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Review Article

Role of Menstrual Hygiene in Sustainable Development Goals

Dr. Anuradha R Tiwary

Assistant Professor (Economics Department), GDGWI, Lancaster University, Gurgoan, India

ABSTRACT

This article is a reminder to focus our attention on menstrual hygiene practices that inhibit healthy and sustainable living. Although with advancing technologies, nations are geared to embrace the 21st century, there is a huge female population that awaits proper education and wellbeing. Menstruation being the natural and a biological process in every female's life it is heavily stigmatized and the taboos associated with it, make matters worse for women. The immediate consequences are on menstrual hygiene, which in turn impact health and education significantly. The paper is an alarm to take immediate action, as the perils of insufficient menstrual hygiene practices and lack of attention have a ripple effect on the socioeconomic development of the nation. Moreover, its impact on health and environment can't be ignored. A review of studies also explores why menstrual hygiene is essential to achieve many of sustainable development goals (SDGs) and the way forward.

Keywords: Menstruation, Menstrual Hygiene, Sustainable development, education, taboos, health.

INTRODUCTION

"I remember I was playing with my friends one evening, and suddenly I feel something wet in my panty, and my genitalia felt wet with something flowing out of it. My friends spot a red mark on my skirt and I knew I was menstruating. Yea I knew, because I was educated by my mother on this subject. My mother guided me and enabled me to manage my menstrual hygiene practices; albeit I was prohibited from holy rituals, touching certain food items, engaging in active sports and alike."

Sadly, nothing has changed in so many years. Though I am a member of the 21st century I still see Menstruation as a topic, hidden deep inside the cabinet of culture and beliefs: out of sight & unmentioned. We are still ashamed to talk about our periods, hiding sanitary napkins deep inside the black bag, and silently denying cramps as in explicable "stomach pain". Having said that I would like to bring to light that though I am a part of an

'educated community' and mv work environment consists of academic professional, on being asked what I was working on...my colleagues gave me an alarming look stating "is this a topic?" talk softly, this is not to be discussed in public domain. This reaction was a sufficient motivation to explore why menstruation one of the natural and beneficial process of female life is a stigma and how this stigmatized approach could possibly be the reason for lower attention to menstrual hygiene, impacting the sustainable developmental goals of the nations worldwide in the longer run.

Considering the fact that 26% of the total females population are of the reproductive ages and they menstruate every month for 3-5days (House, Mahon & Cavill, 2012, p.8), menstrual hygiene (MH) is significant for the holistic development of the female from healthy lives to equitable education, to ensuring gender equality and empowerment. However, the absence of

focus on menstrual hygiene is striking. Unfortunately, we have continued to miss this historic opportunity to affirm the critical link between investing in women hygiene and achieving the sustainability goal even with the current set of sustainable development goals (SDGs) provided by the UN.

Up until now, managing adequate hygiene is quite challenging for menstruating young girls and women menstruation and because menstrual hygiene is surrounded by unblemished beliefs and taboos. It is important to understand how poor menstrual hygiene give rise to broader issues such as sexuality. education, reproductive health, child marriage sexual and reproductive health and rights, child marriage, etc around gender equality and women's and girls' empowerment. Combating the challenges and attention to menstrual hygiene is an ardent need given the prominent role played by women of the 21st century. Why then has menstrual hygiene been ignored for long? And how important MH is in all the dimensions specific to women and girls involving them directly in the process of sustainable development.

MENSTRUATION – STIGMA & TABOO

A peek into history reveals how in society, primitive religion has each cemented the threat of menstruation. For an instance within the Orthodox Christian church, menstruation is considered unclean. Touching holy items like Bible or religious icons are not allowed for menstruating women (Bhartiya, 2013). Catholic women are not allowed to have any high standing within church as women are seen impure and dirty due to monthly menstruation (Phipps, 1980). In Islam menstruation is viewed as an illness so women are prohibited to enter any shrine or mosque and they are disallowed to offer any prayer or fast during Ramadan (Engineer, 1987). The menstruating women are restricted to touch the Quran or even recite its contents (Bhartiya, 2013; Maghen, 1999). Hinduism relates menstruation with the Tamas (black) "The third Gunas of the Indian Yoga Philosophy which refer to darkness or obscurity. Anything that is an excretion from the body i.e. sweat, blood, tears etc. are toxic and are classified under tamas, hence forth menstrual blood is considered as toxic" (Bhartiya,2013).

In many culture regardless of their social caste, menstruation is considered polluting (Ten, 2007; House et al, 2012). The Orthodox Judaism literally forbids any physical contact between males and females during the days of menstruation and for a week thereafter (Keshet-Orr, 2003). Even passing objects between each other, sharing a bed, sitting together on the same cushion of a couch, eating directly from the wife's leftovers, smelling her perfume, gazing upon her (Guterman, Mehta, & Gibbs, 2008). Even today, a Jewish Orthodox wife has to immerse into Mikvah, the ritual bath from the beginning of the "bleeding days" until the end of the 7 clean days", which is known as the Niddah period" (Guterman, et "Buddhism 2008). considers al.. menstruation a natural process (Kabilsingh, 1998) but menstrual blood is treated as dirty and harmful (Kotoh, 2008). Buddhist belief Women during menstruation lose Oi (commonly spelled as chi, is believed to be part of everything that exists, as in 'life force', or spiritual energy.) they attract ghosts, and is therefore a threat to herself and others" (Choekyi Lhamo, 2003). They cannot take part in any social ceremonies. (Guterman, Mark A. et al.) and circumambulation of stupas is also not allowed to menstruating women in many Buddhist temples. Menstrual blood is also linked to practices related with black magic reflecting attached the stigma to menstruation (Golub, 1992; Stepanich, 1992). There are several taboos associated with menstruation that are prevalent across the globe. In several African communities, menstruating women or young girls are not allowed to be in kitchen to cook or to do dishes, and neither allowed to participate in

games with other young people for fear that they may contaminate others and the things they may touch (Njau, 2016). In U.S., and in some European countries, they believe that menstruating women should not bake bread, as it will not rise (Ten, 2007). Menstruating young girls and women are not allowed to touch water source, cook, wash cloths, touch plants or pass through plant fields (Dasgupta, & Sarkar, 2008). In south Asian countries especially people in India believe menstruating women make cows infertile, and they are not allowed to pray or cook.

In Bangladesh, menstrual blood is seen as "the greatest of all pollution", and women are not allowed to prepare food or even go near the rice fields (Walton, 2013). In Uganda, menstruating girls and women are not allowed to drink their cow's milk, as it is believed that menstruation would affect the production of milk from cows to get bloody milk while in East Africa their touch dry out the crops (Walton, 2013) "Girls are even taught not to dispose of used menstrual material in open spaces as they might be used in witchcraft, resulting in death and infertility" (Tamiru, Acidria. Satva. Ndebele, Mamo & Mushi, 2014, p.8.).

As menstruating young girls and women are viewed "impure" and a "Curse", they are forced to live in secluded and unhygienic places like mud huts (menstrual huts), animal sheds away from their house. For period of 1-5 days women are forbidden to touch men and they must survive on a diet of dry foods, salt, and rice (Anand & Garg, 2015; Sharma, Vaid & Manhasl, 2006). Some communities even believe they will suffer misfortune such as a natural disaster if women and girls are not put into isolation during their menstruation. In some part of rural Nepal secularism during menstruation is still followed and it is known as "chhaupadi"- literally means 'untouchable being'. They believe women are impure during their menstrual cycle and are not allowed to be in their house. Therefore, menstruating women need to exchange their bed for the cold stone floor of the cowshed (Lamsal, 2017). Many societies celebrate the occasion of Menarche as it signals that a girl is ready for a productive marriage and family responsibilities. These taboos have made menstruation more like a hidden than a visible stigma (Oxley, 1998).

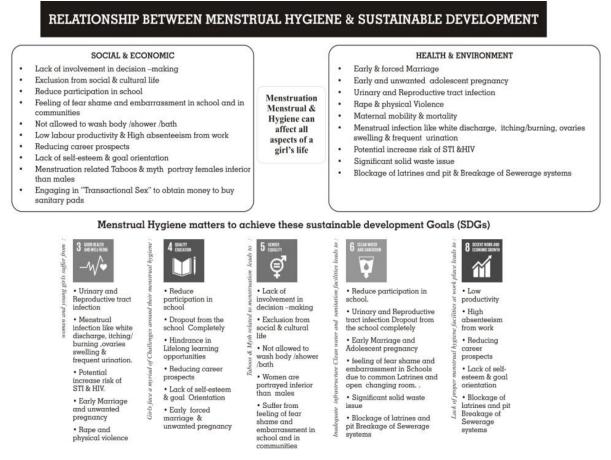
The stigma is visible when we hear the names that people use to refer menstruation It explains candidly how menstruation is perceived and handled by different culture and communities. "In Ethiopia the official name is "Yewer Abeba, meaning "monthly flower" different tribes name it-idif, meaning "dirt", Gadawo, "disease meaning of the abdomen". (Tamiru, Selamawit et al.:08). In Hindu communities menstruation is referred as Baith Jana "Baith Jana" - Baith means sit and means that I am sitting for 3 days. In Tanzania Hedhi is used meaning "the blood flow and in south Sudan people called it as meaning Ada Shaharia. the "usual monthly". These references strongly indicate that people are reluctant to talk openly about menstruation as it is seen as a private issue.

Unfortunately, the stigmatized status menstruation questions the of basic menstrual needs of the women and young girls and engulf the life of individuals in the 21st century. The lack of attention and silence to this issue is striking. Silence on menstruation has led to silence on MH practices giving rise to manifold consequences. It's disturbing that the 21st century continues to pursue a stoic silence on the issue regardless the impact.

Relationship for Menstrual Hygiene with sustainable Development

United Nations (2015) adopted 17 SDGs and each of these SDGs are structured and defined in such a way that they address the important problem from a health and sustainability perspective. However Menstrual Hygiene is not explicitly mentioned in any of the Sustainable development goals as adopted by United Nation (UN) but still directly linked in achieving several of the proposed SDGs, from SDG 3 (Ensure healthy lives and promote well –being for all at all age); SDG4 (Ensure inclusive and equitable quality education and promote lifelong learning); SDG5 (Achieve gender equality and empower all women and girls); SDG 6 (Ensure availability and sustainable management of water and sanitation for all) and SDG 8 (Decent Work & Economic Growth).

Considering the fact that more than two billion women between the age group of 12 yrs -50 yrs in the world are menstruating between 2-7 days a month, MH remains important in all the dimensions specific to women and girls involving them directly in the process of sustainable development as demonstrated below in FIGURE 1.



Based on:

- Infographic on MHM &SDGs created by Simavi, Path &Wash United.
- World Health Organisation, UNICEF(2013) FIGURE 1

SDG 3: Ensure Healthy Lives and promote well being for all ages: The highest attainable standard of health is a fundamental right of every person. Menstruation is often being managed by women and young girls with the most unhygienic and inconvenient wavs particularly in poor setting. They develop their own personal hygiene strategies to cope with menstruation which vary greatly

on individual's personal preferences, cultural beliefs (myth, Taboos), economic status and education (Sumpter & Torondel, 2013). The unhygienic practices like: uses materials like rags, cotton, sponges and goat skins, old cloths and newspapers for absorption of menstrual blood in place of sanitary pads, reuse the same cloth without being properly washed and dried in sunlight adopted by them during menstruation leads to many health related issues [(Narayan, Srinivas, Pelto & Veerammal, 2001) The use of unsuitable absorption materials and altered bathing and cleaning practices expose women and young girls to Reproductive tract infection (RTI) such as Bacterial Vaginosis (BV) and Urinary Tract Infection (Das et al., 2015). At times, absorption material washed and dried at hidden places may give rise to microbial growth and insect larvae due to dampness leading to foul-smelling vaginal discharge (Mathew, 1995). Few Studies also show that women with prolong BV may be at the higher risk of adverse pregnancy outcomes like preterm birth (Ness et al., 2005), development of pelvic inflammatory disease and increases risk of HIV infection (Balamurugan & Bendigeri, 2012; Atashili, Poole, Ndumbe, Adimora & Smith, 2008). "Around 14% of menstruating women suffers with menstrual infections like white discharge (Leucorrhoea), itching/burning, ovaries swelling and frequent urination because of inadequate and unhygienic menstrual practices" (Therese & Fernandes, 2015). Onset of menstruation makes girls more vulnerable to early Marriage and unwanted pregnancy more maternal death. When women don't have access to a toilet they are forced to go outside. This can mean travelling long distances and often at night in order to retain some privacy and dignity under the cover of darkness. This can increase the risk of harassment, sexual violence and even rape (Domestos, WaterAid & WSSCC, 212). Thus, poor menstrual hygiene acts as a social and economics barrier in fulfilling the right to health and well being among the young girl and women and empowering their choices.

SDG 4: Ensure inclusive and equitable quality education and promote lifelong opportunities for all:

Improved education is the prerequisite for gender equality and women's right. It empowers them to raise their well being and contribute to social and economic gains. For all girls and young women, education must

be available across their lifetimes but unavailability of sanitary absorbents, social cultural taboos, lack of water, and sanitation, bathing and laundering facilities forces many girls to miss class or drop out school altogether (Naughton, Pena Pereira Weiss & Vargas Ramirez, 2017). In one of the study it has been noticed that 20% of rural primary school girls, that menstruate, do not attend school whilst they are on their menses as school does not have adequate sanitation facilities which leave them with fear and shame (Ndlovu & Bhala, 2016). In Nepal and Afghanistan, 30 percent of girls school during their periods misses (Yakupitiyage, 2016). In Kenya, girls miss an average of 4.9 days of school each month because of a lack of access to adequate menstrual hygiene (MaeO'Hagan, 2017). One in 10 menstruating African girl's skips school every month or dropout completely and thereby loose critical learning time (WSSCC & IRC, 2015). Ultimately if girls education because are missing of menstruation, they are less likely to return to education reducing their future career prospects leaving them more vulnerable to early marriage, violence and forced sexual relations giving rise to more maternal death (Ndlovu & Ednah Bhala). It is important to note that high girl's dropouts from the school due to menstruation led to higher cost to the economy. With every 1% increase in the proportion of women with secondary education, a country's annual per capita income grows by 0.3% and would result in an up to 1.2% increase in GDP in a year (Chaaban & Cunningham, 2011).

SDG 5: Achieve gender equality and empower all women and Girls: This goal is the stand-alone gender goal which addresses key challenges such as poverty, violence and inequality against women. It is dedicated to achieving all targets specifically recognizing women's equality and empowerment. The taboos and myth around menstruation and inadequate MH practice often portray women inferior than men and are excluded from social and cultural life during menstruation. Adolescent girls suffer from feeling of fear shame and embarrassment in school and in communities. A qualitative study found that two third of south Indian girls described their menstruation as shocking and fearful (Narayan et al., 2001). The experience of harassment by male students in school during menstruation stops young girls to fully enjoy activities with others (Ndlovu, Everson, & Bhala, 2017). Once girls and women have the resources and knowledge to manage their menstrual health and hygiene, they are better placed to invest in themselves, families and communities. Onset of menstruation makes girls more vulnerable to early Marriage and unwanted pregnancy more maternal death. With the increase in the cost of commercial menstrual health supplies young girls and women are unable to afford sanitary pads resorting to shocking alternatives like unsanitized cloth, ashes and husk san. The affordability issue of sanitary also leads to many health issues and forces young girls and women in "Transactional Sex" to obtain money to buy sanitary pads (Hennegan & Montomery, 2016). When women don't have access to a toilet they are forced to go outside. This can mean travelling long distances and often at night in order to retain some privacy and dignity under the cover of darkness. This can increase the risk of harassment, sexual violence and even rape (Domestos, Water Aid & WSSCC, 2012), hence fail to achieve the Sustainable development Goal (SDG5)

SDG6: Ensure availability and sustainable management of water and sanitation for all: Ensuring water and sanitation for all is the goal; achieving it must take all dimensions specific to women and girls on board, and involve them directly in the Women's revealed process. that menstruation is often being managed by women and young girls with the most unhygienic and inconvenient ways particularly due to non- availability of clean water and sanitation facilities. Girls need clean water to wash themselves or their menstrual cloths if they are using them. Availability of these facilities in schools will make a big difference to whether or not girls come to school during their monthly periods. The lack of adequate disposal materials, facilities menstrual for particularly in public places, schools, work place, leads women and girls to dispose of their menstrual waste (both commercial or home -made sanitary pads, such as cloths, or cotton) in secret like in pit latrine, garbage dump or water body, bush areas, forests, often causing environmental harm (UN Women &WSSCC,2015). According to (Bharadwaj & Patkar, 2004)" an average woman throws away 125 to 150kgs of tampons, pads and applicators in her lifetime". The great majority of these end up in landfills or as something the sewage treatment plants must deal with. The flushing of menstrual waste down the toilet continues to cause blockages and breakage of city sewer system. This act as a barrier in ensuring the attainment of SDG6 which quotes "Ensure availability and sustainable management of water and sanitation". Thus Menstrual hygiene seems to be an insufficient acknowledged problem with regards to SDG 6. According to Domestos, Water Aid, WSSCC (2017) "Improving sanitation would make 1.25 billion women's lives both safer and healthier". Adequate facilities provide sanitation can а comfortable space for women to dispose of waste without shame and prevent the environmental issues leading to increasing welfare gains from economic activities by reducing resource use, degradation and pollution along the whole lifecycle, while increasing quality of life which is not been achieved.

As stated in SDG 8: "Decent Work & Economic growth: sustained Promote inclusive and sustainable economic growth, full & productive employment and decent work for all" but lack of Menstrual hygiene facilities at workplace impact on absenteeism. affecting livelihoods. productivity levels and ultimately the

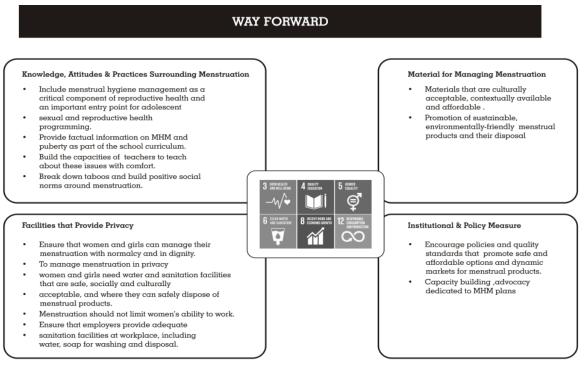
Proper menstrual hygiene economy. practices would help women to take on paid work rather than to stay at work during menstruation so that they can earn more and invest this back into a better life for themselves and their families. It also acts as a barrier to occupational attendance and engagement of adult women. .In Bangladesh 60% of the women factory workers uses rags from the factory floor as menstrual cloths. Since these were chemically charged and often freshly dyed leading to infection and absence from work. 73% of women miss work for an average of six days a month giving rise to huge economic challenge to them and also to the business supply chain (Domestos, WaterAid & WSSCC, 2017). The Social exclusion, distraction. disengagement and of adolescent girls due to MH practices ultimately leads to losses of critical learning time and potential productivity and income which they could have achieved if they are educated or employed. Thus girls are directly or indirectly affected by in adequate menstrual hygiene practices to varying degrees.

Thus, menstrual hygiene has broader implications on women's and girls' lives and on the success of several sustainable Development Goals (SDGs).

THE WAY FORWARD

It is a human right for women to be able to manage their period in a safe and dignified right. It is very well addressed in the World Conference on Human Rights and in the United Nation's Platform for Action "that the human rights of women throughout the life cycle are an inalienable integral and indivisible part of universal human rights." (Ohchr.org, 2017)

It is therefore time that we respect this right by including MHM into the development discourse and enhanced global advocacy about the importance of Menstrual Hygiene and its health outcome which creates an obstacle for achieving universal goal of facilitating quality education, gender equality, good health, decent work and last but not the least Sustainability. The FIGURE 2 summarizes the way forward.



Based on :

Infographic on MHM & SDGs created by Simavi, Path & Wash United.
World Health Organization, UNICEF (2013).

FIGURE 2

Despite the great importance that menarche represent in the life of young girls. There exists limited knowledge about puberty, menstruation, and reproductive health. There are two dimensions attached to menstruation which need to be addressed explicitly. One is the taboos and stigma associated to menarche which made women and young girls more reluctant to talk and discuss about the social trauma they face every month of the year. Another dimension is the menstrual hygiene practices which need to be addressed, to ensure that girls develop with dignity and contribute the best to the society. The impact of inadequate menstrual hygiene practices starts from the onset of the menarche exclude them from their normal activities, school dropouts and even restricting the participation of women in society in many places of the world, leaves women and girls vulnerable to early and forced marriage, early and unwanted pregnancies, unsafe abortions and maternal morbidity and mortality. To change this situation, we need to take care of both the dimensions associated with menstruation by the effective blend of facilities, knowledge information and Institutional and policy measure by government and NGOs, to manage menstruation hygienically.

Unsurprisingly, the essential part is to minimize the impact of harmful cultural, religious belief which are associated with menstruation. In light of the social, economic health and environment impact discussed earlier. knowledge and information on menstruation will have the larger impact. Many young girls and women wishes to have information on menstruation (UN Women & WSSCC, 2015). It is important to break the silence around menstruation by educating them about the menstruation and how it is related to sexuality and reproduction. Schools and health centre (Anganwadi) can become a hub for education on menstrual hygiene and management. Even if the women get a good access to facilities and products such as clean toilets, water and pads, they need to possess the proper knowledge to maintain this access in a hygienic and safe way.

Another important step is the Capacity building of teachers to teach about these issues with comfort. Engaging men and boys in lifting the cultural taboo associated with menstrual cycle and address menstrual heath issues in schools and communities. Menstrual hygiene management should be mainstreamed within the school curriculum. There should be continuous flow of information to create awareness through the use of various source of information like short films, booklets, story board on menstrual management for school girls. Peer network are also the best propagators of change.

A systematic review of the water and sanitation in schools should be done. An investment in MHM in relation to WASH could possibly result in an economic benefit. This in turn might spur governments into making policies that will regulate and enforce the provision of gender appropriate WASH facilities in schools and at work place and other public spaces. In order to do this, more research on the mean to spread knowledge and information will be needed. It is important to encourage policies and quality standards that promote safe and affordable options and dynamic markets for menstrual products. Materials those are culturally acceptable, contextually available and affordable. Promotion of environmentally-friendly sustainable. menstrual products and their disposal as it is very important aspect of sustainable development goals.

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