



India

Menstrual Health Literature Review

2020



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Acronyms

AGYW	Adolescent Girls and Young Women
ARSH	Adolescent Reproductive and Sexual Health
CWSN	Children with Special Needs
CSR	Corporate Social Responsibility
CSO	Civil Society Organization
MHAI	Menstrual Hygiene Alliance of India
MHM	Menstrual Hygiene Management
MHH	Menstrual Health and Hygiene
MoHRD	Ministry of Human Resource Development
MoHFW	Ministry of Health and Family Welfare
NFHS	National Family Health Survey
NGO	Non-Governmental Organization
RMSA	Rashtriya Madhyamik Shiksha Abhiyan
SDG	Sustainable Development Goal
SBM	Swachh Bharat Mission
SSA	Sarva Shiksha Abhiyan
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UNFPA	United Nations Population 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 India 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 India. The review will: 1) summarize the existing menstrual health policy environment by sector in India, 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 India.

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. Splash was legally established in Kolkata, India in 2014- 2015 and has been operational in the country since 2012. Since 2012, Splash has reached 269 sites and 111,143 kids with clean water. The goal in Kolkata is to reach all government schools and over 400,000 kids with 100% WASH coverage by 2023.

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.

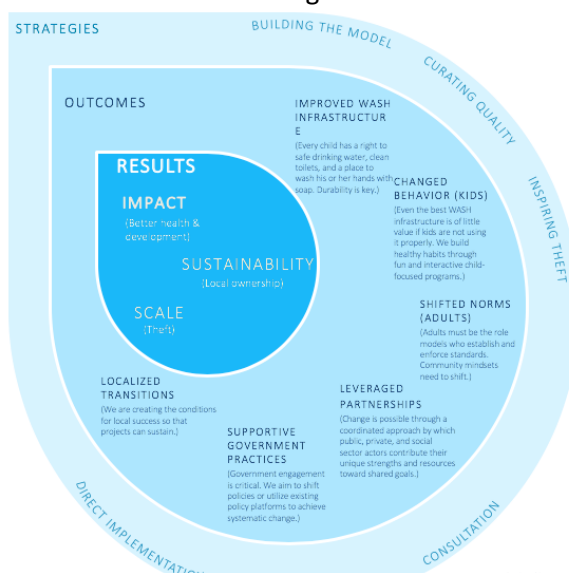


Figure 1: Splash 2016-2020 Theory of Change

2.0 Purpose and Objectives

The 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 by Splash in Kolkata, India. The purpose of this review is to synthesize existing academic literature, program approaches, and country-level context for menstrual health and also menstrual hygiene management (MHM) which have an impact on girl. This can include sources discussing behavior change, education-based approaches, infrastructure, supply chain management, provision of products, media approaches, advocacy 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 India
- 2- Establish significant knowledge, attitudes, and practices for menstrual health related behaviors in a school setting in India with a focus on Kolkata
- 3- Review existing menstrual health program approaches and interventions implemented in India
- 4- Identify gaps in existing urban school-based menstrual health research and areas for further investigation.

3.0 Methodology

This Literature Review is based on a review of existing policies related to menstrual health in India, scientific publications, grey literature/ program reports, and miscellaneous information sources identified through an online search. This Literature Review also takes into account an existing study done in five Splash schools by Dr. Erin Hunter, a former PhD candidate at the Johns Hopkins Bloomberg School of Public Health.

Priorities for information sources include official policy documents, India-specific scientific literature, and evidence from previous programs implemented in the country that address WASH, menstrual health, adolescent sexual and reproductive health, and gender in a school setting. The limits of this literature review (both scientific evidence and programmatic findings) include sources that are specific to India- where India specific findings were unavailable, global data was used.

The scientific literature has been collected to inform the current knowledge, attitudes, and practices of menstrual health in the urban school environment in India, with a priority given to researches set in Kolkata and its fringe areas. 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- Menstrual Health Education
- 2- Product Provision
- 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.

3.1 Menstrual Health Verbiage

Globally, the WASH sector has taken a lead on championing Menstrual Hygiene. Many experts describe mainstream menstrual health work as having emerged from the ‘male-dominated and technically oriented’ WASH (Water, Sanitation and Hygiene) development sector. As a consequence, this form of discourse has reduced menstruation to something to be ‘managed’ and boxes the process to its technical, biological aspects – thereby abstracting it from the girl’s own bodies and lived experiences, isolating menstruation from the entire cyclical process.²

A new term that UNICEF is introducing is Menstrual Health and Hygiene³ which encompasses both menstrual health and the broader systemic factors that link menstruation with health, well-being, gender equality, education, equity, empowerment, and rights.

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” toilets. However, even provided the increased focus on the issue of menstrual health, 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

The 2015 Millennium Development Goals⁴ did not talk explicitly about menstrual health, but it had a bearing on the goals to achieve universal primary education, and to promote gender equality and empower women. 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 met by India.

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 12.⁵ 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 Menstrual Health Opportunities	
SDG 3- Ensure Health lives and promote well-being for all at all ages	<i>Integrated menstrual health in educational curriculum</i>
SDG 4- Ensure inclusive and equitable quality education and promote life-long learning opportunities for all	<i>Ensure young girls have accurate information about MHM</i> <i>Build teacher capacity so that students can be instructed around menstrual health without discomfort</i>
SDG 5- Achieve gender equality and empower women and girl	<i>Enable girls to manage their menstruation with dignity</i> <i>Address existing cultural norms, taboos, and stigma related to menstruation</i>
SDG 6- Ensure availability and sustainability of water and sanitation for all	<i>Ensure the sanitation is “girl-friendly”</i> <i>Find solutions for disposal with dignity of menstrual health products</i>

SDG 8- Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all
<i>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</i>
SDG 12- Ensure sustainable consumption and production patterns.
<i>Ensure policies promote safe, economical, and environmentally friendly menstrual health products</i>

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 in Ten

In 2014, UNICEF and Columbia University facilitated the first *MHM in Ten*⁶ to map out a ten-year agenda for menstrual health in schools. The meeting brought together a range of stakeholders, 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 development. 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 menstrual health 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.

4.4 WINS4Girls

The UNICEF 'WASH in Schools for Girls⁷: Advocacy and Capacity Building for menstrual health through WASH in Schools Program' (WinS4Girls Project), supported by the Global Affairs of the Government of Canada, was implemented in 14 countries (including India) from 2014-2017. The aim was to use formative research to support evidence-based policies and interventions that could be taken to scale through education systems.

All the 14 countries, including India, developed or influenced menstrual health guidelines and a basic package of interventions aimed at supporting menstrual health in schools. The intervention varied and took into consideration the diverse needs expressed by girls, their teachers and their families in differing country contexts. Outcomes of this project have included national or sub-national policies and guidelines; learning and communication material; and training modules for teachers, health workers and peer educators. In India, an Action Guide for Teachers and Review of MHM in Schools were some knowledge outcomes.

4.5 Global coalitions, working groups and networks

Collaboration across various international, regional, and national stakeholders to further menstrual health and hygiene is gaining momentum. Some of these emerging networks and platforms are:

4.5.1 *The Menstrual Health Hub*

Menstrual Health Hub⁸ is a female health collective focused on knowledge-sharing, ecosystem-building and advocacy promotion. Their approach is to connect, build and sustain a community of engaged and well-equipped menstrual health stakeholders. Ever since its inception in Berlin, the MH Hub has been facilitating collaboration across different sectors and creating an evidence base of menstrual health information via a crowd-sourced and centralized repository of research, education, policy and innovations. They have also developed the concept of Women-Centered Design (WCD),⁹ which acknowledges and innovates from the starting point that women's bodies and experiences are different, and therefore necessitate gender-specific innovation that responds to these biological realities.

4.5.2 *The Menstrual Health and Gender Justice Working Group*

The Menstrual Health and Gender Justice Working Group¹⁰ is funded through the Center for the Study of Social Difference at Columbia University as a part of the Women Creating Change series. The working group seeks to further the nascent field of menstrual studies. This group provides a forum for encouraging individual and collaborative inter-disciplinary research.

4.5.3 *Global South Coalition for Dignified Menstruation*

The Global South Coalition for Dignified Menstruation (GSCDM)¹¹ is a global network for Dignified Menstruation. It was started in Nepal by the Radha Paudel Foundation. It's still in its nascent stage and the first collaborative workshop is scheduled to be held in May 2020 in Kathmandu.



4.5.4 Menstrual Hygiene Alliance of India (MHAI)

The Menstrual Hygiene Alliance of India (MHAI) is a collaborative of organizations working on menstrual health and hygiene in India. MHAI works towards joint advocacy, knowledge generation and evidence-based action in India.¹² Along with Dasra, MHAI organized the first national consultation May 31, 2018 with a focus on normalizing menstruation, menstrual health products, and solid waste management.

5.0 MH related Policies by Sector in India

Menstrual Health is a multi-sectoral issue covering the education, WASH, women's empowerment, and health sectors. The sectoral ownership of menstrual health as an issue has been debated among many stakeholders over the past years. Currently, in India, menstrual health is primarily split among the Ministry of Health and Family Welfare (MoHFW); Ministry of Women and Child Development (MoWCD); Ministry of Rural Development (MoRD); Ministry of Human Resource Development (MoHRD); and Ministry of Jal Shakti¹³ (as of May 2019, the Ministry of Drinking Water and Sanitation was merged with Ministry of Water Resources to form this new ministry). In 2017, the Menstrual Hygiene Alliance of India partners – PATH, Development Solutions, Water Aid, WSSCC, Zariya Consulting – published a call¹⁴ for convergence of efforts at the central government level. The key ministries mentioned above along with the Ministry of Environment and Forests and the Ministry of Urban Development were asked to form an inter-ministerial group to support implementation of coordinated, comprehensive menstrual health programs across the country.

India has a federal structure with distribution of powers and responsibilities between the Central and state governments, wherein state-level government departments also have their own policies related to menstrual health. In the sections below, an overview of the policies, government programs, and guidelines that have been developed by the government at the central and state level are discussed below. To better understand the menstrual health policy landscape this review discusses policies across rural and urban settings.

5.1 WASH sector

In the government framework, key policies and activities for WASH at the Central government level are led by the Ministry of Jal Shakti (rural) and in the state of West Bengal by the Department of Public Health and Engineering. Currently in West Bengal, however, the Department of Panchayats and Rural Development (P&RD)¹⁵ controls the budget of Rural Sanitation and has been made the nodal department for rural sanitation. In urban areas, the Municipal Affairs and Urban Development Departments are now looking after activities of Urban Sanitation and Sewerage Sector.

In the WASH sector, there is a gap in menstrual health programming for both the Centre and the state of West Bengal, because policies on menstrual health are more often initiated and finalized by either the Ministry of Jal Shakti or the P&RD Department in West Bengal based on evidence from rural areas.

In July 2019, the P&RD Department, Government of West Bengal, UNICEF, and Taru Leading Edge, organized a state level multi-stakeholder consultation on “Menstrual Hygiene Management (MHM) Guidelines for West Bengal.” Splash was invited as a stakeholder to this consultation; however, the lack of additional urban representation was a key gap that was highlighted in presentations and discussions. Despite this rural-urban gap, the menstrual health related policies and guidelines from the WASH focused ministries have a bearing on the menstrual health landscape in India.

5.1.1 Menstrual Hygiene Management National Guidelines 2015

The Menstrual Hygiene Management National Guidelines¹⁶ were issued by the Ministry of Jal Shakti in 2015 to support all adolescent girls and women throughout India. It outlines what needs to be done by state governments, district administrations, engineers, technical experts in line departments, and school head teachers and teachers.

The detailed guidelines primarily focus on rural India and have dedicated sections focused on menstrual health in schools. They stress the importance of sensitively involving male students as a means to shift norms and increase positive effect on how girls perceive issues around menstruation for the rest of their lives.

The guidelines also suggest the establishment of support groups, such as the Girls Hygiene Clubs, linked to the existing child cabinets as an essential part of ensuring peer-to-peer learning and sharing of information. These guidelines also lay down a suggested template for training sessions with girls at the school level.

In hardware-based interventions, the guidelines suggest adequate space in the cubicle for girls to change their sanitary materials and to wash themselves, toilet cubicles with a shelf, hooks or niche to keep clothing and menstrual adsorbents dry, disposal system for menstrual waste, a well-positioned mirror so that girls can check for stains on their clothes, and a private bathing or changing unit that includes a place for drying their reusable menstrual absorbent. Access to adequate and sustained water supply and soap is also a pre-requisite to improved menstrual experience for girls in school.

5.1.2 Swachh Bharat Mission (Gramin)

In 2014, the Indian government rolled out the Swachh Bharat Mission (Gramin)¹⁷ with the ambitious goal to make India open-defecation free. This mission was primarily focused on rural areas where rates of open defecation were higher compared to urban areas.

Embedded within this ambitious mission was the component focused on improving menstrual health for girls. The SBM (G) guidelines mandate that funds available for information, education, and communication (IEC) materials may be used to raise awareness, disseminate information and skills on

menstrual health. While, for the solid waste management component, the guidelines mentioned that provisions should be arranged for menstrual waste disposal. It should be noted that the Swachh Bharat Mission (Urban) guidelines¹⁸ have no specific mention of menstrual needs of women in urban areas.

5.1.3 Guidelines on Gender issues in Sanitation

In 2017, Guidelines on Gender issues in Sanitation for Swachh Bharat Mission (Gramin) were released by the Ministry of Jal Shakti. These guidelines demonstrate a progressive shift in the government's approach to sanitation by acknowledging the role of gender in WASH initiatives. These guidelines call for special attention to menstrual hygiene needs of women while constructing toilets in schools. They also suggest holding counselling sessions on menstrual health and hygiene for girls in schools by qualified professionals.

5.2 Education Sector

Education is in the Concurrent List of the Indian Constitution, which makes it a responsibility of both the state and the central government. In this section, we will look at some of the policies of the central government and the West Bengal government which have a bearing on the menstrual health of female students.

5.2.1 Samagra Shiksha Mission

The Union Budget (2018-19) proposed to treat school education holistically without segmentation from pre-nursery to Class 12. Samagra Shiksha (SSA)¹⁹ is an education sector program with the goal of improving school effectiveness measured in terms of equal opportunities for schooling and equitable learning outcomes. It subsumes the three initiatives of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE). The vision of Samagra Shiksha is to ensure inclusive and equitable quality education from pre-school to senior secondary stage in accordance with the fourth Sustainable Development Goal for Quality Education.

In the context of menstrual health, both SSA (for universalization of elementary education) and RMSA (for enhancing access to and quality of secondary education) recognize that gender norms and physiology often make privacy a greater priority for girls than boys, and that girls need adequate sanitary facilities at school to manage menstruation.

The landmark Right to Free and Compulsory Education Act (RTE) (2009) gave a legal mandate to provide free and compulsory elementary education to every child in the age group of 6-14 years. It also included standards for gender-segregated sanitation facilities in schools. RTE recognizes that when schools have appropriate, gender-segregated facilities, a barrier to attendance is removed.

5.2.2 Swachh Vidyalaya

In 2014, the Government of India Ministry of Human Resource Development launched the “Swachh Bharat Swachh Vidyalaya” (SBSV) initiative to ensure that all schools in India have access to functional gender-segregated toilets. The initiative also emphasized promoting safe and appropriate hygiene practices in schools and behavior among children.

Essential elements of Swachh Vidyalaya are separate toilets for boys and girls, menstrual health facilities including supportive components such as soap, adequate and private space for changing, adequate water for cloth washing, and disposal facilities for menstrual waste, including an incinerator and waste bins, and stockpiling extra sanitary pads and clothes (such as school uniforms) for emergencies. Along with hardware provisions, the Swachh Vidyalaya handbook also places heavy importance on including menstrual hygiene education sessions in school, along with enhanced training programs for teachers.

In the assessment criteria for Swachh Vidyalaya Puraskar²⁰ menstrual hygiene management indicators, such as separate toilets and awareness sessions with female students on menstrual health management are discussed.

5.2.3 Nirmal Vidyalaya Abhiyan

The Nirmal Vidyalaya (Clean School Awards) is a competition among schools in West Bengal as a way to incentivize schools to accelerate the pace of adopting better hygiene practices. Among the key indicators for award eligibility are separate and adequate functional toilet complexes for girls and boys (wherever applicable) and provision for proper solid waste disposal receptacles.²¹

5.3 Health Sector

5.3.1 Menstrual Hygiene Scheme (MHS)

In 2011, the Ministry of Health and Family Welfare introduced an initiative for the promotion of menstrual hygiene among adolescent girls aged 10-19 year in rural areas.²² Some of the major objectives of the initiative were to increase awareness among adolescent girls about menstrual hygiene; to increase access and use of high-quality menstrual health products, and to ensure safe disposal of products in an environmentally-friendly manner. The initiative was initially implemented in 2011 in 107 selected districts in 17 States wherein a pack of six sanitary napkins called “Freedays” were provided to rural adolescent girls for Rs. 6 through the network of Accredited Social Health Activist (ASHA). A range of IEC materials were also developed to create awareness among adolescent girls about safe and hygienic menstrual health practices.

However, the implementation was difficult due to procurement issues, irregular supply, high costs, lack of knowledge about the initiative, and lack of disposal facilities.²³

5.3.2 Rashtriya Kishor Swasthya Karyakram (RKSK)

In order to ensure holistic development of adolescent population, the Ministry of Health and Family Welfare (MoHFW) launched Rashtriya Kishor Swasthya Karyakram (RKSK)²⁴ or the *National Adolescent Health Programme* in 2014 to reach 253 million adolescents in both rural and urban areas. Key drivers of the program were community-based interventions such as outreach by counsellors; facility-based counselling; Social and Behavior Change Communication; and strengthening of Adolescent Friendly Health Clinics (AFHCs) across levels of care. The Menstrual Hygiene Scheme was merged also with the RKSK to ensure the effectiveness and convergence of efforts.

To guide the implementation of this program, the MoHFW, in collaboration with UNFPA, has developed a National Adolescent Health Strategy. One of the strategic priorities of RKSK is to promote healthy menstrual hygiene practices among adolescent girls through access to menstrual aids and counselling on menstrual disorders management through AFHCs.

In 2017, the MoHFW launched Saathiya Resource Kit and SAATHIYA SALAH mobile application²⁵ for adolescents as part of RKSK. The Resource Kit was developed by United Nations Population Fund (UNFPA) and Population Foundation of India (PFI). Thus, the launch of tech-enabled platforms, such as Saathiya, shows the increasing propensity of the state to utilize mobile technology in India in the last decade.

5.3.3 Anwesha Clinics

In West Bengal, Anwesha Clinics²⁶ are an initiative to provide counseling and medical facilities to the adolescents related to menstrual problems, puberty, unwanted pregnancy, and depression, among others. The program focuses on supporting adolescents to identify health problems and participate in their own healthy development. Such clinics were intended to be run in three medical colleges of the state. However, inadequate human resources and infrastructure have been a challenge to make this initiative a success.

5.4 Women's Development Sector

5.4.1 Rajiv Gandhi Scheme for Empowerment of Adolescent Girls) or "SABLA"

In 2010-2011, the Ministry of Women and Child Development (MWCD) launched the Rajiv Gandhi Scheme for Empowerment of Adolescent Girls, or "SABLA". SABLA²⁷ is designed to address the critical nutritional and educational needs of adolescent girls. SABLA is being implemented in rural areas across 200 districts and provides services under the Integrated Child Development Scheme (ICDS) to all adolescent girls aged 10–18 years, both school-going and out-of-school. Information on menstrual hygiene is primarily provided under the non-nutrition component of SABLA that imparts information on Adolescent Reproductive and Sexual Health (ARSH), informs girls about their reproductive system, menstruation and MHM. While the distribution of sanitary products and treatment of menstrual disorders are not included under this initiative, girls may be referred to health facilities as needed.

5.4.2 Kanyashree Prakalpa

Kanyashree Prakalpa, a flagship project of West Bengal Government, is focused on improving the status and well-being of girls, specifically those from socio-economically disadvantaged families. The program consists of conditional cash transfers to incentivize girls to study for a longer period. The program also works to enhance the social power and self-esteem of girls through a targeted behavior change communication strategy. The Kanyashree strategy includes adolescent-friendly sessions through Kanyashree Clubs covering issues such as menstrual hygiene. In West Bengal's Purulia²⁸ district, there are 400 Kanyashree clubs in over 20 blocks comprising of 30 to 35 members. The girls, popularly known as the "Kanyashree Girls," are taught about menstrual hygiene and are expected to carry forward the knowledge to other women who are not aware about the menstrual health.

6.0 Menstrual Health in Urban Schools within India

The following sections investigate the current knowledge, attitudes, and practices of girls and their supportive networks within an urban school environment within India, and more specifically Kolkata. These sections draw references from a 2018 qualitative study conducted on menstrual health in five Splash schools by Dr. Erin Hunter.²⁹

6.1 Knowledge

In a recent qualitative study done in five Splash intervention schools, it was found that a vast majority of girls only learned of menstruation after their own menarche. Girls seemed to be aware that it is a "natural process" and necessary to "give rise to the next generation". Older girls who had studied menstruation in textbooks could only say that it was "caused by hormones." They knew that they should keep clean, eat well, and use sanitary pads to absorb the blood, but it seemed girls lacked understanding regarding reproductive anatomy and the reason for menstruation. In these schools, students reported feeling comfortable discussing issues of menstrual health with female teachers.

Similarly, in another cross-sectional study conducted among 200 adolescent girl students of a Government school located in Behala West circle in Kolkata, 59% of the study subjects were not aware of menstruation before menarche. Among the 41% who were aware, 43.9% received information from their mother, while 13.66% received information from friends. The majority (90.5%) of the students reported knowing that menstruation is a physiological process, but 76.5% did not know the source of blood during menstruation.³⁰ This is comparable to another study³¹ in Singur, West Bengal, where 67.5% (n=160) secondary school girls were aware of menstruation prior to menarche, but 97.5% did not know the source of menstrual bleeding.

These findings demonstrate a need to discuss the current school curriculum and to probe the content presented in school textbooks. In 2018, a Kolkata-based NGO, Nirman Foundation, conducted a curriculum analysis³² of Life Science/Biology textbooks used in schools under Government of West Bengal. From textbooks used for Grade 7 to 12 they found that functions of hormones and changes due

to puberty have been thoroughly discussed within the life science curriculum taught in Grade 8. However, no component of menstrual health and hygiene is featured in any of the chapters until Grade 10 when most girls have been menstruating for several years. In Grade 11 and 12, the chapter on human reproduction explains the biological process of childbirth, and menstruation is briefly mentioned. However, it must be noted that this knowledge is limited to those who choose to study biology, with students in other disciplines not having access to this information. The curriculum analysis found no mention of absorbents, mechanisms of disposal, or recommendations related to hygiene during menstruation.

6.2 Attitudes

Girls interviewed expressed an eager desire to learn more about menstruation and know why they are prohibited by their mothers to do certain activities. Teachers agreed that more detailed education should be given, but they also feared giving too much information and upsetting parents. It was found that boys are strictly excluded from menstrual health education sessions and discussions. Incidents of boys going through girls' bags and teasing them when finding pads was also reported. In another study in Singur, it was observed that 86.25% of girls believed menstruation to be a physiological process; 6.25% of girls believed it was a curse of God, 5% girls believed it was a disease and 2.5% girls believed it to be the result of some sin.

Many girls and women are subject to restrictions in their daily lives simply because they are menstruating. Not entering the "puja" room is the major restriction among urban girls. Menstruating girls and women are also restricted from offering prayers and touching holy books. The underlying basis for this myth is also the cultural beliefs of impurity associated with menstruation.³³ In some parts of India, some strict dietary restrictions are also followed during menstruation. Sour food such as curd, tamarind, and pickles are usually avoided by menstruating girls. It is believed that such foods will disturb or stop the menstrual flow.³⁴ In interactions in Splash schools, most of the girls spoke about following all or some of these restrictions.

At menarche girls get more information on social taboos and restrictions than on maintaining menstrual hygiene or the ill effects of bad menstrual hygiene. This culture of silence forces adolescent girls to seek information from their peers who know little about the subject, pointing to an urgent need to address this lacuna.³⁵

Teachers reported some students missing 1-2 days per month due to menstruation, but this is not seen as a serious concern in their opinion. Some girls prefer to stay home to avoid having their menstrual status disclosed, whether it be due to leaks or others noticing they are not feeling well. Pain was the most cited reason for school absence during menstruation. Girls reported being "aware of their dates" or predicting that their period is approaching due to menstrual cramps and other associated symptoms. However, it was not common for girls to formally track their cycles on a calendar.

6.3 Practices

6.3.1 Product use

In a systematic review and meta-analysis of studies published in 2015 on girls' menstrual health practices in India, it was found that the use of commercial pads was significantly more common in urban areas, and cloths were significantly more common in rural areas. On the whole, cloth use was reported as less common in schools regardless of context.³⁶

In the National Family Health Survey¹ (NFHS-4), young women age 15-24 were asked what method(s) they use during menstruation. In West Bengal, 66% use cloth³⁷, 39% use sanitary napkins, 14% use locally prepared napkins, and 2% use tampons. Notably, only 4% of rural women use a 'hygienic method' of menstrual protection, compared with 73% of urban women. The NFHS-4 considered only locally prepared napkins, sanitary napkins and tampons to be *hygienic methods* of protection.

In a study of an urban school in Kolkata (Victoria Institution) it was found that 82.3% of adolescent girls used sanitary pads and 15.7% used cloth. Out of cloth users, 69.5% had problems washing and drying the cloth due to lack of privacy. For this reason, they usually dried and stored the cloth in unhygienic places³⁸.

The preference for disposable sanitary pads was also reported by girls in the five Splash schools in Kolkata. Girls believed using disposable sanitary pads was the 'correct' way and those who use cloth (old kurtis) dispose of them after one use rather than washing. Girls did not express inability to use disposable pads due to cost. Girls reported changing pads every 6, 8, or 12 hours and some also reported changing only when pad is full in order to conserve resources. Girls also reported that school washrooms are often dirty and crowded resulting in many preferring to change menstrual materials at home.

6.3.2 Disposal

The study in the five Splash school found disposal to be a challenge even when a waste bin was available, because often pads were thrown or hidden haphazardly. In schools where waste bins are used, the Child Cabinet is responsible for notifying staff when waste bins fill up; but some students feel too shy to mention the problem. The schools also face challenges because some sweepers demand extra payment to take away the menstrual waste.

6.3.3 Pain Management

Many girls interviewed reported not doing anything to reduce their menstrual pain. Pain medication is viewed as inappropriate for menstrual pain unless it is debilitating and requires advice from a doctor. The use of pain medication for menstrual cramps was thought to cause later reproductive problems among girls.



7.0 Menstrual Health Program Interventions by Domain

In this section we will be looking at some of interventions that have contributed to the menstrual sector in India. With collaborative platforms such as the Menstrual Health Alliance India gaining traction, there are more opportunities for various actors to share learnings and explore collaborations. Most of these interventions have a rural focus but can be applied more broadly to urban settings.

7.1 Menstrual Health Education

Knowledge and awareness of ideal menstrual health practices is a critical first step to improving menstrual health, 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 hygiene practices associated with menstruation.

7.1.1 Champa Kit – Thoughtshop Foundation

The Champa Kit³⁹ is based on a story, where the central character is a twelve-year old girl named, Champa. The story is presented through flip charts and contains five modules. Each module is self-sufficient and can be used either independently or in sequence with other modules. The sequence of issues covered include self-esteem, puberty, menstruation, conception and sex determination, and birth spacing.

7.1.2 Menstrupedia Comic

Menstrupedia⁴⁰ is a friendly comic-style guide which helps girls and women stay healthy and active during their periods. Menstrupedia aims at delivering informative and entertaining content on menstruation through the character of ‘Priya Di,’ who is a doctor and a reliable source of menstrual health information for girls.

The Menstrupedia Comic is being used by more than 7,500 schools, 270 NGOs and 1.2 million girls across India. In West Bengal, the Lalana,⁴¹ campaign in Hoogly district in West Bengal, has been using these comic books to educate girls and women.

7.1.3 Ritukalin Bandhobi Dolon Di (*Dolon - our friend in need during periods*) – Nirman Foundation

Nirman Foundation in Kolkata published the Bengali comic book on menstrual health called, Ritukalin Bandhobi Dolon Di. This is an in-house publication which has been rolled out by Nirman Foundation in various menstrual health projects in West Bengal along with other IEC materials developed by the foundation in-house.

7.1.4 As We Grow Up – WSSCC and Government of India

As We Grow Up⁴² was jointly produced by the Water Supply and Sanitation Collaborative Council (WSSCC) and the Government of India (GOI). The images in the flipbook allow participants to visualize the changes in the body that take place from childhood to adulthood. Taking a ‘show don’t tell’ approach eases the participants into the topic of menstruation. WSSCC has also launched a version of this module for girls with disabilities.⁴³

7.1.5 Paheli ki Saheli – UNICEF and Johnson & Johnson’s

The Paheli ki Saheli (roughly translated as “*the answer to our riddles*”) package⁴⁴ is a comprehensive tool for educating adolescent girls as well as their mothers and teachers on menstruation. Apart from a story based illustrated flipbook, it also contains five short five-minute films, riddles, and activity-based games. It’s an initiative by UNICEF India and Johnson & Johnson’s to break the silence around menstruation and trigger a transformation in menstrual health and hygiene for girls.

7.1.6 Chaa Jaa - Girl Effect

In India, Girl Effect has launched Chhaa Jaa (Go Forth and Shine)⁴⁵, a brand aimed at empowering adolescent girls in India through digital media content. In the segment Khullam Khulla (Talk Openly! Without Hesitations!), an everyday girl Rani talks about various aspects of sexual and reproductive health with a special focus on menstruation.

7.2 Menstrual health product – Access and Use

The ‘She Pad’⁴⁶ project was launched in 2017 by Kerala government as a product-based intervention in schools. The widely talked about project supplied schools in the state with sanitary napkins, almirah, and incinerators. The project covered 400 schools in the state and was implemented by the Kerala State Women Development Corporation (KSWDC).

In Kolkata, Dollar Industries, as a part of their corporate social responsibility (CSR) initiative, in association with SEED⁴⁷ (Society for Socio Economic and Ecological Development) launched a campaign #BeFreeBeYou. The campaign aimed to improve the menstrual health of underprivileged girls. In the first phase, 100 sanitary napkin vending machines were planned to be installed around Kolkata and sub-urban areas. CSR funds⁴⁸ were also leveraged by Nirman Foundation to install pad vending machine and incinerators in ten schools in and around Kolkata area and South 24 Parganas, under the CSR initiative of Balmer Lawrie & Co. Ltd.

In recent times, there have been environmental concerns about disposable sanitary napkins. This has led to social enterprises, such as Aakar Innovations⁴⁹ and Saathi Pads⁵⁰, launching their own brands of biodegradable or eco-friendly sanitary napkins. Though a welcome step in addressing sanitary waste, the claims that these products are eco-friendly, biodegradable, and compostable have been contested by national campaigns.

Another focus has been on reusable menstrual products, such as cloth pads and menstrual cups. Anahat Foundation⁵¹ and Shomota Pads⁵² are social enterprises based in Kolkata which have been conducting menstrual health sessions to promote their brands of cloth pads and have also distributed their reusable kits in school and community outreach programs.

In the midst of menstrual product boom there have also been concerns about their quality and safety standards. The Bengaluru-based NGO Safety Monitor Research Foundation⁵³ offers safety certification to product companies and has listed menstrual health products which have been evaluated on parameters such as ingredients safety, product claims and compliances. With many menstrual health product options becoming available in India, NGOs such as WaterAid India have been advocating for informed menstrual product choice⁵⁴ which can be achieved through multi-product information and training. Informed product choice is important *as it enables girls and women to choose a safe menstrual health product according to her needs and comfort, her ability to pay, and the context in which she lives and experiences menstruation.*

7.3 Supportive Built Environment

Girls need access to toilets that enable them to attend to their menstrual hygiene needs, such as washing themselves and changing menstrual products. Merely providing access to a sanitation facility is not enough, since toilets should also be girl-friendly with adequate water supply, doors with locks, electricity, ventilation, and light.

In the past six years, investments for building gender-segregated toilets in schools improved when the Indian Prime Minister pledged to provide separate toilet facilities for girls and boys in every school in his first Independence Day address. NGOs and CSR funds have been mobilized to build separate toilets for girls in schools, including girl friendly facilities with private space for changing and disposing of menstrual waste. In 2019, Rotary experimented with bio-toilets in three girls' schools in the outskirts of Kolkata in Budge Budge.⁵⁵

7.3.1 Disposal and waste management

The use of menstrual health products is intertwined with menstrual waste disposal and management solutions. Qualitative evidence suggests that when girls lack disposal facilities, they may use disposable pads for a longer duration than recommended or dispose of used pads in an unhygienic way, contributing to poor maintenance and cleanliness of school facilities.

Management of menstrual waste from disposable sanitary products have been a challenge as these products are becoming increasingly accessible to girls in Kolkata's schools. Most incinerator



manufacturers in India are now opting for a voluntary certification from third party laboratories. Some manufacturers are claiming to be eco-friendly, among them are GreenDispo⁵⁶ – an incinerator developed by National Environmental Engineering Research Institute (NEERI) and marketed by the Pune-based Allforasmile LLP since September 2019.

7.4 Stigma and Normative Change

In the past few years, menstruation has entered the popular discourse through films, television, and the internet. “Touch the Pickle” campaign by Whisper⁵⁷ and the movie *Padman*⁵⁸ are efforts by non-traditional actors to mainstream “period talks.”

Involving boys and men has been acknowledged as both a need and a challenge to bring about normative change. In a project implemented by WaterAid and Vatsalya⁵⁹, men and boys were involved through different, innovative approaches, including games and a film made with the communities to share their experiences and perceptions, to stimulate discussion. Other strategies included involving male members of school management committees through training and awareness-raising sessions to provide supportive environments for effective menstrual health management in schools and to inspire men to become change agents. The 2018 short film, *First Period* produced by Dasra⁶⁰ is another effort to build empathy in men and boys about the experiences of menstruating women and girls.

7.5 Advocacy and Policy

Ever since its inception, the Menstrual Health Alliance India (MHAI) has been an effective platform for pushing forward menstrual health advocacy and policy efforts in India. Some of the successes of the MHAI include advocating for revised standards of sanitary napkins⁶¹ and working with the MoDWS (now Ministry of Jal Shakti) to publish a resource book⁶² on menstrual waste management.

The internet has added a new dimension to active citizenship in India and this has led to new age menstrual health advocacy led by citizens on platforms such as change.org and Youth Ki Awaaz.⁶³ From menstrual health focused campaigns asking for mandatory⁶⁴ menstrual health education in schools, to demanding sanitary napkin vending machines in girls’ and co-educational schools in pockets of Kolkata,⁶⁵ internet has democratized the advocacy landscape in India. A successful example of menstrual activism has been the removal of a “goods and service tax” (GST)⁶⁶ on sanitary pads in India which was triggered by a petition on change.org. Such petitions have a chance of changing policy and have an impact on the menstrual health landscape in India.

8.0 Recommendations for Future Investigation

The opportunities for further research, development, and actualization of menstrual health program approaches described below 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 Kolkata, India.

Successful implementation of menstrual health solutions requires a multifaceted approach. Below are the opportunities that exist within each of the current domains of programmatic 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. Also ensuring supply chain to enable schools to procure their own stock. As CSR funds have an interest in funding them, building the capacity of schools to approach or look for such sources of funding for projects.
Menstrual Health Education	Increase knowledge of physiological process of menstruation for teachers- especially male, for students (male and female) and provide age appropriate information to pre-menarchical students. As questions on menstrual health often lead to larger questions on sexual and reproductive help which are beyond the scope of Splash, signposting services such as Teen Helpline run by CINI could be explored within the scope of Splash’s menstrual health program. Collaboration with other organizations is an area that can be explored. As doctors are seen as reliable source of information, collaboration with the medical colleges in Kolkata is an area is a possibility.
Supportive-built environment	Investigation into types of product disposal- acceptability of incinerators and trash removal schemes will inform a solution for product disposal. Exploring nudges in built environment to trigger hygienic behaviors
Stigma and normative change	Involving the larger community is essential, especially out of school engagement with parents. Collaboration with other community outreach NGOs could be a way to address this need. Involving faith group members in the WASH sector has proven to be successful, similar approach could be given a thought to when it comes to menstrual health. A good example is the Global Interfaith WASH Alliance which has been touching upon the need for menstrual health.
Advocacy and policy	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. But with the rise of menstrual health collaborative platforms, there is an opportunity for joint advocacy to advance girl’s health in urban schools in India.
Research	There is currently minimal evidence linking the impact that menstrual health management to broader life course outcomes. Often the evidence addressing health outcomes is anecdotal in nature and not generalizable to any given population. There is also scope to investigate other indicators of menstrual health apart from school attendance as a girl’s ability to attend school is influenced by other societal factors apart from access to menstrual hygiene facilities at school.



Annex 1. Menstrual Health Stakeholders in India –Stakeholder Matrix

Table 3. Stakeholder Matrix

	Education/Awareness	Product Provision	Supportive Built Environment Provision	Policy/ Advocacy	Economic Empowerment	Stigma/Normative Change	Disposal	Research	Urban	Rural	AGYW	Caregivers	Schools/Teachers	Community/ Social Network	Policy Makers/ Government
Aakar Innovations Private Limited	X	X			X	X			X	X	X		X	X	
Aga Khan Development Network	X	X	X			X		X	X	X	X		X	X	X
Anahat Foundation, Kolkata	X	X			X	X			X	X	X		X	X	
Biomass Controls							X	X	X	X				X	
CARE India	X		X	X		X			X	X	X			X	
CINI, West Bengal	X		X			X			X	X	X			X	
EcoFemme	X	X			X	X			X	X	X			X	
Girl Effect	X					X									
Goonj	X	X	X		X				X	X	X			X	
Menstrupedia	X								X	X	X	X	X	X	
Nirman Foundation, Kolkata	X	X	X			X	X		X	X	X		X	X	
PATH	X		X	X		X		X	X	X	X		X	X	X
Plan India	X	X	X				X		X	X	X		X	X	
Population Foundation India	X			X				X		X	X			X	X
ThoughtShop Foundation	X					X			X	X					

UNICEF India	X		X	X				X	X	X	X		X	X	X
WASH United	X		X	X		X		X	X	X	X		X	X	X
World Vision India	X		X			x			X	x	x		X	x	
WaterAid India	X		X	X		X		X	X	X	X		X	X	X
WSSCC	X		X	X		X		X	X	X	X	X	X	X	X
YP Foundation	X			X		X					X			X	X

Table 3. Stakeholder Matrix contd.

	Education/Awareness	Product Provision	Supportive Built Environment Provision	Policy/ Advocacy	Economic Empowerment	Stigma/Normative Change	Disposal	Research	Urban	Rural	AGYW	Caregivers	Schools/Teachers	Community/ Social Network	Policy Makers/ Government
Central Government Stakeholders															
Ministry of Jal Shakti (erstwhile Ministry of Drinking Water and Sanitation)	X		X				X		X	X	X		X	X	X
Ministry of Health & Family Welfare	X	X	X			X			X	X	X		X	X	
Ministry of Human Resources and Development	X		X				X		X	X	X		X		
Ministry of Women and Child Development	X									X	X			X	
Ministry of Rural Development		X			X					X	X			X	
Ministry of Chemicals and Fertilizers		X							X	X	X			X	
West Bengal Government Stakeholders															
Health and Family Welfare Department		X							X	X	X			X	

Panchayats and Rural Development Department		X	X		X					X	X		X	X	
Department of Women Development and Social Welfare, Government of West Bengal	X				X					X	X			X	

Annex 2. Key concepts and definitions

Informed product choice is the ability of girls to choose a menstrual health product drawing upon comprehensive and unbiased information on the product range, including their relative benefits and disadvantages, so that it meets their personal, reproductive health and socioeconomic needs and realities.

Menstruation or menses is the natural bodily process of releasing blood and associated matter from the uterus through the vagina as part of the menstrual cycle.

Menarche is the onset of menstruation, the time when a girl has her first menstrual period.

Menstrual hygiene management (MHM) refers to management of hygiene associated with the menstrual process. WHO and UNICEF Joint Monitoring Program (JMP) for drinking water, sanitation, and hygiene has used the following definition of MHM: '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 fear¹.

Menstrual health and hygiene (MHH) encompass both MHM and the broader systemic factors that link menstruation with health, well-being, gender equality, education, equity, empowerment, and rights. These systematic factors have been summarized by UNESCO as 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.

Menstrual hygiene materials are the products used to catch menstrual flow, such as pads, cloths, tampons or cups.

Gender refers to the roles, behaviors, activities, and attributes that a given society at a given time considers appropriate for men and women. These attributes, opportunities and relationships are socially constructed and are learned through socialization processes. They are context and time-specific, and are changeable.

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