Objectives

This Literature Review is the first step for creating an evidence base for the development of a comprehensive school-based menstrual health program strategy to be implemented at scale by Splash in Addis Ababa, Ethiopia. The purpose of this review is to synthesize existing academic literature, program approaches, and country-level context for menstrual health in schools. This review includes sources discussing behavior change, education-based approaches, infrastructure, supply chain management, provision of products, and referral to service considerations. Findings from this literature review will be used to inform the development of a formative research protocol that will seek to address gaps in existing approaches and knowledge base. This literature review will focus on the following four core objectives:

- 1- Summarize the existing menstrual health policy environment by sector in Ethiopia
- 2- Establish significant knowledge, attitudes, and practices for menstrual health related behaviors in a school setting
- 3- Identify gaps in existing school-based menstrual health research and areas for further investigation
- 4- Review existing menstrual health program approaches and interventions implemented in schools

3.0 Methodology

This literature review is based on a review of existing policies related to menstrual health in Ethiopia, scientific publications, grey literature/program reports, and miscellaneous information sources identified through an online search. Priorities for information sources include official policy documents, Ethiopia-specific scientific literature, and evidence from previous programs implemented in Ethiopia that address WASH, menstrual health, adolescent sexual and reproductive health, and gender in an urban school setting. The limits of this literature review (both scientific evidence and programmatic findings) include sources that are specific to Ethiopia, urban, and school-based.

The scientific literature has been collected to inform the current knowledge, attitudes, and practices of menstrual health in the urban school environment in Ethiopia. To organize the programmatic intervention evidence, we have identified five key domains that will be used to structure this review and inform the recommendations. They are as follows:

- 1- Product Provision
- 2- Menstrual Health Education
- 3- Supportive Built Environment
- 4- Stigma and Normative Change
- 5- Policy and Advocacy

This effort will inform the broader WASH and international development sectors on a critical global health issue that has received insufficient resources and attention.

4.0 Global Momentum

There has been increased momentum from donors, governments, and other stakeholders to address issues around menstrual health management in the developing world. Often the approaches that are promoted are largely "hardware" based and include provision of products and the building of supportive infrastructure such as "girl-friendly" toilets². However, even provided the increased focus on the issue of menstrual health on an international level, there is a dearth of rigorous systematic and longitudinal research on the issue and how it impacts the lives of young girls. Without this research, targeted interventions and approaches can often miss the mark. Menstrual health is an incredibly complex topic given it touches multiple sectors and is framed by inextricable factors such as social norms, cultural taboos, and stigma.

4.1 Millennium Development Goals for 2015

Starting with the Millennium Development Goals for 2015, menstrual health was encapsulated in the goals to achieve universal primary education, and to promote gender equality and empower women. Great strides have been made towards the achievement of universal primary education but developing countries, such as Ethiopia, have remaining issues around female participation in higher levels of education due to traditional norms around early marriage and lack of accommodation for menstruating adolescent girls and young women (AGYW)². The goal *to promote gender equality and empower women* and the associated

targets: to eliminate gender disparity in primary and secondary education by 2005 and at all levels by 2015 were not met.

4.2 Sustainable Development Goals for 2030

With the conclusion of the Millennium Development Goals and the inception of the Sustainable Development Goals (SDGs), the path towards progress around menstrual health has evolved. Menstruation is not simply a hygiene issue and spreads across SDGs 3, 4, 5, 6, 8, and 12s¹. Menstrual health solutions call for a multi-sectoral and integrated approach. Below is a table outlining the SDGs related to menstrual health and the associated solutions to close the gap between the status quo and achievement of the SDGs.

Table 1: Sustainable Development Goals and MHM Opportunities³

SDG 3- Ensure healthy lives and promote well-being for all at all ages

Integrated menstrual health in educational curriculum

SDG 4- Ensure inclusive and equitable quality education and promote life-long learning opportunities for all

Ensure young girls have accurate information about menstrual health Build teacher capacity so that students can be instructed around menstrual health without discomfort

SDG 5- Achieve gender equality and empower women and girl

Enable girls to manage their menstruation with dignity

Address existing cultural norms, taboos, and stigma related to menstruation

SDG 6- Ensure availability and sustainability of water and sanitation for all

Ensure the sanitation is "girl-friendly"

Find solutions for disposal with dignity of menstrual health products

SDG 8- Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all

Ensure that sanitation facilities in the workplace and at schools are accessible and include menstrual health hardware such as soap, products, disposal solutions, and privacy

SDG 12- Ensure sustainable consumption and production patterns

Ensure policies promote safe, economical, and environmentally friendly menstrual health products

Implementation of effective menstrual health programs will contribute towards the achievement of SDG targets in education, gender equality, maternal health, and water, sanitation, and hygiene.

4.3 UNICEF's MHM (Menstrual Hygiene Management) in Ten

In 2014 UNICEF and Columbia University facilitated the first "MHM in Ten" initiative to map out a ten-year agenda for menstrual health programming in schools. The meeting brought together a range of actors, including academics, donors, non-governmental organizations (NGOs), United Nations agencies and the private sector, from a variety of sectors, including water, sanitation

and hygiene (WASH), education, gender, sexual and reproductive health and adolescent development⁴. The participants identified five priorities to help dramatically improve menstrual health by 2024.

The MHM Ten priorities are:

- 1. Build a strong cross sectoral evidence base for MHM in schools for prioritization of policies, resource allocation and programming at scale.
- 2. Develop and disseminate global guidelines for MHM in schools with minimum standards, indicators and illustrative strategies for adaptation, adoption and implementation at national and sub-national levels.
- 3. Advance the MHM in schools' movement through a comprehensive, evidence-based advocacy platform that generates policies, funding and action across sectors and at all levels of government.
- 4. Allocate responsibility to designated governments for the provision of MHM in schools (including adequate budget and monitoring and evaluation (M&E) and reporting to global channels and constituents.
- 5. Integrate MHM, and the capacity and resources to deliver inclusive MHM, into the education system.

Current progress against these priorities has been slow. There is still a huge lack in evidence and a need for more longitudinal studies and impact evaluations of MHM interventions. Once more evidence has been generated there is a need for the findings to be widely disseminated and translated into advocacy-focused language. An advocacy-based approach informed by scientific literature will encourage governments to increase budget allocations to activities related to MHM.

5.0 Menstrual Health Policies by Sector

Menstrual health is a multi-sectoral issue covering the education, WASH, women's empowerment, and health sectors. The sectoral ownership of menstrual health initiatives as an issue has been debated among many stakeholders over the past years and may be the reason for slow progress in this space. Currently, in Ethiopia menstrual health is primarily split among the WASH, education, and health sectors and although great strides have been made, a cohesive menstrual health approach would greatly improve the potential for impact. In the sections below, the policies, government programs, and guidelines that have been developed by the Ethiopian government are detailed.

5.1 Education Sector

5.1.1 General Education Quality Improvement Program (GEQIP)

The General Education Quality Improvement Program (GEQIP) implemented by the Ministry of Education (MoE) and the World Bank includes a sub-component called the School Improvement Plan (SIP) that seeks to address school-level issues. However, most schools have not identified issues related to menstrual health through the self-assessment process due to existing cultural taboos surrounding the topic⁵.

5.1.2 Education and Training Policy (1994)

The Education and Training Policy of 1994⁶ was the basis of Ethiopian education reform and was followed by five subsequent iterations of the Education Sector Development Program (ESDP). The ESDP IV (2010-2015)⁷ in particular was closely linked to the Ethiopian Growth and Transformation Plan (discussed below) and the Millennium Development Goals as it placed a heavy emphasis on improving access to quality of education. The ESDP V continues to expand upon previous efforts in ESDP IV to focus on educational equity, especially for post-primary education.

5.1.3 Growth and Transformation Plan II (GTP II) 2016-2020

The first Growth and Transformation Plan (I) acknowledges that female students face higher rates of school attrition due to unconducive learning environments and prevalence of harmful traditional practices and norms⁸. It calls for further attention to these issues in the second Growth and Transformation Plan (II)⁹. However, neither the GTP I nor GTP II explicitly mentions activities related to menstrual health management. The GTP II mentions the following targets related to menstrual health "creating a conducive environment for female students, increasing the number of female teachers..., [and] eradicating harmful traditional practices" but does not expand to cover anything specific related to menstrual health.

5.2 WASH Sector

5.2.1 One WASH Health National Program

The One WASH National Program (OWNP),¹⁰ developed in 2015 is the implementing mechanism that links to the GTP II to improve the access and quality of water and sanitation across the country of Ethiopia. A primary objective of this program is to decrease school dropouts for girls through increased promotion of menstrual health interventions and the construction of girl-friendly WASH facilities.¹⁰ The One WASH Health National Program defines a harmonized, government-led WASH plan for all organizations and implementing partners working in the WASH sector within Ethiopia. The program's coordinating structures range from the federal to Kebele-level with specific roles and responsibilities of the four signatory ministries (Ministry of Water, Irrigation, and Energy (MoWIE), Ministry of Health (MoH), MoE and Ministry of Finance and Economic Development (MoFED).) ¹⁰

Target 2 as listed in the One WASH Health Program states that by 2030, "handwashing and menstrual hygiene facilities and inequalities in access to each of these services have been progressively eliminated." The One WASH National Program acknowledges that an absence of girl-friendly toilets can affect a female student's academic performance and result in higher rates of attrition for female students. Lack of accommodations and resources for the effective management of menstrual health can have long term impacts such as lower literacy rates in girls than boys, earlier age at marriage and first pregnancy, and increase in violence, abuse, and exploitation.

The indicators included in the One WASH National Program that address the issue of menstrual health are:

The percentage increase in enrollment of female students in school, and

• The percentage decrease in dropouts among female students.

5.2.2 Integrated Urban Sanitation and Hygiene Strategy Action Plan Implementation Guidelines / Integrated Sanitation and Hygiene Strategy Action Plan- Actions

The Integrated Sanitation and Hygiene Strategy Action Plan- Actions (IUSHSAP-A) lays out a strategic approach for encompassing menstrual health considerations in the broader urban sanitation and hygiene ecosystem. The Strategic Objective 1 of the IUSHSAP-A is, "to bring sustained behavior change for better hygienic practices, installation of facilities and delivery and uptake of sanitation services by 2020." The targets for this strategic objective can be found in the GTP II, mentioned above.

In regard to the implementation of these strategic objectives, the related, Integrated Urban Sanitation and Hygiene Strategy Action Plan Implementation Guidelines (IUSHSAP-IG) states that the responsibilities of government establishments are to ensure that sanitation facilities include child, gender, and differently-abled (CGD) friendly water, toilet, and hand washing facilities including areas related to menstrual hygiene management.

5.3 Health Sector

5.3.1 Health Sector Transformation Plan

The Health Sector Transformation Plan (HSTP)¹¹, like the OWNP, is an implementing mechanism linked to the GTP II. The HSTP includes gender equity indicators as relates to access to health services and community-level WASH interventions such as Community Led Total Sanitation and Hygiene (CLTSH)¹². Unfortunately, menstrual health is not directly considered in the efforts to improve access to improved sanitation for households and does not have a clear performance indictor.

5.3.2 Health Extension Program

In addition to the HSTP, another health sector-level program is the Health Extension Program.¹³ Within this program there is a personal hygiene sub-component that includes both a training manual for health extension workers and information about menstrual health management that health extensions workers can deliver to the beneficiaries within their catchments.

5.3.3 MHM Policy and Implementation Guidelines¹⁴

The MHM Policy and Implementation Guidelines call for engagement across a continuum of stakeholders including: the federal government/ MoH, the regional-level/Regional Bureau of Health, the Woreda level, health centers and health posts, and the kebele level. Given this continuum of actors, the guidelines propose a multi-sectoral approach that includes health, water and irrigation, education, women and children's affairs, labor and social affairs, civil society organizations (CSOs)/development partners, the private sector, and community structures.

The key principals for mainstreaming MHM as laid out by the MHM Policy and Implementation Guidelines mandate that an MHM strategy be context specific, inclusive, gender-aware, holistic

and integrated, evidence-based, and sustainable. The policy's recommended MHM approach is comprised of four primary components:

- 1- Comprehensive awareness raising/ demand creation
- 2- Supply of WASH facilities
- 3- Supply and provision of sanitary pads
- 4- Management and disposal of sanitary materials

The policy and implementation guidelines assert that given the engagement of the stated key MHM stakeholders, the integration of a comprehensive MHM approach across sectors, and the four-pronged component intervention approach girls and women in Ethiopia will be better able to lead dignified, productive, and healthy lives.

5.3.4 National Hygiene and Environmental Health Communication Guideline

The National Hygiene and Environmental Health Communication Guideline investigates the key messages that if deployed through recommended channels will be able to change target behaviors and improve health in Ethiopia. It proposes an approach based on the social ecological model and seeks to increase understanding of current knowledge, attitudes, and practices, provide evidence to support behavior prioritization, define communication channels, and lay out a framework for continued monitoring of activities and outcomes.

In regard to menstrual health, the guideline provides a comprehensive review of the existing knowledge, attitudes, and practices in Ethiopia and defines the target behaviors. In terms of prioritization, this guideline defines menstrual health as having low disease impact but is ranked high in terms of the frequency of poor practice among the target population. Per this communication guidelines, ideal menstrual hygiene management is not high on the priority list as compared to other key WASH behaviors.

5.4 Women's Empowerment Sector

5.4.1 National Policy on Women

The National Policy on Women (1993)¹⁵ was created with the aim to create appropriate structure's within government offices to ensure the establishment of gender-equitable and gender-sensitive public policies. This policy includes provisions that address the discrepancy in school dropouts between male and female students. However, the implementation of this policy has been inconsistent even given the development of the Women's Affairs Office in 2005¹⁶.

6.0 Urban School Menstrual Health

The following sections investigate the current knowledge, attitudes, and practices of girls and their supportive networks within an urban school environment within Ethiopia.

6.1 Knowledge

Across Ethiopia, young boys and girls currently do not have consistent access to puberty education¹⁷. The Ethiopian Government does not currently mandate puberty education in

school and when menstrual health education is provided, boys are often not included¹⁷. Compounding this issue, many teachers and health extensions workers are uninformed and are unable to serve as resources for accurate information regarding menstrual health management, especially the biological and physiological processes that take place during menstruation¹⁷.

Due to inconsistent curriculum around menstrual health menstruating girls lack knowledge around the physiological processes involved in menstruation^{17–20}. In spite of this, areas surrounding Addis Ababa and other urban centers report high levels of knowledge and awareness of menstrual health management with 70% of study girls surveyed having a good knowledge of menstrual health and its management²¹. In Addis Ababa, 90% of girls learned about menstruation from a teacher¹⁷. In a survey conducted by the Ethiopian MoE it was found that 81.5% of girls in urban schools knew about menstruation prior to the start of their own menses. Younger girls knew more about menstruation than older counterparts did at their age, demonstrating an improvement in puberty education and communication around menstruation²⁰.

The most common source for information about menstrual health was a teacher, followed by grandmother, and friend. Of young girls surveyed in urban settings, only 9.4% learned about menstruation from their mother, a stark contrast to the 40.7% who learned about menstruation from a teacher. Girls whose mothers had attained an education status of secondary or above were more likely to have good knowledge of menstrual health. Girls who lived in a household with a radio or TV were more likely to have knowledge of menstrual health²². The majority of girls (approximately 80% of girls surveyed) knew that menstruation is a physiological process, whereas approximately 10% of them believed that it was a curse from God²².

There is limited research covering girls' knowledge of the source of menstrual pain, various levels of pain, and how to treat menstrual pain. However, there is significant research discussing menstrual pain as a primary reason for menstruating girls missing school. In a study conducted by the Population Council it was found that 69% of menstruating girls missed school due to pain and discomfort while only 19% reported missing school for fear of having a leak at school and only 15% missed school due to embarrassments²³.

6.2 Attitudes

Due to the intricate link between menstrual health and sexual health, menstrual health is rarely discussed openly¹⁷. Additionally, there exist many cultural myths and taboos around menstrual health that make adequate sanitation facilities inaccessible to menstruating girls and women¹⁷. Many young girls in Ethiopia are not comfortable discussing menstruation with their teachers even in areas where menstrual health education is provided. And in most cases, girls do not feel comfortable discussing menstruation with their mothers²⁴. Many parents and teachers in Ethiopia view menstruation as a normal bodily process that does not require special training or education²⁴ so girls are often left to seek out information on their own.

Among Ethiopian school girls, self-reported problems faced during menstruation by the 650 menstruating girls surveyed include isolation (48.8%), insult (26.7%) and discrimination

(24.5%)²⁴. In Ethiopia menstruation is called *Yewer Abeba*, meaning monthly flower officially and *Idif*, meaning dirt, and *Gadawo*, meaning disease of the abdomen by different tribes²⁵. Many girls do no discuss their menses for a multitude of reasons related to stigma. The majority of girls surveyed did not discuss menstrual health due to fear, followed by shame, taboos, religious reasons, or because it is not customary to discuss¹⁷.

6.3 Practices

6.3.1 Menstrual Hygiene Management

Among school-aged girls in Addis Ababa, Ethiopia, a recent study found that 9.27% girls took a daily bath during menstruation and 29.48% cleaned their external genitalia with soap and water during menstruation. 52% of the study participants were found to practice ideal menstrual hygiene. ²⁶

6.3.2 Product use

To manage their menses, many adolescent girls and young women use reusable or homemade solutions when they are at home and commercial or disposable products for school and other public outings²⁷. In Ethiopia, exclusive commercial product use is correlated with higher wealth quintile. In urban settings, 86% of girls report use of sanitary napkins²⁷. In Ethiopia, 65.8% of urban girls have reported using a pad to go to school. Reusable products, particularly pads are also quite common in Ethiopia due to the affordability and environmentally friendly nature of their design.²⁷

Barriers to ideal menstrual management include the lack of lack of access to clean water for girls to clean themselves. In Ethiopia, 95% of school girls noted that they did not have access to safe WASH facilities with water access at their schools²⁴. Clean water and girl-friendly WASH facilities are critical for the use of disposable or reusable products.

6.3.3 Product access

There are a multitude of challenges that girls face in terms of accessing solutions to manage their menses. In Ethiopia, due to existing structures and policies related to the importation of commercial goods, there can be a high rate of menstrual hygiene product stockouts²⁷. Additionally, many young girls report facing harassment from male peers and other men in their communities when at a purchasing site²⁷. Compounding these access barriers, there is often low financial prioritization of menstrual management products in household expenditures²⁷.

6.3.4 Product disposal

If a girl is able to overcome these access challenges, there are barriers related to product disposal that she must also contend with. Currently there are very few waste facilities that support appropriate disposal and processing of menstrual hygiene waste in Ethiopia²⁴. The most common place for disposal of menstrual products in urban settings is in a garbage can followed by a latrine/toilet, and a public dumping area²⁴. There is minimal research or programming around the use of incinerators for the disposal of menstrual products in Ethiopia.

7.0 Menstrual Health Program Interventions by Domain

The country-level menstrual health interventions (in and out of schools) most commonly seen in existing and previous programs include economic empowerment, provision of products, hygiene education, provision of girl-friendly sanitation facilities, advocacy and policy, and activities to address stigma and promote normative change. The wide variation between intervention approaches has resulted in relatively inconsistent and sometimes counterproductive efforts between international implementing partners, the relevant Ethiopian government ministries, and local organizations.

7.1 Provision of Menstrual Health Products

Many implementing organizations are building the capacity of women-run enterprises by providing a sewing pattern for pads and supporting their business model to make and sell reusable sanitary pads. Reusable pads come in many forms including sachets that can be filled with various absorbent materials, water-proof panties, or large foldable pieces of cloth that can be fashioned into any desired shape. Some reusables are manufactured internationally and shipped into Ethiopia, and some are produced by women-run businesses and small-scale enterprises. However, due to the higher upfront cost of reusables, the distribution of these products is largely limited to NGO distribution and primarily targets rural regions¹⁷.

Disposable menstrual health products are preferred by girls and women in Ethiopia as they are perceived to allow for increased mobility, reduce the risk of leaks, and are more comfortable²⁷. There are multiple implementing organizations working on increasing the provision of disposable menstrual pads to schoolgirls including SNV's "Girls in Control" program, World Vision International in support of the Ethiopian government, Plan International, and others. The approach to the provision of menstrual pads has largely been school-based.

7.2 Menstrual Health Education

Many programs take a "software" approach to improving menstrual health through the implementation of education-based interventions. Knowledge and awareness of ideal menstrual hygiene practices is a critical first step to improving menstrual health experience, reducing stigma, and ensuring that girls are able to achieve their highest potential.

Some curricula cover menstrual health in combination with puberty education in a format where lessons are delivered separately to boys and girls. This format allows for young girls to ask questions without feeling embarrassed and for an in-depth discussion around the

Disposable Market Considerations

The two primary brands (90% of the market) are Eve and Comfort²⁷

Distribution Challenges²⁷

- Ethiopia's overreliance on imported aoods
- Lack of access to foreign currencies
- Declining currency rate

<u>Disposable Product Preferences (ranked)</u> 27

- 1. Product stickiness for security
- 2. Absorbency
- 3. Inclusion of wipes
- 4. Low cost

hygiene practices associated with menstruation²⁸. However, many recent program interventions include boys learning about menstrual health alongside their female peers. This

approach helps to reduce the stigma that many girls feel when they begin to menstruate and can have the potential to reduce teasing and harassment²⁸.

There are many organizations working in the space of menstrual health education. Some implementors include CARE, Girl Effect, Save the Children, and PSI.

7.2.1 Puberty Books

Growth and Changes

The Ethiopian government undertook the task of developing a comprehensive puberty guide in 2012¹⁸. This was in response to a report by the United Nations Educational, Scientific and Cultural Organization (UNESCO) stating that among curriculum topics related to sexuality and puberty, content around menstruation was the most incomplete and impractical¹⁹.

There was also further evidence that in Ethiopia, the delivery of puberty related curriculum per the national education policy was inconsistent, with many schools not covering the topic of menstruation at all²⁰. The book "Growth and Changes" covers the topic of puberty, menstruation, and sexual and reproductive health. The book discusses the physiological changes that take place throughout puberty and frames these changes in culturally appropriate stories and lessons. The book is distributed to students through schools but is not associated with any additional taught sessions led by teachers at this time. In a mixed-methods evaluation of the impact of the distribution of "Growth and Changes" to young girls ages 10-14 in Ethiopia, it was found that the book had a positive effect on girls' knowledge and attitudes regarding menstruation¹⁸.

7.3 Supportive Built Environment

When there is not a clean and useable sanitation solution available to young female students they often resort to open defecation or missing school²⁹. Lack of useable sanitation facilities becomes a much larger issue when a girl is menstruating. Girl-friendly sanitation addresses many of the issues that currently exist around the safety, cleanliness, and accessibility of sanitation facilities. Girl-friendly sanitation has been defined in a multitude of ways but generally means a sanitation facility that has a door that locks, has proper ventilation, is well-lit, ensures privacy, and has a disposal receptacle for MH products²⁹. Building girl-friendly toilets in Ethiopia has been a priority of many donors and implementing organizations including ChildFund International, the European Union, Splash, UNICEF Ethiopia, World Vision, among others.

7.4 Stigma and Normative Change

Many stakeholders are currently working to reduce stigma and change cultural attitudes around menstruation by providing education to girls about menstruation and their right to attend school while on their periods. To open up a discussion around menstruation and therefore normalize it, implementers have created hygiene clubs³⁰ and girls clubs. They have also developed workshops in which girls make reusable pads to be distributed to the female students at their school³¹. Through hygiene clubs, girls have the chance to discuss the changes

they are experiencing in their bodies, get answers to questions about what menstruation is and means for them, and share experiences with other female peers. The goal of these clubs is to normalize the discussion of menstruation which in turn reduces stigma.

Including male students in menstrual health curriculum is also an important way to ensure that young boys understand menstruation and do not ridicule their female peers. Teasing from male students was noted as a primary reason for girls missing school during their period in an assessment of knowledge, attitudes, and practices around menstrual health³². There is a common misconception in Ethiopia that menarche signifies the loss of virginity, which becomes the focus of teasing from boys³³. Including male teachers in menstrual health education is also critical so that if needed, they can serve as a support system for female students³².

7.5 Advocacy and Policy

Implementers working in advocacy and policy include SNV, UNESCO, and UNICEF. Current advocacy efforts focus on increasing funds for girl-friendly sanitation, providing comprehensive education around menstrual health, and ensuring that girls have access to menstrual hygiene management products.

Menstrual health is also a large component of the women's empowerment movement overall and any effort made advocating for raising the status of women and girls in Ethiopia will positively impact menstrual health. Right now, there is a focus on the refinement of policies regarding early marriage and helping girls stay in school. But for girls to stay in school many of the barriers they face to higher educational attainment must be address and that includes menstrual health interventions.

The Ethiopian government has made great strides with the support of several international NGO's to develop policies and guidelines around menstrual health and puberty education. The next step will be to comprehensively implement those policies and guidelines across the country so that all girls can benefit from them.

8.0 Recommendations for Future Investigation

The opportunities for further research, development, or actualization of menstrual health program approaches described are included based on their ability to make an impact on the long-term health and wellbeing of young menstruating or soon to be menstruating girls in Ethiopia. Successful implementation of menstrual health solutions requires a multifaceted approach. Below are the opportunities that exist within each of the current domains of program approaches.

Table 2: Recommendations by Domain

Domain	Opportunity
Provision of menstrual health products	There is an opportunity for increased investigation into the cost and scalability of biodegradable menstrual health products.
nearth products	scalability of blodegradable menstrual health products.
	Further insight into the installment of product vending machines in schools
	and other locations frequented by young girls would help inform a delivery
	model for products that minimizes embarrassment and shame.
Menstrual health	Increase knowledge of physiological process of menstruation for health
education	extension workers, teachers- especially male, and for students (male and female).
	Instruction around the various types of menstrual health products available
	will help girls in making decisions on what product type is best for them.
Supportive built	Investigation into types of product disposal- acceptability of incinerators and
environment	trash removal schemes will inform a solution for product removal.
	Piloting of in-stall features that will facilitate proper menstrual hygiene
Ctiams and normative	practices. There is an opportunity for increased investigation into other forms of stigma
Stigma and normative change	reduction such as the use of mass media, parent-level education programs,
Change	community recognition events, among many other approaches.
	Exploration of knowledge of menstrual pain- the source, treatment options,
	and normal pain levels.
Advocacy and policy	Further efforts around the coordination of all the various implementers of
	menstrual health programs is needed for a consistent and evidenced based
	approach to menstrual health management.
	Menstrual health is still under funded in development contexts. Increased
	advocacy informed by research on the impacts that menstrual health
	management can have in the lives of women and girls is needed to increase
	the prioritization of menstrual health with donors and governments.
Research	There is currently minimal evidence linking the impact that menstrual health
	management to broader life course outcomes.

9.0 Conclusion

There is growing recognition that issues surrounding menstrual health require multi-faceted and multi-sectoral approaches. Rigorous systematic and longitudinal research is needed for donors, governments, and other stakeholders to better understand how menstrual health impacts the lives of young girls. While previous research has narrowly focused on the provision of menstrual product this report incorporates a broader context of factors including menstrual health education, supportive built environment, stigma and normative change, and policy and advocacy. The findings from this literature review can be used to inform the develop of a formative research protocol to address existing gaps, as well as make recommendations for future menstrual health research in the pursuit of more targeted and effective interventions to improve the lives of young girls.

Annex 1. MHM Stakeholders in Ethiopia

Organization	Domain						Foo	cus	Target Audience						
	Education/Awareness	Product Provision	Supportive Environment	Policy/ Advocacy	Economic Empowerment	Stigma/Normative Change	Research	Urban	Rural	AGYW	Caregivers	Schools/Teachers	Community/Social Network	Policy Makers/ Government	Manufacturers
CARE	Х		- 01		Х	0 /			Х	X		01	Х		
Dignity Period							Χ		Χ						Χ
Girl Effect	Χ	Χ				Χ		Χ	Χ				Χ		
Plan International	Χ	Χ						Χ		Χ		Χ			
SNV	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ			Χ	Χ	Χ	
UNICEF				Χ			Χ			Χ		Χ	Χ	Χ	
UNESCO				Χ				N,	/A					Χ	
WaterAid	Χ		Χ			Χ				Χ		Χ			
WASH United															
World Vision- Eth			Χ					Χ	Χ	Χ		Χ		Χ	
Save the Children	Χ	Χ					Χ		Χ	Χ					
PSI	Χ	Χ		Χ			Χ	Χ	Χ	Χ					
MH Hub				Χ			Χ	N,	/A						
Splash	Χ	Χ	Χ			Χ		Χ		Χ					
Other implementors															

Annex 2. Key concepts and definitions

Gender: A culturally-defined set of economic, social, and political roles, responsibilities, rights, entitlements, and obligations associated with being female and male, as well as the power relations between and among women and men, boys and girls. The definition and expectations of what it means to be a woman or girl and a man or boy, and sanctions for not adhering to those expectations, vary across cultures and over time, and often intersect with other factors such as race, class, age, and sexual orientation. Transgender individuals, whether they identify as men or women, are subject to the same set of expectations and sanctions.

Gender equality: The state or condition that affords women and men equal enjoyment of human rights, socially valued goods, opportunities, and resources. Genuine equality means more than parity in numbers or laws on the books; it means expanded freedoms and improved overall quality of life for all people. (adapted from *IGWG training resources; USAID Gender Equality and Female Empowerment Policy*)

Women's empowerment: Expansion of women's capacity to make and act upon decisions affecting all aspects of their lives - including decisions related to health - by proactively addressing socioeconomic, and other power inequalities in a context where this ability was previously denied.

Constructive engagement of men: A programmatic approach that involves men and boys as a) clients and beneficiaries, b) partners and c) agents of change, in actively promoting gender equality, women's empowerment, and the transformation of inequitable definitions of masculinity. In the health context, this comprises engaging men and boys in addressing their own, and supporting their partners' reproductive, sexual, and other health needs. Men's engagement also includes broader efforts to promote equality with respect to caregiving, fatherhood, and division of labor, and ending gender-based violence.

Gender integration: Strategies applied in programmatic design, implementation, monitoring and evaluation to take gender considerations (as defined above, in "gender") into account and to compensate for gender-based inequalities.

Gender-based violence: Violence that is directed at individuals based on their biological sex, gender identity, or perceived adherence to culturally-defined expectations of what it means to be a woman and man, girl and boy. GBV is rooted in economic, social, and political inequalities between men and women. GBV can occur throughout the life cycle and can affect women and girls, and men and boys, including transgender individuals

Dysmenorrhea: Menstrual cramps caused by uterine contractions. Primary dysmenorrhea refers to common menstrual cramps, while secondary dysmenorrhea results from a disorder in the reproductive organs. Both types can be treated.

Amenorrhea: The absence of menstruation during reproductive years. Primary Amenorrhea is characterized by not having menstruation begin after puberty starts, while Secondary Amenorrhea is defined by missed periods once menstruation has begun.

Menarche: The first menstrual cycle, which signals a female's capability for reproduction.

Menstruation: A female's monthly cycle of bleeding during reproductive years. In the absence of pregnancy, the uterine lining is shed in the form of blood and tissue via the vagina.

Menses: The discharge of menstruation. Contents are made up of blood and tissue from a female's uterine lining.

Menstrual Hygiene: Menstrual Hygiene Management (MHM) is the absorption of menstrual blood onto clean material which can be changed in privacy. It also incorporates the availability of soap and clean water, to wash re-usable sanitary materials and the body, as well as a suitable place of disposal for used materials (WHO-UNICEF 2012).

Menstrual Health: An encompassing term that includes both menstrual hygiene management (MHM) as well as the broader systemic factors that link menstruation with health, well-being, gender, education, equity, empowerment, and rights³⁴

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