INTRODUCTION AND METHODOLOGY

PART 1 BACKGROUND INFORMATION

1.1 PROJECT TITLE

Combating the Silence from Menarche to Menopause - A Comprehensive Report on Menstrual Hygiene Management in India.

1.2 PROJECT AIMS

The principal aim of the project is to analyse layers of silence on menstruation in India and search for enablers to combat these. We bring findings from people-centric and participatory research from fourteen districts in seven states of India such that an ethical, context-sensitive and ethnographic intervention to fill gaps between policy and practice can be enabled. Eleven of these were aspirational districts under Govt of India's Aspirational Districts Programme (ADP) and three more were included due to their various vulnerabilities.

1.3 PROJECT OBJECTIVES

a) To conduct survey; also to do a critical review of available literature on menstrual hygiene in India

b) To assess knowledge levels, beliefs and practices on menstrual hygiene across regions & communities in the chosen parts of 14 districts in the 7 states of Maharashtra, Haryana, Chhattisgarh, Odisha, Tamil Nadu, Bihar and Assam.

c) To determine vulnerabilities, issues and risks pertaining to Menstruation and social as well as inter-sectoral stress factors.

d) To understand multiple layers of building blocks by building an ethnographic profile in terms of MHM space and times as lived realities of women, particularly in the ages 24-49.

e) To identify structural challenges hindering proper MHM and explore opportunities to overcome these, including suggesting on ground suitable product awareness and policy related advocacy.

f) Collecting surveillance data on menstrual health to better understand the effects and demographics of menstruation, including puberty trends with individual as well as comparative insights

g) To tailor programme suggestions for Civil Society, Social Workers, Grassroots Leaders, Women Sarpanchs, Legislators and SHG Teams.

h) To publish the research report based on the above assessments and share with government, NGOs and other stakeholders.

1.4 RATIONALE

For our research, we have focused on data collection and analysis from communities living in some of India's Aspirational Districts[1].

The Aspirational Districts Programme (ADP) aims to quickly and effectively transform 112 most under-developed districts across the country. With States as the main drivers, this program focuses on the strength of each district, identifying low-hanging fruits for immediate improvement and measuring progress by ranking districts on a monthly basis based on incremental progress made across 49 Key Performance Indicators (KPIs) under 5 broad socio-economic themes - Health & Nutrition, Education, Agriculture & Water Resources, Financial Inclusion & Skill Development and Infrastructure. The delta-ranking of Aspirational Districts and the performance of all districts is available on the Champions of Change Dashboard.

1.5 PROJECT DURATION

The research was completed in the period from February 2022 to April 2023.

1.6 RESEARCH OWNERSHIP

This research has been organised and executed under Sulabh Sanitation Mission Foundation (SSMF) Delhi.

1.6.1 ABOUT SULABH REFORM MOVEMENT

SSMF is a part of the Sulabh Reform Movement, a pioneer in the field of WASH (Water, Sanitation and Hygiene). The founder of the Sulabh Reform Movement, Dr. Bindeshwar Pathak (Padmabhushan awardee) has taken the sanitation movement and his twin-pit technology to a level where he has been able to free the scavengers from the inhuman task of manual scavenging, and enabled alternative employment through vocational training. His work has received large scale national and international recognition. In the course of this journey, different organisations were established under the Sulabh Reform Movement from time to time. Sulabh Sanitation Mission Foundation (SSMF) was established in 2006 with the idea of integrating WASH interventions with strategies for education, women's economic empowerment, and health and nutrition programmes. Since 2014, SSMF has played a significant role in facilitating Government of India's Swachh Bharat Abhiyan, a programme for ending open defecation in India. Additionally, SSMF has been actively implementing projects that work towards the achievement of SDG 3, SDG 4, SDG 5 and SDG 6 targets, and has a special consultative status with the UN Economic and Social Council (UN ECOSOC).

Under Sulabh Reform Movement, so far about 16 lakhs household toilets, more than 10,000 public toilet complexes and 20,000 toilet blocks in schools have been constructed, benefitting thousands of schoolchildren especially girls, who had to otherwise struggle for proper school sanitation facilities. 'Sulabh School Sanitation Club' is a project, where school students, youth, parents and teachers come together and learn to work towards a more hygienic world through various fun activities. It is a girl-led movement which empowers children through hygiene education leading to a positive social transformation and has so far been implemented in over 200 schools in India and abroad. Training sessions in rural and urban communities are also held where women and girls are educated about myths, taboos and shame that promotes a culture of silence around menstruation which silence puts health at risk. This intervention has had a positive outcome on the overall health of girls and women, and now SSMF is working on a proper sanitary napkin disposal mechanism in schools and villages.

PART 2 INTRODUCTION: PROBLEMATISING MENSTRUATION

2.1 SILENCE, VOICE AND VISION ON MENSTRUAL HEALTH MANAGEMENT

The history of Menstrual Hygiene Management (MHM) in India has been painful, moving from a deep and a shameful silence just a decade back to the present time when now 28th May every year is observed as MHM Day. From being absent in public health agenda to having a dedicated program on MHM, menstrual hygiene has come a long way. Though there is a positive momentum in terms of options to manage periods in a safe

[1] The broad contours of the Aspirational Districts Programme are Convergence (of Central & State Schemes), Collaboration (of Central & State level Officers & District Collectors), and Competition among districts through monthly delta ranking; all driven by a mass movement.

and healthy manner, yet the social barriers continue to be a challenge. Efforts are on to provide School toilets for girls, free or subsidized sanitary pad distribution in schools and toilets at household level. Yet only a little over half (58%) women between 15-24 years use a hygienic method of menstrual protection as per the National Family Health Survey-4 (2015-16).[2]

We observed that though India has achieved some goals in menstrual hygiene through centrally sponsored and state schemes, still the journey to achieve equity and wellbeing for women of all ages and circumstances seems to be a long and arduous one. While adolescent and school going girls have begun to derive restricted benefits of various govt. programmes, yet creating positive perceptions in homes, institutions and society on menstruation, as well as proper MHM among Elder and Ageing Menstruating Women(EAMW) has not been adequately addressed. In India, there is (a) an intersectoral silence and lack of dialogic wellbeing on MHM among EAMW and; b) debilitating voices that equate periods with a negative, restrictive, prohibitive and segregational connotations. The silence on periods is not only layered and inter-sectoral, but in its insidious reach in homes, institutions and livelihoods, this lack of rationalisation of menstruation reflects a missing analytical engagement on barriers and enablers.

With a motive to understand the patterns of silence as well as the voices on menstruation in India, our research study juxtaposed barriers with enablers through analytical inferences from data and by presenting felt needs, perceptions and experiences emerging from our data.

Vision: Menstruation is an embodied experience for a woman, who from menarche to menopause encounters not only her changing biological situation but also the socio-political-economic-cultural challenges. Menstruators[3] in our study belonged to diverse communities and contexts which influenced their periods' experience in a variety of tangible intangible ways. While period poverty and lack of resources represent tangible challenges, the veritable silence and restricting beliefs over menstruation reflect the intangible encumbrances. To ensure menstruating women a basic dignity and well-being, it becomes pertinent to address her challenges from menarche to menopause. Our vision is to suggest community sensitive ways to combat the silence over the myths and taboos, and recommend policy interventions in accordance with findings from each state. In this way, we hope to create a dialogic space and the basic hygiene, sanitation and reproductive health facilities for women beyond their school years.

Our research strives to bridge literature gaps, deepen the knowledge on grassroots experiences and ideas on menstruation, to build a positive relationship between MHM, public policy, women's rights, WASH and targeted advocacy and to break the silence over periods.

Menstruation is generally associated with perception of impurity in Indian society. Isolation of the menstruating girls and restrictions on them have imparted a negative attitude towards this phenomenon. People fail to understand that menstruation is an integral and normal part of human life. This subject is too often a taboo and has met many cultural hindrances and negative attitudes due to embedded perceptions and cultural beliefs that menstruating women and girls are "contaminated", "dirty" or "impure". Girls undergo severe mental trauma and have no accurate or direct access to information on the subject. Adolescent girls in schools suffer most from period stigma, lack of sanitation services, facilities to cope with the physical and psychological changes and in addressing difficulties during menstrual periods. Inappropriate facilities at school poses challenges to girls attending schools during menstruation. While the government has established some programmes to address the education and awareness on this issue, its coverage for school going girls[4] and also for older menstruators maybe less than desired.

A study conducted by AC Nielsen reveals that inadequate menstrual management practices makes adolescent school girls (age group 12-18 years) miss 5 days of school in a month (50 days a year). Around 23% of girls drop

[2] MENSTRUAL HEALTH IN INDIA:AN UPDATE; Ministry of Health and Family Welfare, Government of India. https://pdf.usaid.gov/pdf_docs/PA00W863.pdf

[3] 'Menstruators' as a term of reference is used here as a gender neutral and inclusive term for all our period conversations.

[4] i) In India, 66% of schools lack functioning toilets, leading to menstruating girls missing, on an average, 5 days of school every month or dropping out completely once they start lagging in their studies. ii) Teachers are not trained or capable of providing the girls with credible answers and practical ways of managing their menstruation. In fact, many female teachers themselves miss school during their menstruation. iii) 23% of adolescent girls in the age-group 12-18 drop out of school after they begin menstruating

out of school after they start menstruating. Generally, women have been facing several cultural and physical barriers and violence since time immemorial, and cultural practices against women, largely stemming out of patriarchy and superstitions, have made women extremely vulnerable to violence, physical, cultural, emotional, and social.

Gender dynamics and relations change throughout the course of one's life, and caste, community, ethnicity, age, marital status, number of children, sex of the children born, disability, economic resources and educational level can all determine status of a woman in her household. Women including adolescent girls often have the lowest status where families see women as assets to be protected and got rid of post puberty. The cultural barriers further worsen her condition in the household as she belongs to none. In our work with some indigenous communities, we have noticed the abominable practice of a woman staying out of the house during menstruation in huts or cattle-shed, as she is considered, "impure" during her menstruation. Such attitudes may expose her to an infectious environment, besides causing her emotional alienation.

Such practices make a woman or girl extremely vulnerable to physical and sexual violence from outside and compromises her right to life with dignity and right to residence in her parental or marital home. The mental and emotional trauma that women and girls endure are unspeakable. Research has identified that adolescent girls are particularly vulnerable and susceptible to gender-based discrimination including sexual violence, forced and early marriage, dropping out of school and risk of death during childbirth due to poor hygiene and sanitation practices. Many organisations are now working on the issue of prevention of early marriage and early pregnancy as they have adverse effects on the girl's health and may inhibit their ability to take advantage of educational and job opportunities. The issue of menstrual hygiene needs to move out of the corridors of discussion into the practical world of making communities aware and active on securing protective lives for women.

Adolescent girls and Menstruation: Menstrual hygiene management (MHM) is an essential part of hygiene for women and adolescent girls between menarche and menopause. Despite being an important issue concerning women and girls in the menstruating age group, we found MHM in our study districts to be largely limited to a short solution such as provision of sanitary pad. However, the focus should be on determining the knowledge, perception and practices on menstrual hygiene across various sections of communities. As of now, there is no discussion on the process of menstruation, and the subject is a taboo and it is still common for people in India to feel uncomfortable about the subject.[5] A holistic approach is required as the subject cuts across multiple sectors and involves multiple stakeholders to overcome the gaps and challenges through a single window system and not merely providing part solutions like sanitary pads.

The sexual and reproductive rights of girls and women are compromised when they must alter their daily routines; face stigma in their communities, schools, and workplaces; and be at risk of poor sexual and reproductive health outcomes because they cannot manage menstruation with dignity. Society must also take the responsibility to sensitize boys and men on issues pertaining to Menstruation.

2.2 SCOPE OF THE STUDY

2.2.1 THEMATIC FOCUS

Our study focuses on women between the age group of 20-49 years. Although our study has mainly taken into consideration policy and healthcare gaps in MHM, WASH and wellbeing of women, however data on adolescent school-going girls has also been collected and analysed. This is connected to our argument that the community and policy should engage more on menstrual health issues and knowledge building of adolescents. In contrast, the EAMW are very much left to their own resources seeking help from whichever quarter possible or worst, suffering in silence in many isolated, deprived, impoverished and hostile circumstances.

[5] National Guidelines on Menstrual Hygiene Management, Ministry of Drinking Water and Sanitation, Government of India

2.2.2 HERMENEUTIC TOOL

Our study conceptualises the term, 'Elder and Ageing Menstruating Women'(EAMW) as this is the age group that we call special attention to, owing to a neglect both in policy and literature. Women between the ages of 20 to 49 years of age seldom enjoy exclusive focus on menstrual hygiene and WASH, unless they themselves have the capacity to exercise their voice. Factors such as educational and economic background; livelihood constraints, remote and isolated lifestyles away from medical and infrastructural hubs, all influence a woman's capacity and options to speak up and pursue intimate health issues. Social structure (taboos, myths, dos and don'ts of family and community) in traditional set-ups are such that shy newly married women and young mothers face hurdles on MHM. Similarly the EAMW feel hesitant and neglected, and face everyday adversities. We propose that EAMW need community focus and a special policy empowerment to overcome encumbrances and build dialogic spaces to uphold their rights and wellbeing.

2.2.3 REGIONS AND AREAS

We focused on approximately five villages each and diversely vulnerable communities in fourteen districts in seven states, eleven of which were Aspirational Districts under Government of India's, ADP programme[6]. We also included three non-ADP districts which either suffer grave natural disasters or have vulnerable communities.

2.2.4 LIMITATIONS OF THE STUDY

The research and conceptual design are closely linked to the fact that in India, although there is a growing policy focus and engagement on the well-being of young menstruating girls (10-19 years), yet adequate infrastructure, socio-medical support system, as well as resources for young, adult and ageing pre-menopausal women (between 20-49 years of age) are rare. Our primary focus in this report is on methodical accessing and processing of information, opinions and critical reviews on MHM and WASH from a bottom-up perspective for a better policy direction.

This project covers specific themes, and Menopause is not within its ambit. Although focussing on women's voices, yet at the same time, we believe that men and women can complement the process of menstrual relief in India, and the study brings on board some narratives of women who confide with the men in their lives. Together, women and men can partner to improve the prospects of MHM and WASH not only in policy making but also in implementation, at both the National and community and family level.

This study closely looks at the presence or lack of logistic, social, emotional, medical and economic support systems for menstruating women beyond adolescence and before menopause. Our study also includes some voices of menopaused aged women, as they form an essential part of menstruation as a lived experience.

The project is aware that the term 'menstruators' is more gender inclusive, and non-reductionist. However, this study barring some exceptions centres on primarily women menstruators, and how they undergo the socio-physiological, structural, inter-sectoral and reproductive health issues connected to menstruation. The intricate processes and challenges, and requisites of the 'Third Gender' menstruators are not part of this research. Additionally, specific target groups such as sex workers and trafficked, incarcerated, physically and mentally disabled and special needs women and girls are outside the purview of this study. Our experience indicates that more work needs to be done amongst these vast target groups, and could be part of a subsequent study. Till then we are happy to bring into public domain this inter-disciplinary knowledge on women menstruators from seven states and fourteen districts of India.

[6]Owing to inter and intra-regional disparities, disasters, risks and developmental lags especially in the human and social development sectors, the ADP of the GOI announced in 2018, is an attempt to shift the focus back on health, nutrition, livelihood and education. The health sector itself comprises of 13 indicators in the Aspirational Districts (ADs) (Kapoor and Green 2020). Overall, the ADP is based on three core principles of convergence, collaboration, and competition. The unique programme aimed to track and measure the growth of the districts under it on 49 developmental indicators, ranging broadly across five themes namely, health and nutrition, agriculture, financial inclusion and skill development, basic infrastructure, and poverty (Deb 2021).

2.3 ENGAGING WITH LITERATURE ON MHM: A REVIEW

Through this review, we aim to provide a comprehensive research on how women's menstrual health is closely related to social customs, taboos, beliefs and practices on the one hand, and the available policy and infrastructural resources towards MHM including WASH on the other. The social relationships and life-processes in groups and communities ascertain how menstruating women will fare through their periods, whereas the educational, participatory, economic and technical facilities available to her determine how well the support systems ensure her socio-medical wellbeing (Roberts 2020).

Literature on MHM indicates how active engagement with a woman's basic human right to public health during menstruation assures her status as a dignified member of society. In today's era of equity, justice, women's rights as human rights, social growth and sustainable development, societies have failed when almost 50% of the population suffer a silent yet stark neglect. (World Bank 2018). Our project juxtaposes key insights and inter-linkages from public policy, public health, political science, social anthropology, disaster risk-resilience and human capital literature with actual findings from the field. Our unique contribution has been the combined insights from desk-based, existing, inter-disciplinary research with reflective knowledge and perspectives from menstruating women-actors with the following potential benefits:

- Given the challenges in India's public health policy and dearth of literature on MHM and WASH issues, provisions for women in the age group of 20-49 years in India, the voice of menstruating women over the issue can impart a critical awareness to policy, women's rights and sustainable development.
- By comparing our findings with prevalent behaviour and social norms observed through factors such as women's marriage age, trends in schooling and education, nutritional and social taboos in the seven chosen states, we contribute a insight on removal of gender discrimination on MHM and barriers to WASH.
- Finally, a study such as ours has achieved two objectives: a) Informed us, to what extent the findings of age cohort 15-24 years represent the realities of menstruating women beyond 24 years and; b) Prepared us to analyse the particular factors that determine the health and wellbeing of older menstruating women across in India. In the subsequent sections of this report, we will draw on findings and facts to illustrate both these points.

2.4 A RESPONSIBLE ENGAGEMENT WITH EXISTING KNOWLEDGE

The study aims to propose critical interventions in conception and practice from interpretations of quantitative and qualitative data findings. Our findings address gaps in prevailing literature. At the same time, our data also tallies with existing literature on many accounts, at times by extending its focus. The instances where we have consensus with existing literature is how barriers to MHM and WASH are detrimental to women's trans-generational menstrual health from the following perspective:

1. At a national and global context, India may struggle long to make her women equal, if they lack MHM and WASH facilities as basic rights.
2. In states and regions and w.r.t community specific developmental indicators, menstruating Adolescent women and EAMW face actual MHM and WASH related traumas. Resilience alone may not always pull her through barriers and anomalies during deprivations and disasters as women then become even more vulnerable. EAMW seldom get the eco-system to bail them out. Pandemic related MHM products shortages are a recent case in point.
3. We argue that when menstrual inequities exist amidst lack of medical and social care, ignorance and neglect become encoded in layers of silence, and it requires individual courage and collective wisdom as well as coordinated national, regional and local efforts for redressal.

Meanwhile, our contention is that the more prolonged existing barriers, silences and lags become, the more overarching are likely to be the acts of exclusion of and compromises in women's rights. A weakened status of women impacts her menstrual, reproductive and sexual health directly by impinging upon her choice,

participation and decision making in socio-political life and sustainable development aspects. Hence it is the need of the day to combat the silence on menarche, menstruation, menopause and also see beyond menopause.

2.5 MENSTRUATION: THE PROCESS AND ITS IMPLICATIONS

Menstruation is a standard, regular biological process that half the world's population undergoes for a noteworthy part of their lives (Global Menstrual Health Collective: 2020). Menstruation is the process in which the uterus sheds blood and tissue through the vagina. The process begins in young girls around 10-12 years of age and occurs naturally and cyclically with an interval of approximately 28 days. Depending on the individual, uterine shedding can last anywhere between 2-5 days and is often accompanied by a range of physiological symptoms including cramping, headaches, nausea and fatigue (Li et al., 2020).

The average menstruator undergoes around 450 menstrual cycles in their lifetime (Chavez-MacGregor et al., 2007). Menarche, the period that heralds the beginning of menstruation, has been found to generally remain stable between 12 to 13 years in the case of populations that are well-nourished and belong to developed countries (American Academy of Paediatrics et al., 2016).

In India, the mean age of menarche was 13 ± 1.1 years with wide variations, i.e., 10–17 years. 73.1% had a cycle duration of 21–35 days (Omidar and Amiri et.al 2018). It is estimated that mostly 98% of females would have reached menarche by the time they are 15 years old (Chumlea et al., 2003). Although the duration, intensity, patterns and symptoms of most menstrual cycles typically ranges from and last up to 3 to 5 days, a range of 2 to 7 days seems to be a more accurate representation of the overall duration of menstruation each month. More or less in developing countries too, 13 years seems the average age for the onset of menstruation. With menarche, girls register immense changes in their being as well as social responses not only at a young age but later on in adult life and during childbirth, maternity, child rearing years and beyond. Yet from a practical societal perspective, Singh (2020) observes that menstruation is not just about women. It influences men too. For instance, boys seem to recognize, but are saddened by the resulting change in the nature of their friendships with girls once they reach menarche. In effect, they lose friendships, Chang and colleagues (2012) and Penakalapati (2009).

Allen and colleagues studying undergraduates in the US further describe this (2011) as a 'gender wedge'. This phenomenon may stem from the girls' own change in attitude on reaching puberty and withdrawing from boys generally, but particularly during menstruation. It is also likely to be perpetuated in societies where male/female relationships are restricted, as well as in cultures where girls reaching menarche are seen as ready for marriage. Other authors refer this as the 'sexualising of menstruation', akin to the sexualisation of women at menarche (Mason and Sivakami 2005).

Good menstrual hygiene is important for the health, confidence, and self-esteem. It is also linked to gender equality and basic human rights. In India, the number of women in the reproductive age group (15–49 years) is more than 31 crores (Census 2011).

Understanding the quantum of morbidity and poor quality of life that a woman would have to bear in the absence of proper MHM practices in the country, Government of India has incorporated MHM into national policies and programs as part of improving health, well-being, and nutritional status of adolescent girls and women. Initiatives have also been taken for reducing school absenteeism among adolescent girls. WHO and UNICEF is also providing technical guidance and support towards raising awareness, addressing behaviour change, capacity building of frontline community cadre, sensitization of key stakeholders, and creation of WASH facilities including safe disposal. Although there is no direct mention of any goal for menstrual health and hygiene in the UN Sustainable Development Goals (SDGs), it is well recognized that poor MHM practices will adversely affect the initiatives and performances of the countries toward achieving a number of important developmental goals (SDGs 3, 4, 5, 6, 8, and 12).

This study is a situational analysis of Menstrual Hygiene practices and needs in selected villages and has tried to augment existing research and ground knowledge.

2.6 MENSTRUAL HYGIENE MANAGEMENT (MHM) AND WASH

2.6.1 MHM:

Menstrual Hygiene Management (MHM) is defined as, "women and adolescent girls using a clean menstrual management material to absorb and collect blood, that can be changed in privacy as often as necessary for the duration of the period, using soap and water for washing the body as required and having access to facilities to dispose of used menstrual management materials." (UNICEF 2013 and 2014). Menstrual Hygiene Management (MHM) refers to the overall mechanisms that allow for the upkeep of hygiene during the course of menstruation. This includes but is not limited to having proper access to menstrual hygiene products to absorb or collect blood flow during menstruation (e.g., sanitary napkins, tampons, menstrual cups), and having safe, secure and private environment to change the materials and having adequate access to facilities that allow effective disposal of menstrual wastes.

MHM collectively also refers to several wider-scaled factors responsible for linking menstruation and menstruators with concerns of health, well-being, gender equality, empowerment, equity, education and fundamental rights (UNICEF, 2019). Studies indicate that MHM practices by adolescent females of low and middle-income countries (LMICs) are causes of severe concern (Chandra-Mouli & Patel, 2020), given that over 50 % of adolescent females have been found to follow unsatisfactory MHM practices. It must be noted, that this percentage of MHM anomaly is higher in rural areas compared to urban ones, (Hennegan & Montgomery, 2016; Khanna et al., 2005).

2.6.2 WASH:

Women use toilet facilities to manage their menstruation. Good MHM practices means that women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, and the MHM product 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.

(Sommer & Sahin, 2013).

India produces over twelve billion non-biodegradable pads annually. Many of them are heavily plastic-based and can take up to eight hundred years to decompose. But that's not all. In India, sanitary waste disposal faces an additional challenge: the manner and place in which it is disposed. Attempts to understand either process have not, at present, yielded pleasant results. A sizable proportion of India's menstruating population resorts to discarding used menstrual products in open fields and rivers; still more opt for throwing it away as part of the routine waste. Not only does this compromise the health of various water bodies, but also exposes sanitation workers, who take up the task of regularly segregating such sewage, to a variety of deadly diseases (Singh 2020). In order to look efficaciously into such challenges, an enabling environment for capacity building of states, society, CBOs and frontline workers is a need.

The frequency with which materials used for absorption of the menstrual flow are changed is also of critical importance. Not doing so can result in rashes and irritation to more serious issues like Urinary Tract Infections (UTIs), Reproductive Tract Infections (RTIs) and Toxic Shock Syndrome. There are several causes of this, ranging from a lack of awareness and poverty to widespread myths and taboos surrounding menstruation, (Majeed et al., 2022, Shanbhag et al., 2012 and Cherrier et al., 2018).

Poor menstrual hygiene management (MHM) can negatively impact the health and psycho-social well-being of women and girls. Menstrual hygiene management in the WASH sector is not formally defined in the Sustainable Development Goals (SDGs). However, clear linkages are there in: SDG3 (physical health and psycho-social well-being for women and girls), SDG4 (quality education for girls), SDG5 (gender empowerment and equality), SDG6 (water and sanitation), and SDG12 (responsible consumption and production for the environment). Proper management of MHM and WASH reduces not only health risks for men and women, but also eases the strain on sustainable development. Various kinds of menstrual materials, commercial and non-sustainable

products like sanitary napkins and tampons often contain harsh chemicals like dioxins (bleach), pesticide residues (from the cotton used as the base), artificial perfumes and other compounds. Dermal contact with this compromises the health of the external and internal vaginal region.

The long-prevailing taboos regarding menstruation and sanitary issues in Indian rural socio-economic populations results in the hesitation towards the usage of menstrual materials. Safe hygiene practices include not only washing and timely changing of menstrual hygiene products but also their proper disposal. Other factors might be influenced by the kind of menstrual materials used. Expectedly, this is highly problematic and has a number of adverse implications for India's ecological well-being (Singh 2020).

2.6.3 WASH, EDUCATION AND MHM IN INDIA

It is widely discussed in different studies, why there is a need for improving sanitary provisions for adolescents in schools in India, and the safe disposal of materials. For, instance, data analyses (Sivakami and van Eijk 2019; van Ejik and Sivakami et. al 2016) on MHM and WASH amongst school going girls in India states that while nearly all (93%) menstruating girls had received some information about menstruation, one in five girls using disposable pads had to take the used napkin home for disposal. A third complained of pain (36%); other worries included fear of staining, smell, or feeling unwell, and discomfort with movement and sitting. The type of menstrual hygiene problems differed for different items used. The discomforts and experiences of feeling unwell and restricted in movement etc. were more common among users of cloth (used by 28% of girls) compared to disposable pad users (used by 45%). Moreover, the status of sanitary facilities in schools is often reported to be inadequate, compromising girls' ability to manage their menstruation. Identifying discomforts associated with MHM, wellbeing and disposal during periods, the authors (Sivakami and van Eijk 2019; Also see, van Ejik and Sivakami et. al 2016) conclude that MHM and WASH lapses in various states of India impact quality as well as quantity of school time. Regularity of attendance of growing girl-children can be improved by national investment in menstrual hygiene management in schools,

Van Ejik and Sivakami et,al (2016), estimate that about half of Indian adolescent girls starting menarche are unaware of its cause, with only a quarter understanding the source of bleeding. The majority of girls faced numerous barriers and restrictions, and only one in eight girls faced no restriction at all. Commercial pads were more commonly used in urban areas and urban schools, while girls in rural areas mainly dependent on cloth.

About one in five girls disposed of their soiled absorbents in inappropriate locations. A quarter of girls reported that they did not attend school during menstruation. Absenteeism due to menstruation did not decrease over time; school absence was inversely associated with the prevalence of pad use in univariate analysis, but not when adjusted for region. Cloths are traditionally used to absorb menstrual flow; they are cheaper and environmentally less polluting, but are gradually being replaced by pads, particularly in urban areas. Cleaning and drying cloths is a problem if girls lack water, privacy and a drying place.

2.7 MENSTRUAL HEALTH, WOMEN'S EMPOWERMENT AND SUSTAINABLE DEVELOPMENT GOALS (SDGS)

MHM in schools makes a crucial contribution towards achieving the SDGs. Supporting adolescent girls during menstruation is also a step towards building their confidence in themselves and their bodies, enhancing their engagement at school and in their wider communities. Success in improving MHM in schools means success in improving quality education (SDG 4), gender equality (SDG5), and clean water and sanitation (SDG 6), enhancing the lives of girls across the world (UNICEF 2020). According to the Terminology Action Group of the Global Menstrual Collective Menstrual Health and Hygiene (MHH), good MHM practices are essential to the well-being and empowerment of women and adolescent girls. Access to affordable and sustainable menstrual products is key to improving menstrual health and hygiene, but millions of women around the world cannot afford these products. Menstruation has also been shown to be a reliable indicator of various parameters of an individual's health (e.g., Popat et. al., 2008).

Our view is that while facilities on MHM should in fact begin and continue throughout schooling to enhance a growing girl-child's intellectual and physical capacities and wellbeing, nonetheless these should not terminate therein. Beyond school years as well as in spaces outside of school, women and girls still require MHM and WASH support to be able to deal with emotional, reproductive, private health issues as well as sexual wellbeing.

Menstrual health management among adult women and the issues that they face up till menopause and beyond finds little focused attention . There is a need to adopt a holistic approach to include these EAMW in MHM, WASH and gender- wellbeing initiatives. Millions of women, girls and transgender people face menstrual related barriers across their life course due to discriminatory menstrual practices, inadequate menstrual health and hygiene services that prevent them from participating fully in life. Access to economically viable and sustainable menstrual products (e.g., menstrual cloths, reusable pads, disposable pads, menstrual cups and tampons) is key to improving menstrual health. Yet only a small segment of women and girls in developing countries use sanitary products during menstruation (World Bank: 2021).

2.8 DEALING WITH MENSTRUATION AS STIGMA, TABOO, SHAME

One of our prime concerns is that despite evolving policy framework and schemes in India as well as a growing national and international understanding on MHM and WASH, still there are huge gaps in implementation. Implementation at grassroot level requires a two-way approach. Governments need to be aware of what to deliver and to whom, and communities in turn, need the awareness on what to ask & expect. Additionally, if experts, policy makers, specialists, think tanks and community workers do not worry beyond adolescence, how will MHM and WASH be achieved for the women in the age group of twenty to forty-years?

Our research questions, reviews and ground-work on MHM is a bird's eye perspective for all stakeholders to empower communities and support national frameworks on women's health, community development, behavioural preparedness and social change. Our data is a resource of information on the current situation and presents a glimpse into the skills, resilience, and wisdom of the communities themselves. A circular two-way approach on the issue, we argue, can help coping up with menstruation as a social, economic, behavioural, health and hygiene issue specifically with regards to barriers and taboos, myths and obstacles to MHM and WASH

2.8.1 SOCIAL BELIEF, EXCLUSION & MENSTRUATION

Extensive stigma and taboos around menstruation- from menarche to menopause, however, converts itself into a source of fear, embarrassment, deprivation, ill-health and shame for many. Scholars in the western context have asserted that menstruation is more like a hidden than a visible stigma, but that is because women go to a great deal of effort to conceal it (Oxley 1998). Menstrual hygiene products (for example, tampons, pads) are designed to absorb fluid and odours, not to be visible through one's clothes, to be small enough to carry unobtrusively in one's purse, and to be discreetly discarded in a bathroom container (Kissling 2006). It is usually not possible to know for certain that a woman is menstruating unless she says so or unless menstrual blood leaks through her clothes and exposes her condition.

In the Indian context, however, we have different practices on menstruation depending upon region, social strata and the ethnicity. There are communities who segregate the girls and women when periods occur and ask them to live with bare minimum during periods. This exposes the menstrual status of the girls and women and not in the best of ways. There are those who celebrate the onset of puberty and menarche through traditional rituals. The restrictions during periods such as not going to holy places (in case of Hindus), cooking or praying etc, actually make women' period public, even though ironically the phenomenon itself is hidden in layers of silence in public domain. Restrictions continue to apply, though not without generating national debates on the issue now and then.

Published literature indicates that in addition to investment in safe and functional toilets with clean water for girls in both schools and communities, countries such as India must consider how to improve the knowledge and understanding and how to better respond to the needs of early adolescent menstruators. Our observation is

that alongwith this, due attention must also be given to elder and ageing menstruators (EAMW). Strengthening of MHM programmes in India is urgently needed, and Community and women's need for awareness, access to hygienic absorbents and their disposal need to be addressed. Local initiatives can also lead the way. For instance, In 2021, Raigarh district in Chhattisgarh initiated *Pavna*, a community-led menstrual hygiene programme, including training and supporting SHG members to produce and distribute pads through village markets. Through its "whole-of-society" approach, it facilitated breaking of social taboos in remote areas, while simultaneously increasing the usage of sanitary pads from 40 per cent to 75 per cent within a year (Rana 2022). Convergence with other schemes and departments, such as the Rurban mission and Department of Education was helpful.

Exclusion and shame lead to misconceptions and unhygienic practices during menstruation. Rather than seek medical consultation, girls tend to miss school, self-medicate, and refrain from social interaction. Relatives and teachers are often not prepared to respond to the needs of girls. In general, it has been found that in less developed contexts, the lack of preparation, knowledge, and poor practices surrounding menstruation are key impediments not only to girls' education, but also to self-confidence and personal development. The long-prevailing taboos in rural India result in lack of proper understanding on the usage and disposal of menstrual materials, as also personal hygiene practices necessary during menstruation and the frequency with which to change menstrual materials during the day.

2.9 WOMEN-CENTRIC, INTER-SECTORAL AND HEALTHIER WAYS TO LOOK AT MENSTRUATION

An important way to reduce stigma is social activism as well as pro-active & participatory community-based work. Bobel (2006, 2008, 2010) has written extensively about the history of menstrual activism as well as the myriad ways contemporary menstrual activists are drawing attention to the health and environmental hazards of menstrual hygiene products through organisations, political action, zines, and other publications. Finally, health care providers are beginning to recognize and promote menstruation as an important indicator, even a vital sign, of girls' and women's overall health (Diaz, Laufer, and Breech 2006; Stubbs 2008). The mission of the Project Vital Sign (www.projectvitalsign.org) campaign is to raise awareness about the role of menstruation in women's psychological and physical health with the ultimate goal of encouraging an open dialogue on menstruation between health care providers and female patients. Efforts to normalise menstruation would go a long way toward reducing its stigmatised status.

Individuals use specific menstrual hygiene products based on their awareness, availability, affordability/ income, and region, based on comfort level of use stemming from the cultural context. On any given day, more than 300 million women worldwide are menstruating. In total, an estimated 500 million lack access to menstrual products and adequate facilities for MHM (World Bank 2022). To manage their menstruation effectively, girls and women require access to WASH facilities, affordable appropriate menstrual hygiene materials, information on good practices, and a supportive environment where they can manage menstruation without embarrassment or stigma.

PART 3 MENSTRUATION, PUBLIC POLICY AND DISCOURSE IN INDIA

3.1 THE INDIAN DISCOURSE ON HEALTH, HYGIENE, WASH AND GENDER EQUITY

Rarely talked about and articulated in the open, Menstruation in India was linked to WASH sector only in the recent couple of years just as public health, sexual and reproductive health, and education sectors have begun a recent focus on this issue. Even the National MHM Guidelines (2015) observes that menstruation is not spoken about openly and causes unnecessary embarrassment and shame. As a result, the practical challenges of menstrual hygiene are made even more difficult by socio-cultural factors and millions of women and girls continue to be denied their rights to WASH, health, education, dignity and gender equity. Layers of socio-political silence on the subject have prevented the theme of menstrual wellbeing and justice from being articulated as a mainstream issue. MHM and WASH policies need a community-sensitive dialogic space to

reach their full potential in India. Newer policies on comprehensive and inter-sectoral understanding of MHM have been indicative steps in the right direction. Through these various initiatives, menstrual hygiene has improved, yet gaps remain.

Existing anomalies in MHM in India, especially in impoverished and marginalised contexts have led the government to acknowledge, "If girls and women are to live healthy and productive lives, with dignity, menstrual hygiene is a priority", (Ministry of Health: Adolescent Menstrual Hygiene Guidelines). GOI data on the issue confirmed some worrisome findings at that time: India's 113 million adolescent girls are particularly vulnerable at the onset of menarche; At this time, they need a safe environment that offers protection and guidance to ensure their basic health, well-being and educational opportunity. In a 2015 survey the GOI found that in 14,724 government schools only 53% had a separate and usable girl's toilet. At home, the situation also needs to improve as 132 million households do not have a toilet (MHM Guidelines 2015), leaving adolescent girls and women to face the indignity of open defecation. However, safe and effective MHM along with WASH is a trigger for better and stronger development for adolescent girls.

The project argues that combining MHM and WASH for EAMW will go a long way in making the approach to health and wellbeing truly gendered and inclusive. It is up to every state to show willingness, initiate open participatory dialogues and ensure that policies and schemes are implemented better. That would be a credible route to combat the silence as well as tackle the anomalies on MHM.

India counts on maternal and infant health schemes and policies at the centre, state and union territory levels. However, despite consistent focus on mother and child health, enough attention is not forthcoming for specific women's health issues such as menstruation, sexual and reproductive health, voice and rights. There are 253 million adolescents in the age group 10-19 years in India. This age group comprises individuals in a transient phase of life requiring nutrition, education, counselling and guidance to ensure their development into healthy adults. They are susceptible to several preventable and treatable health problems, like early & unintended pregnancy, unsafe sex leading to STI/HIV/AIDS, nutritional disorders like malnutrition, anaemia & overweight, alcohol, tobacco and drug abuse, mental health concerns, injuries &violence (National Health Mission, GOI)[7][1].

Females comprise almost 47 per cent and males 53 per cent of the total adolescent population. More than half of the currently married illiterate females are married below the legal age of marriage. Nearly 20 percent of the 1.5 million girls married under the age of 15 are already mothers. According to the Ministry of Health and Family Welfare's, 'Adolescents Reproductive Sexual Health (ARSH) Strategy' implementation Guide for states; adolescents (10-19 years) in India constitute 22% of the country's population. "Adolescents are not a homogenous group. Their situation varies by age, sex, marital status, class, region and cultural context. A large number of them are out of school, get married early, work in vulnerable situations, are sexually active, and are exposed to peer pressure. These factors have serious social, economic and public health implications" (Ministry of Health Statement, GOI 2006). This calls for health interventions that are flexible and responsive to their disparate needs. Adolescent health is hence, one of the key technical programmes under the National Rural Health Mission and RCH-II. It is important to raise awareness regarding the health-seeking behaviour of adolescents, as their situation will be central in determining India's health, mortality and morbidity; and the population growth scenario[8]. The Ministry of Health and Family Welfare introduced a scheme for promotion of menstrual hygiene among adolescent girls of 10-19 years in rural areas. The major objectives of the scheme are i) to increase awareness among adolescent girls on Menstrual Hygiene ii) to increase access to and use of high-quality sanitary napkins by adolescent girls and iii) to ensure safe disposal of Sanitary Napkins in an environmentally friendly manner.

Asian countries show greater use of cloth during menstruation in comparison to other parts of the world, (Elledge and Muralidharan et. al 2018). Not all women in India use sanitary pads or other market-based products to manage periods owing to lack of availability in remote areas such as where forest dwellers and tribals live

[7] https://nhm.gov.in/index1.php?lang=1&level=2&sublinkid=818&lid=221

[8] http://www.nrhmhp.gov.in/content/adolescent-reproductive-sexual-health-programme. Accessed 6th October, 2022.

owing to socio-economic factors as well as cultural beliefs, myths and taboos (Elledge and Muralidharan et. al 2018). Moreover, there are diverse MHM trends in rural and urban Indian contexts and among different communities. In an urban resettlement area of New Delhi for instance, the use of sanitary pads was more likely to be associated with young women (20–29 years old) rather than older women (≥30 years old) and with those whose mothers were better educated, as they provide more information to the girls. Anand et al. studied census data (2007–2008) of India and pointed to the use of cloth as the main menstrual hygiene product used by females aged 15–49 years.

However, urban India saw greater use of sanitary pads, a trend likely to increase in the future. Such findings show to policy makers how in majority of rural areas, there was a worrisome neglect of menstrual hygiene due to low awareness levels and lack of access to sanitary products. Anecdotal evidence and cross-sectional studies suggest that the lack of access to MHM products and infrastructure, including sanitary napkins, school toilets, water availability, privacy and safe disposal, could constrain school attendance and also contribute to infections. Additionally, taboos and myths surrounding menstruation limit girls' access to schooling and socialising, adding to the existing gender discrimination. Hence, a major policy focus is on adolescent MHM and WASH. Creating awareness and increasing access to the requisite sanitary MHM infrastructure is a must.

3.2 SCHEMES FOR THE PROMOTION OF MENSTRUAL HYGIENE AMONG ADOLESCENT GIRLS IN THE AGE GROUP OF 10-19 YEARS SINCE 2011

The Ministry of Health and Family Welfare has implemented the scheme for Promotion of Menstrual Hygiene among adolescent girls in the age group of 10-19 years since 2011. The scheme is supported by the National Health Mission through the State Programme Implementation Plan (PIP) route based on the proposals received from the States / UTs. The major objectives of the scheme are (i) to increase awareness among adolescent girls on menstrual hygiene; (ii) to increase access to and use of high-quality sanitary napkins by adolescent girls, and (iii) to ensure safe disposal of sanitary napkins in an environment friendly manner. Under the scheme, a pack of sanitary napkins are provided to adolescent girls by the Accredited Social Health Activist (ASHA) at a subsidised rate of Rs. 6 per pack[9].

3.2.1 JANAUSADHI SUVIDHA SANITARY NAPKIN

Further, to ensure access to sanitary napkins and good quality medicines at affordable price, Department of Pharmaceuticals under Ministry of Chemicals and Fertilisers implements the Pradhan Mantri Bharatiya Janausadhi Pariyojna (PMBJP). Under the scheme, an important step in ensuring the health security for women was taken up by announcing Oxo-biodegradable sanitary napkins named Suvidha at Re. 1/- per pad only. Over 8700 Janaushidhi Kendras have been set up across the country[10].

3.2.2 MENSTRUAL HYGIENE MANAGEMENT NATIONAL GUIDELINES 2015

The Menstrual Hygiene Management National Guidelines were issued by the Ministry of Jal Shakti (Department of Drinking Water and Sanitation) 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 of line departments, and school head teachers and teachers.

The guidelines suggest adequate space 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 prerequisite to improved menstrual experience for girls in schools.

[9] The Union Minister of Women and Child Development, Smt. Smriti Zubin Irani gave this information, in a written reply in Lok Sabha on July 2022. (Release ID: 1846147) Visitor Counter: 1369: https://pib.gov.in/PressReleasePage.aspx?PRID=1846147

[10] http://janaushadhi.gov.in/pmjy.aspx. Accessed 10th October 2022; Also, refer to- Press Release July 29, 2022 https://pib.gov.in/PressReleasePage.aspx?PRID=1846147. Accessed 6th October 2022.

The detailed guidelines focus on rural India and have dedicated sections on menstrual health in schools. They stress the importance of sensitively involving male students as a means to increase positive effect on how girls perceive issues around menstruation. The guidelines also suggest the establishment of support groups as the soft input, such as the Girls Hygiene Clubs, linked to the existing child cubicles 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 for school girls.

3.2.3 NATIONAL GUIDELINES ON MHM

The Ministry of Drinking Water and Sanitation under Swachh Bharat Abhiyan seeks to create awareness in rural areas as part of its overall interventions related to behaviour change on sanitation hygiene. Guidelines for Swachh Bharat Mission (Gramin) 2017 released by the Ministry of Jal Shakti, included guidelines for support to MHM for girls and women. (Guidelines, were produced with the help of UNICEF). Under the guidelines, funds available under the IEC component may be used to raise awareness and skills on Menstrual Hygiene Management (MHM), specifically amongst adolescent girls in schools. IEC plans should include an MHM component for raising awareness among all stakeholders. Funds under the SLWM component can also be used for setting up incinerators in schools, PHCs and public toilets. The guidelines outline what needs to be done by state government, district administration, engineers and technical experts in line departments; and school teachers, CSOs and SHGs. The National Guidelines on MHM (2015) are presented by the Ministry in three parts, the Main Guideline; a series 'Action Guides' that describe what each key stakeholder must do, why and how; and Technical Guides. The main guideline (this document) is organised as follows: Part 1: About the guideline; Part 2: Swachh Bharat is India's nationwide sanitation initiative launched by the GOI for the first time in 2014.

Who needs to know what, why and how; Part 3: Providing adolescent girls with menstrual hygiene management choices; Part 4: MHM infrastructure in schools and the safe disposal of menstrual waste (MHM National Guidelines 2015)

3.2.4 SWACHH BHARAT MISSION (GRAMIN) AND GENDER ISSUES IN SANITATION

In 2014, the Indian government rolled out the Swachh Bharat Mission (Gramin) 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. Under the solid waste management component, the guidelines mentioned that provisions should be arranged for menstrual waste disposal. The Swachh Bharat Mission (Urban) guidelines have no specific mention of menstrual needs of women in urban areas. Nonetheless, 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.

3.2.5 MENSTRUAL HYGIENE SCHEME: 2017

The Ministry of Health and Family Welfare in India introduced a scheme for promotion of menstrual hygiene among adolescent girls in the age group of 10-19 years in rural areas (Menstrual Hygiene Scheme: 2017). The objectives were to increase awareness among adolescent girls on Menstrual Hygiene; increase access to and use of high-quality sanitary napkins to adolescent girls in rural areas and ensure safe disposal of Sanitary Napkins in an environmentally friendly manner. The scheme was initially implemented in 2011 in 107 selected districts in 17 States wherein a pack of six sanitary napkins called "Freedays" was provided to rural adolescent girls for Rs. 6. From 2014 onwards, funds are now being provided to States/UTs under National Health Mission for decentralised procurement of sanitary napkins packs for provision to rural adolescent girls at a subsidised rate of Rs 6 for a pack of 6 napkins.

The ASHA will continue to be responsible for distribution, receiving an incentive @ Rs 1 per pack sold and a free pack of napkins every month for her own personal use. She will convene monthly meetings at the Aanganwadi

Centres or other such platforms for adolescent girls to focus on the issue of menstrual hygiene and also serve as a platform to discuss other relevant SRH issues. According to India's last National Family Health Survey (NFHS)-V (2019-21), 73 per cent of rural women aged 15 to 24 years use hygienic methods of menstrual protection, up from 48 per cent in NFHS-IV (2015-16) (Rana 2022).

3.2.6 ADOLESCENT REPRODUCTIVE AND SEXUAL HEALTH (ARSH) AND THE ADOLESCENT EDUCATION PROGRAMME (AEP) 2019[11]

Existing national health programmes such as the Adolescent Reproductive and Sexual Health (ARSH) and the Adolescent Education Programme (AEP) include a range of interventions for adolescent girls and boys who are in school and out of school. While pilot interventions to promote menstrual hygiene exist, the scheme for menstrual hygiene provides an opportunity for states to implement these in multiple districts.

3.3 LIMITATIONS OF OUR RESEARCH

Our research and conceptual design are linked to the fact that in India, although there is a growing policy focus and engagement with well-being of menstruating girl-children (10-19 years), yet infrastructure and socio-medical support system as well as resourses for young, adult and ageing pre-menopausal women (between 20-49 years of age) are rare. Our primary focus has remained on a methodical accessing and processing of information, opinions and critical reviews on MHM and WASH from a bottoms-up perspective for better policy uptake. The project has covered only specific themes and actors with special focus on women voices. Menopause is not within the ambit of this study.

We also believe that men and women can complement the process of menstrual relief and uplift in India. From a comprehensive gendered approach, the study brings on board narratives of women who confide with the men in their lives, especially their spouses. Together, therefore both can surge ahead in partnership to improve the prospects of MHM and WASH both in policy making as well as in implementation.

The current study casts a close glance on the state of real life presence or the lack of available means and options in relation to logistical, social, emotional, medical and economic support systems of menstruating women beyond adolescence and before menopausal stages of life. Our study also includes voices of menopausal, elderly as well as aged women too, as they form an essential background of menstruation as lived experience. The project is aware that the term 'menstruators' is more gender inclusive, and non-reductionist. However, this study barring some exceptions, centres on primarily women menstruators, and how they negotiate as well as undergo the socio-physiological, structural, inter-sectoral and reproductive health related phenomenon of menstruation in their life. Hence, we opted to use the terms women or girl-children rather than the word menstruators. The intricate processes of affirmation, challenges, discriminations and medical as well as socio-psychological requisites against menstruating individuals who identify as 'Third Gender' in India are beyond the scope of this research.

Additionally, specific target groups such as sex workers and trafficked, incarcerated, physically and mentally disabled and special needs women and girl-children are outside the purview of this current study and findings. Our experience indicates that much work needs to be done amongst these other vast groups that could not be included in this participatory research.

PART 4 METHODOLOGY

COVERING APPROACH, METHODS AND ETHICS OF RESEARCH

The study employed both qualitative as well as quantitative methods and approaches to make tools, collect and process data and used a mixed methodology perspective for final inferences and conclusions. The Emic Evaluation Approach was used for collecting and processing qualitative data, while reaching out to the large

[11] https://adityacbse.com/adolescent-education-programme-aep/. Accessed 10th October 2019

numbers of participants and arriving at the sampling processes required using quantitative techniques. However, the qualitative and quantitative team worked together at each stage and the questionnaires were developed keeping in mind both kinds of data.

4.1 EMIC EVALUATION APPROACH AS THE COVERING APPROACH AND METHODOLOGY

As a covering methodology for Qualitative Data Collection and Interpretation, the principles of Emic[12] Evaluation Approach (or the EEA) be followed. As a theoretically informed approach, the EEA strives to overcome the one-dimensional conception of 'the' emic (insider, exclusive) perspective by incorporating the full range of how actors relate to each other in social life. Hence, it brings forward the exclusive actor-based view and experiences while juxtaposing these inter-subjective social, relational as well as political realities with each other. Involving three broad steps of research: a) Actor Analysis; b) Discourse Analysis and; c) Practice Analysis, the EEA is highly suitable where sensitive groups and populations are to be covered in conflictual/contested realities or sensitive zones. Using the normal range of ethnographic/actor-oriented tools such as interviews and interactions with the actors themselves, group discussions, observations, interviews, recording of and immersion in the field, the EEA entails authorised, consent-based as well as ethical use of note-making, observations, participation, target-group discussions, focus group discussions and workshops as methods of research and advocacy. Next, following the same principled approach under the EEA video/audio cameras; Dictaphones and formal as well as informal interviews can be used to generate and collect data. Though the exact modalities of the research problems will be better known once an-in-depth literature review is accomplished and fields mapped, in the interim and as of now, complementing the EEA with the ethics of participatory research methods, tools and techniques of data collection and analysis are adequate starting points.

4.2 ETHNOGRAPHY, EEA AND MIXED METHODOLOGY

4.2.1 QUALITATIVE ASPECTS OF RESEARCH

Our research analyses grounded data that has been systematically collected, organised and interpreted to uncover social relationships, discourses and practices; attitudes, belief systems and behaviours; communicative as well as participative processes of individuals and communities on themes related to menstruation. The Emic Evaluation Approach (EEA), which was adopted as our covering approach, is inspired from a wide variety of literature and methods across disciplines. The EEA relies on ethnography (which can be used across disciplines) and related approaches to define its toolkits and processes. Employing field and community- based inductive methods of observation and documentation, the EEA also places immersion and interviewing to investigate social practices and the meanings behind social action. Ethnographic research was found suitable as our investigation design required us to build a qualitative information base from participants. Ethnographic approaches have proven to be relevant in collecting and interpreting qualitative data in medical research (Atkinson and Pugsley 2005; Reeves and Peller et.al 2013) over a plethora of issues including for medical education. Under the EEA, ethnography is used in a way that corroborates evidence by following three steps of analysis: a)Actor Analysis; b) Discourse Analysis and; c) Practice Analysis. EEA is beneficial for grounded research as it helps overcome the limitations of relying solely on interviews and participant generated data. Hence, the EEA offered us the opportunity to complement our qualitative methods with the potential to yield detailed and comprehensive accounts of different social phenomena, (actions, behaviour, interactions, beliefs) in the field.

4.3 ETHICS, MIXED METHODS AND THE QUANTITATIVE ASPECTS OF RESEARCH

To complement the qualitative research with non-narrative, inter-sectoral data on MHM and WASH, a mixed-methods approach using quantitative survey and tools was used. However, notwithstanding approaches, backgrounds, age groups and regions, MHM still remains an extremely sensitive topic in India like in other

[12] Emic signifies curate ethnographic descriptions and analysis from an internal or 'emic' perspective, which brings the native point of view. In other words the insiders' views/testimonies- taken from involved actors, key informants and other stakeholders who live and witness the situation directly even if they do not embody or experience it.

developing countries and traditional societies. Hence, the project adhered to consensual and voluntary participation; sensitive, confidential, ethical data collection and; monitoring methods as well as WHO mandated protocols. The basic ethical principles maintained include doing good, Do No Harm principles and protecting the autonomy, wellbeing, safety and dignity of all research participants. All research protocols have been adequately followed to safeguard the privacy of information provided by respondents. Dissemination and reporting of research findings will follow the basic principles of beneficence and non-maleficence (Association of Social Anthropologists of the UK and the Commonwealth 1999).

4.4 TOOLS AND TECHNIQUES USED

The project's mixed methods design, incorporating primary data collection, was done through quantitative and qualitative components. Data was collected from the Menstrual Practice Questionnaire through in-depth interviews (20 – 49 age group) regarding their perceptions and experiences with menstrual hygiene practices. This was accompanied by focused group discussions with adolescent girls (10-19 age group) and elderly women (above 50 years). A review of the literature was done including policy documents, and media reports, academic databases through google scholar. Additionally, qualitative interviews of key stakeholders (In-depth interviews of 168 respondents) were conducted and Menstrual Practice Needs Scale (MPNS) was filled during the data collection process. Embedding quantitative components to further investigate qualitative themes, the periodical review was conducted for checking the quality of the process, and content of the MPQ, and the stakeholders' interview codebook was developed in depth.

4.5 JUSTIFICATION FOR MIXED METHODS: AN OVERVIEW OF METHODOLOGICAL

4.5.1 APPROACHES

We chose a mixed-methods design to allow detection, via open-ended interview questions, of unanticipated factors influencing the factors affecting menstrual hygiene while assessing inter-sectoral focus via analysis of survey responses, to determine whether these influences were shared by a broader population of states than those we interviewed and to investigate factors that individual interviewees may have had limited ability to report from their own personal experiences.

4.5.2 INCLUSION AND EXCLUSION CRITERIA

Quantitative data was obtained using a cross-sectional survey with women of 20-49 years' age from selected villages of 14 districts from 7 states namely Maharashtra, Haryana, Bihar, Chhattisgarh, Assam, Odisha, and Tamil Nadu across India where the strong base of organisations was present and was working at the grass root level on various issues like health, education, livelihood, WASH, etc. in rural, peri-urban and municipal areas of the states. From the mentioned states aspirational districts or the districts with prominent problems were selected.

4.5.3 SAMPLING FRAMEWORK AND SAMPLE SIZE

For the cross-sectional survey, Cochran's formula was used to create the sampling framework. The number of samples required for the survey was assessed by Cochran's formula, I.e., $n = pqz2 / d2$

n = required sample size

p = proportion of the women's hygienic methods of protection during their menstrual period

q = 1-p

z = Z value of confidence level

d = degree of precision

The proportions of the women's hygienic methods of protection during their menstrual period (p) were taken for different districts of each study state using NFHS-5 data.

Further, we kept the confidence level at 95% (Z value of 95% confidence level is 1.96) and the degree of precision at 5%. So, by considering all these parameters plus accounting for a sampling error of 10%, the final sample size for each district of all the study states is provided below:

State	District	Prevalence (NFHS-5)	Final Sample Size
Maharashtra	Beed	70.70%	351
	Osmanabad	86.50%	198
Haryana	Jhajjar*	97.40%	269
	Mewat	58.10%	413
Bihar	Katihar**	49.50%	424
	Khagaria**	50.50%	424
Chhattisgarh	Mahasamund	61.40%	402
	Uttar Bastar Kanker**	53.10%	422
Assam	Baksa	63.40%	393
	Kokrajhar	72.30%	339
Odisha	Malkangiri	64.70%	387
	Kalahandi	70.50%	352
Tamil Nadu	Ramnad*	98.30%	178
	Virudhunagar*	97.30%	279

From the above table, it is clear that in states where the prevalence rate is higher the sample size of the population is lower. The three districts, namely, Jhajjar* (Haryana); Ramnad* and Virudhunagar* (Tamil Nadu) have the highest prevalence rates whereas Katihar** and Khagariya** (Bihar) and Uttar Bastar Kanker** (Chhattisgarh) have the lowest prevalence rates. Therefore, the sample numbers are inversely proportional to the prevalence rates that have been taken from the Government of India (GOI) NFHS-5 databases.

4.5.4 SELECTION OF THE VILLAGES

The villages/ hamlets for conducting the survey from each district have been selected purposively based on the following criteria: In each district, at least five locations are selected by focusing on mixed communities and proximity to health facilities and other developments, as well as remote / cut off/ last mile locations and homogenous communities like tribal, Dalits, minority groups, migrant workers, etc. were selected by multi-stage sampling. From the final list of villages in each district where the study will be conducted, a list of eligible populations for the study was collected from ANMs/ASHAs/Anganwadi Centres/ Panchayat of the selected villages, voters list, ward-wise block office, Nagar panchayats in peri-urban/ urban areas. From the lists received of the eligible women, final subjects were identified randomly using computer-generated random numbers from the listing of women between the 20-49 age group from the selected villages of each district.

4.5.5 DATA COLLECTION TOOLS

A total of four types of survey tools were designed. All tools were drafted in five languages: English, Hindi, Odiya, Assamese, and Tamil.

4.5.5.1 MPQ (20-49 AGE GROUP)

The standard Menstrual Practices Questionnaire (MPQ)[13] is available for download from the Menstrual Practice Measures website (www.menstrualpracticemeasures.org). The tool is available under a Creative Commons Attribution-Non Commercial International License and is free to download and use.

High-quality evidence is needed to inform policies and programmes aiming to improve menstrual health. Quantitative studies must address the many evidence gaps in this field, and practitioners have increased monitoring and evaluation efforts to track their progress. A significant barrier to improving the rigor of this work is the lack of comprehensive and comparable measures to capture core concepts. The Menstrual Practices Questionnaire (MPQ) is a new tool to support comprehensive and standardised assessment of the activities undertaken in order to collect, contain, and remove menstrual blood from the body in self-report surveys.

The questionnaire is freely available online and can be adapted for use across contexts and age groups. MPQ is considered as one of the best-practice tool to align the description of menstrual practices and provide a foundation for further question refinement. Increased acknowledgement that unmet menstrual health needs result in consequences for physical, mental, and social well-being has motivated policy and programme responses around the world.

However, there is a dearth of evidence to support these efforts. Research is needed to understand menstrual experiences and inform the development of interventions, and to test and monitor their impacts. Quantitative methodologies are required to address many research questions, but have been limited by a lack of tools to measure core concepts To address this need the Menstrual Practices Questionnaire (MPQ), offers a comprehensive set of self-report questions to capture menstrual practices: all of the activities undertaken in order to collect, contain, and remove menstrual blood from the body. The MPQ draws on past research to provide a best-practice tool which can be refined through future work.

THE MPQ HELPS IN THE FOLLOWING

(1) rationale for the consistent assessment of menstrual practices; (2) the development of the MPQ including the coverage of questions and question formats (including recall period, location specificity, and use of single-, multiple-response or frequency questions); (3) directions for future research to improve the measurement and reporting of practice-related questions.

SINGLE-RESPONSE, MULTIPLE-RESPONSE, AND FREQUENCY QUESTIONS

Many menstruators use multiple methods for each menstrual practice. For example, they use a variety of menstrual materials over their period. In collecting data to most accurately reflect menstrual practices, surveys may use multiple-response questions which record multiple behaviours, single response questions which force selection of only one response, or frequency-based questions which capture how often or in what proportion of instances respondents enacted a practice.

QUESTION PILOT AND ACCEPTABILITY

MPQ should be piloted as part of a cross-sectional survey of target communities (Girls, married women, pregnant women, older women etc). Such a pilot-study framework can allow us a rich insight into the world of MHM and WASH as co-related to each other and how these two unfold together to impact the menstrual, physical and reproductive health and well-being of a meaningfully selected and diversely relevant sample representative, in the best possible way of the phenomenon and issue under study. These questions related to menstrual hygiene practice, perceptions and needs can indicate for the world of knowledge and policy, how feasible and desirable it would be to enact larger studies on the issue too.

[13] For detailed information about the development of the Menstrual Practices Questionnaire (MPQ), including guidance for use and the selection of questions, please see the full publication at (https://www.menstrualpracticemeasures.org/mpq/): Hennegan, J., Nansubuga, A., Akullo, A., Smith, C., & Schwab, K.J., (2020). The Menstrual Practices Questionnaire (MPQ): Development, elaboration, and implications for future research. Global Health Action, 13(1), 1829402. https://doi.org/10.1080/16549716.2020.1829402

SURVEY CONTENT

Menstrual materials used; Changing materials; Washing hands and genitals; Disposal; Storage; Washing materials; Drying materials; Sterilising menstrual materials; Toilet/latrine use during menstruation etc.; conversation possibilities on Menstruation; Menstruation Related Illnesses etc. The MPQ was adapted to carry out a process of in-depth interviews (IDIs): Field workers visited the villages with the total women-participants' list containing names and addresses of randomly selected women. Prior information, consent and interview time was sought by every field worker conducting 3 to 4 interviews per day. Each interview took 30 to 40 minutes. Fieldworker conducted the interviews by taking the consent of the respondent.

4.5.5.2 ABOUT THE MENSTRUAL PRACTICE NEEDS SCALE (MPNS-36)

The Menstrual Practice Needs Scale (MPNS-36) is a set of self-report questions that work together to measure women's and girls' menstrual experiences. The scale focuses on a respondents' experience of her last menstrual period and captures experiences of the practices undertaken, and environments used to manage menses.

Items ask about perceptions of comfort, satisfaction, adequacy, reliability as well as worries and concerns during the last menstrual period.

The Menstrual Practice Needs Scale (MPNS-36) measures the extent to which respondents' menstrual management practices and environments were perceived to meet their needs during their last period.

The scale provides a quantitative (number) estimate of the extent to which women's and girls' needs are being met. It can be used for needs assessment in baseline or cross-sectional investigations, or for programme evaluation, to monitor differences in experience over time or between groups[14]

4.5.5.3 FGDS (ADOLESCENT AND ELDERLY WOMEN)

For Adolescents, the place of the interview was school premises or Anganwadi or any comfortable place to gather, same as for the elderly women age group. These discussions were executed by prior planning. The group gathered together, consent was taken, permission for recording was taken, then these discussions were conducted by 2 interviewers for around 30 to 50 minutes depending on the capacity of the respondents to answer and the capacity of the interviewers to generate discussion. All respondents were expected to fill out MPNS forms at the end of FGDs.

4.5.5.4 KIIS (KEY INFORMANT INTERVIEWS FROM KEY STAKEHOLDERS)

Field coordinators were identifying key stakeholders from their respective areas. Key informant interviews were getting conducted by their prior appointments simultaneously with the FGDs and MPQs. Getting information and permission for recording interviews from health workers, local authorities, and officials was a skillful task. Interview time was around 20 to 30 minutes depending on the capacity of the respondents to answer and the capacity of the interviewers to generate discussion. All respondents were expected to fill MPNS forms.

4.6 NGO PARTNERS, PARTICIPANTS AND KEY INFORMANTS

The data was collected with the help of NGO partners in each state. By use of *in-situ* presence and observations, the local data collection team and partners had the skill to 'immerse' themselves in the social setting, thereby generating precise and in-depth data on social action. Participant observation that we oriented and capacitated the partners with, gave them the opportunity to gather empirical insights from the realm of social practices and imagination, which are normally 'hidden' from the public, 'gaze' (see Reeves and Peller et.al 2013). Additionally, using holistic social accounts that are the mainstay of ethnographic research, our study identified, explored and linked social phenomena across sectors with the help of EAMW. As such, ethnographic research differs from other forms of qualitative research such as phenomenology (the analysis of interviews to understand individual's lived experiences) or discourse analysis (the analysis of talk and/or documents to understand the

[14] (https://www.menstrualpracticemeasures.org/mpns-36/) For more detailed information on MPNS-36 development and validation, please see the full publication at: Hennegan, J., Nansubuga, A., Smith, C., Redshaw, M., Akullo, A., & Schwab, K.J. (2020). Measuring menstrual hygiene experience: Development and validation of the Menstrual Practice Needs Scale (MPNS-36) in Soroti, Uganda. BMJ Open, 10, e034461. http://dx.doi.org/10.1136/bmjopen-2019-034461

influence of embedded discourses) and overcomes many of their limitations. Keeping this in mind, the project core research team and field -work teams did not rely exclusively on interview data alone to seek and interpret findings. Using the EEA, a circular mapping and analysis of actors, discourses and practices was conducted in light of one another. Once the data gave us a glimpse of the lifeworld, across regions, we coded, categorised and analysed data using both qualitative and quantitative methods as well as processes. This enabled extremely relevant and pertinent grounded inferences to emerge with the help of combined interpretations.

4.6.1 OUR LOCAL PARTNERS

State	District	Name of the Partner Organisation
Maharashtra	Beed	Jana Vikas Sanstha, Beed
	Osmanabad	Paryay, Osmanabad
Haryana	Mewat	Sulabh Sanitation Mission Foundation (SSMF)
	Jajjhar	Sulabh Sanitation Mission Foundation (SSMF)
Bihar (Bobby)	Khagariya	Nav Jagriti and : Website- www.navjagriti.org.in
	Katihaar	Prayas Foundation For Social Change And Economic Reforms
Chhattisgarh	Mahasamund	Shri Jan Kalyan Samaj Sevi Sanstha
	Uttar Bastar Kanker	Adivasi Samta Manch
Assam	Baksa	SiQSA
	Kokrajhar	SiQSA
Odisha	Malkangiri	Centre for Action Research
	Kalahandi	Centre for Action Research
Tamil Nadu	Ramnad	CORORAT
	Virudhunagar	CORORAT

The project brings forward first-hand information made possible through a collaborative research design and methodology in which the partners facilitated local information collection and opened the doors for effective field -based research. The local partner organisations in fourteen districts were oriented and given support during all stages of data collection and research on the issue of MHM and WASH through virtual, physical meetings and exchange of information sessions. The partner organisations' rich experience and expertise has helped us access approximately five thousand women participants from diverse backgrounds Viz., Migrant workers; farmers; plantation and factory workers; tribal and PVTGs; Dalits and other castes; religious and social minorities; girl-children; community leaders; frontline health workers such as doctors and AWWs, ASHAs; administrative officers; Village Presidents (Sarpanchs) and homemakers all form vital respondents and core participants of our ground research.

4.7 DATA CLEANING AND ANALYSES

Data collection and the data cleaning process were conducted simultaneously. Every interview was allotted a Unique Identity Number as per the interview category. Quantitative data was analysed in Excel as well as in SPSS using a well-defined template of the study instrument. Overall analysis, situational analysis, and multistate analysis were done thoroughly. The Likert scale was tested to assess the normality of the data. Non-parametric

tests were performed on selected ordinal and nominal variables. Measures of central tendencies were applied to the data. Statistical tests like significance analyses were performed on selected variables in SPSS20. We considered P values $p<0.05$ to be statistically significant. Qualitative and quantitative data were synthesised together to develop a comprehensive understanding of menstrual health and hygiene management. Audio-recorded interviews like KII and FGDs with an average length of 30 to 40 minutes were transcribed verbatim into English or Hindi. The transcripts were de-identified to ensure anonymity and coded with the assistance of qualitative software. Codes and themes were developed after carefully reading the transcripts. Similar codes were categorised and broad themes were developed to carry out thematic analysis.

4.8 LIMITATIONS OF THE DATA COLLECTION PROCESSES

- This study mainly focused on understanding the needs for menstrual health and hygiene practices amongst women in the age group of 20 to 49 years (whom we refer as EAMW) who live in remote, isolated and marginalized circumstances. Typically, they also belong to communities and social strata that hardly derive MHM benefits from the public system. Apart from ANC/PNC-related services, schemes and benefits, these women are usually less integrated with the public health system owing to their locations, lack of resources and awareness as well as taboos.
- This entire study was conducted to understand the situation regarding community practices, taboos, available resources, and perceptions to deal with menstrual health and hygiene. The findings of this survey might potentially serve as a tool for breaking the silence in the community regarding menstruation and sums up the concrete MHM needs of women in the outside periphery of adolescent age.
- Both the qualitative and quantitative methods in this study had limitations. In the qualitative interviews, responses could have been subject to social desirability bias, in which interviewees may have given answers that they felt would be more "socially acceptable" than their true beliefs. The quantitative survey was intended, in part, to address this limitation, since the vast majority of items (especially those concerning sensitive topics, such as income, and spending capacity) did not ask individual survey respondents to describe how specific factors affected their professional satisfaction. Instead, quantitative associations were inferred by combining responses from multiple survey respondents.
- In addition, our analysis of survey responses, which controlled for measures of individual response tendency, was designed to mitigate bias due to respondent-to-respondent variability in susceptibility to social desirability.

ANNEXURE I

MHM RESOURCE MATERIAL IN INDIA: A 360 DEGREE APPROACH TO ADOLESCENT HEALTH

A range of IEC material has been developed around MHM, using a 360-degree approach to create awareness among adolescent girls about safe & hygienic menstrual health practices which includes audio, video and reading materials for adolescent girls and job-aids for ASHAs and other field level functionaries for communicating with adolescent girls. Below is a thematic introduction of some of interventions that have contributed to the growth of the menstrual health 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 adapted and applied to urban settings too.

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.

Champa Kit

Thoughtshop Foundation the Champa Kit 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.

Menstrupedia Comic and Illustrated Website

A friendly comic-style guide, Menstrupedia is designed to help girls and women stay healthy and active during their periods. Speaking to other women about their own experiences, Gupta and Paul the authors, says Sahariah (2016) realised there was a general need for greater awareness among young Indian women about menstruation and menstrual hygiene. In 2012, they launched Menstrupedia, an illustrated website that teaches visitors about the physical and emotional changes girls go through when they reach puberty, as well as answering questions such as, "How important is it for a girl or woman to be aware of her body?" 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.

Ritukalin Bandhobi Dolon Di (Dolon - our friend in need during periods)

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.

As We Grow Up – WSSCC and Government of India

As We Grow Up 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 visualise 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.

Paheli ki Saheli – UNICEF and Johnson & Johnson's

The Paheli ki Saheli (roughly translated as "the answer to our riddles") package 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.

Chhaa Jaa - Girl Effect in India

Girl Effect has launched Chhaa Jaa (Go Forth and Shine), 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.

The She Pad - Menstrual health product – Access and Use 2017

The 'She Pad' 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 .

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