

Empowering the Half World - A safe hygienic sanitary napkin.

Ranjit Kumar, Sana Salah.

Abstract— Menstruation is a phenomenon which is unique to the women only and they are blessed to experience this marvel. In total, women spend around six to seven years of their lives menstruating. A vital and fundamental priority for women and girls is to have the obligatory and indispensable knowledge, conveniences and cultural environment to achieve menstruation hygienically, and with dignity. Yet the prominence and importance of menstrual hygiene, organization and management is mostly ignored by development practitioners within the WASH (water, sanitation and hygiene) sector, and other domains such as reproductive health. This paper explores the reasons why menstrual hygiene management is not generally addressed in WASH initiatives, the social and health impacts of this neglect on women and girls. The paper also discusses the prospects of the introduction of low-cost sanitary napkins that can be easily manufactured in rural setup and can be embraced by the majority of the Indian rural women population. It also addresses ways of disposing of these napkins post their usage. Generally, menstrual hygiene management (MHM) practices diverge worldwide and is dependent on the individual's socioeconomic status, their choices and preferences, local cultural traditions and beliefs, and access to water and sanitation resources. MHM practices can be predominantly unhygienic and inconvenient and troublesome for girls and women in poorer surroundings. Very scanty is known about whether unhygienic MHM practices increase a woman's exposure to various diseases. For women and girls to live healthy, productive and dignified lives, it is essential that they are able to manage menstrual bleeding effectively. This necessitates access to suitable water, sanitation and hygiene services, including clean water affordable biodegradable disposable sanitary pads, facilities to dispose of used pads, and sensitization about the menstrual cycle and how to manage it hygienically. Apart from this, it is also indispensable to encourage better cognizance amongst women and men to overcome the awkwardness, cultural practices and taboos around menstruation that effect negatively on women and girls' lives, and fortify gender discriminations and marginalization of the same.

Index Terms— biodegradable, gender, hygiene, menstrual hygiene, sanitary pads, water, sanitation.

1 INTRODUCTION

MENSTRUAL hygiene is fundamental and essential to dignity and well-being of girls and women. In India, menstruation is considered as social and cultural taboo. One of the most vulnerable and defenseless age group who is facing poor menstrual hygiene (MH) is adolescent girls. Talking and discussing about menstrual cycle is a theme of shame and embarrassment. Indian mothers are also not very much knowledgeable, conversant and suitably equipped with menstrual knowledge especially in rural India. Menstruation is hypothetical to be invisible and silent and this makes the women and the girls silent, mum and invisible, too. Millions of girls and women are suffer a setback in their daily lives merely because they are menstruating. Apart from the health problems due to meagre hygiene during menstruation, the lack of or unaffordability of facilities and appropriate sanitary products often thrust menstruating girls temporarily or sometimes permanently out of school, having a negative influence on their right to education. The links between admittance to water and sanitation and accomplishing development goals for environmental sustainability, health, education, poverty alleviation and gender equality have been established (Water Aid 2007). Yet the WASH sector is ignored by the donor and developing country governments, in comparison to other sectors. For instance, although worldwide aid and support for health and education has been progressively increasing the proportion of aid being allotted to WASH has decreased. Although the load of poor health, time consumed fetching water, and lack of privacy for defecation and personal hygiene is excessively endured by women and girls, they are habitually excluded from participating evocatively in decision-making and management of WASH programmes. Even when pro-

grammes and initiatives are implemented to combat gender inequalities, strongly-embedded power relations persist. Due to casualness and negligence they are exposed to unhygienic circumstances and unsanitary resources such as the use of dirty rags, dried newspaper, and ash to manage the high flow of menstrual blood. About 52% of the female population is of in the reproductive phase in India and most of them are menstruating every month while the bulk of them in rural India have no access to clean and safe sanitary products, or to a clean and private space in which to change menstrual cloths or pads and to wash. The importance of menstrual hygiene management is mostly abandoned within WASH (water, sanitation, and hygiene). It is projected that 355 million Indian women and girls have no access to sanitary pads during monthly menstruation periods (Census 2011). Only 12 percent of Indian women can afford to buy the sanitary napkins monthly (UNICEF, 2008) while 80% of menstruating girls and women use old rags and clothes. The sanitary napkin, a universally needed product during menstruation, has very low penetration in India (House, 2012) mainly due to its high price and partly due to the tradition of using cheaper but unhygienic old cloth piece. According to a 2008 UN report, merely 6% of women in the country use sanitary napkins in contrast to 96% women in Europe. Even with respects to Millennium Development Goals Menstrual Hygiene is highly neglected (Bhardwaj & Patkar, 2004) and according to many researchers negligible efforts have been given in the production and social promotion of lowcost napkins. Another plaguing issue with these napkins is their disposal techniques. The 2014 UNICEF statistics says that an average woman disposes 125 to 150 kgs of tampons, pads in her lifetime and most of this sanitary pad

end up in landfills, incinerators or in the river and pose a severe threat for the land, air and water pollution every year. As a result of unhygienic does, women become the host of uterine and cervical infectious diseases. This is due to lack of awareness and the economic inability for adopting better precautions like the use of hygienic sanitary napkins during menstruation period. Usually, a large variety of sanitary napkins is available in the market but they are very expensive and are not affordable for rural & underprivileged women and girls. Hence, they are forced to use rags, newspaper and reuse the cloth after washing them. There are a strong necessity and responsibility to break the myth about the menstrual hygiene in the India, especially in the rural sector. So, the ideal place to make an imprint on refining the lives of girls and women is in water and sanitation and it is high time that imitative is taken to promote it loudly and unashamedly. The part of good menstrual hygiene administration may serve as a catalyst for an improved, stronger development of women and girls: personal, educational and professional. There is also strong evidence to show that ignoring good menstrual hygiene is impacting not only the women and girls directly but also for schools, businesses and economies. Most probably Safe Menstrual hygiene can be attained only through the deployment of reasonable means and safe practices and one of the most noteworthy objectives to achieve the safe menstrual hygiene is to start an enterprise related to menstrual hygiene that is affordable, reachable and scalable and this can be achieved by manufacturing low-cost sanitary napkins through appropriate technology. The beneficiary of these affordable sanitary napkins would be mostly school girls and women in rural India. Unhygienic practices due to lack of knowledge and unaffordability of expensive sanitary napkins result in the lack of confidence in school girls. As a result, they can easily learn and convey the message but that is possible only sensitization. They can be utilized as one of the most active change agents in their communities. Although there are women from the strong financial background in Rural India but they adopt unhygienic Menstrual Hygiene (MH) practices and measures due to deficiency of awareness and knowledge. These women can easily learn and convey the message but it's only conceivable after sensitization and permission from the male family members. They can revolutionise the existing myths and practices in their communities if mobilised appropriately as these innovative and lowcost sanitary products will be attractive to them. There are also working women in rural set-ups for example; teachers, health workers, midwives, or housemaids, and the majority of them have the lower middle-class background. It is evident that the dearth of knowledge and less financial resources result in reflection of unhygienic practices. Innovative and low-cost sanitary products will be attractive to them and they can publicise the product at their workplace and can also play role in improvement of MH situation in their niche. The awareness of practices and access to facilities needed to have a good hygiene during menstruation were commonly found to be missing. In Bangladesh, India and Nepal the majority of women in rural areas use old, dirty tattered cloths to absorb menstrual blood. In Bangladesh, these are usually torn from old saris and are locally known as 'nekra' (Ahmed and Yesmin

2008). For killing harmful bacteria that can cause infection, clothes should be washed with soap and dried in sunlight. Lack of facilities, including safe water and clean private toilets, in addition to taboos and embarrassment associated with menstruation, mean that many women and girls do not have anywhere to change their clothes and are unable to wash regularly during at the time of need. Many are incapable to wash their clothes adequately and have no places to dry them hygienically, instead, they keep on hunting secretive, dark places to hide their clothes (Ahmed and Yesmin 2008; Dasgupta and Sarkar 2009; Dhingra, Kumar and Kour 2009). In the recent study done in West Bengal, it was shown only 11.25 percent of girls used disposable sanitary pads with availability and affordability being stated as the key obstacle and hindrance to more widespread use (Dasgupta and Sarkar 2008).

2 RESULTS AND DISCUSSIONS

The selection of sanitary protection is a very much personal choice based on cultural satisfactoriness. It is often predisposed by a women's or girl's environment and availability to funds, water supply and affordable options. Thus it is critical and important that any programme or initiative aiming to support women or girls with sanitary protection and material should involve the stakeholders in the planning and discussions and decisions about the possibilities to be supported. Disposable sanitary napkins are the most frequently used methods of managing menstruation. In resource scarce poor settings, they are prohibitively expensive and most importantly problematic to dispose of. Many women and adolescent girls from poor families who are economically weak cannot afford to buy these hygienic sanitary pads. (Kirk, 2006). But these napkins reduce the obstacles for girls to stay in school, which are manifold: fear of odour, fear of soiling, staining and even if there are washroom facilities at school, fear of leaving visible blood in the toilets. In order to resolve this crisis especially for rural India appropriate technologies and machinery manufacturing, these pads should be popularised where rural women could produce the napkin locally by redesigning the regular napkins which are generally available in the market. One such model has been adopted in Uttar Pradesh by the Kutir Udyog federation which is based in Mathura. The napkins there are manufactured by simple machines which are made up of very elementary materials like wood, and other locally available raw material and which are easily operated by the workers. Such models can be replicated in most of the rural parts of India and subsequently generate employment for rural women. Apart from that, a good management of menstrual hygiene should visibly include safe and sanitary disposal which is widely lacking in most of the areas. Where do girls and women dispose their used sanitary products and clothes? The answer to it is very simple. Wherever they can do so secretly and easily. In practice, this means open defecation field or landfills for garbage dump and this is applicable to both commercial and homemade sanitary materials. (WSSCC, 2013). In developing countries like India having poor waste management infrastructure, these wastes will produce larger

problems which would be difficult to tackle. The Red Cross Kutir Udyog Model has worked very effectively to rectify this issue by using Strong Absorbent Polymer in the Napkins which makes it biodegradable and eco-friendly. The cost of the napkins are drastically low and affordable and can suit the budget of the rural India. The machine is very elementary and has a very simple, it has a pulverizer that pulverises cotton (100kg/ hour). The other parts of the machine include Napkin Press Machine, Napkin Sealing Machine, Gumming Set and UV Treated Sterilizer. As of now, by using the current model, ten women can manufacture 2,000 packets of sanitary napkins in a day. The machine is designed in such a model that it requires electricity for just two hours; the rest of the execution of work can be done manually. As many rural areas in the country lack proper power supply or are not at all electrified this machine can be an ideal solution. So, this appropriate technology is not just providing low-cost sanitary napkins but also generating employment to the women manufacturing them. Apart from this, the women who are engaged in selling and distributing the napkins get employment too. Every woman can easily earn Rs. 5,000-6,000 a month.

Process Flow of the Product. (Sanitary Napkin)

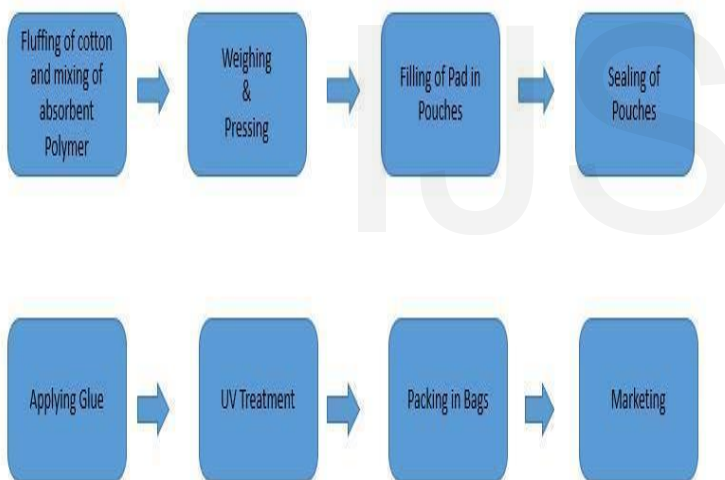


Figure 1: Process Flow of the Product.

Source: Kutir Udyog Model

The given model can generate employment and profit so that it can sustain in the long run, without any external funding. Therefore, it is a sustainable model where profit can be reinvested for establishing new centres in other parts of rural India and subsequently it can scale up near future once it attains the break even. Such models are proving to be very successful and efforts should be given to replicate them in the majority of the rural parts of the country. The District health department can be the major stakeholder in providing the awareness and sensitization to local girls and women through local institutions like NGOs, Anganwadi, and ASHA group. Lady Health Workers (LHWs) are vital in generating awareness about rural sanitation and health hygiene. Therefore, LHWs can serve as the catalyst in the social awareness regarding MHM. Teachers at the community level are another mobilisers which can easily spread awareness among mid-

dle and high school going girls. Generating awareness through the teacher regarding Menstrual Hygiene can be a very operative in sensitising the adolescent girls. The social sector has a strong presence in the rural community as these NGOs have links, direct access and roots in rural communities. They can hence back by sharing their experiences, knowledge of the field. Therefore, Local NGOs can be an effective mediator for awareness.

3 CONCLUSION

Women need access to WASH facilities and services to achieve menstruation hygienically, yet this has been principally deserted by the WASH sector in development. In South Asia, the affliction of this abandonment is tolerated by millions of women and girls who are deprived of their rights and moralities to gender equality, education, access to water, sanitation, health and a life of dignity. As a consequence, governments' promises and commitments to accomplishing national and international development goals will not be achieved. Deficiency of cognizance of development practitioners, policy-makers and communities about the problem, and appropriate solutions as well as technology has meant that menstrual hygiene is not prioritised in both the supply of and demand for WASH amenities. This failure to prioritise the issue is compounded by profoundly rooted gender inequalities and cultural perceptions and beliefs. Women's dearth of meaningful participation in policymaking and administration of development programmes, and the cultural anathemas and practices surrounding menstruation in South Asia create an acute obstacle to implementing practical solutions. This requires longer-term plans to bring about cultural change. Within the WASH sector, a few organisations and agencies have established fruitful tactics to menstrual hygiene and management. The first step is often to break the silence on conversing this issue within the organisation itself. Integrating menstrual hygiene within the WASH sector encompasses raising awareness, hygiene education and promotion, the endowment of affordable and accessible products and amenities, waste management, and the amalgamation of these methods into conventional policies and programmes. But in order to make it effective there is also an immediate need to challenge gender inequalities through women empowerment, antagonizing the gendered perceptions and beliefs about roles and responsibilities (particularly in association to water, sanitation and hygiene) held by both women and men, and stimulating cultural and religious practices. It is observed that the WASH programmes are largely focused on shorter-term interventions, which confines the possibility for cultural transformation. It is, therefore, indispensable to work collaboratively with others, including social activists, gender specialists and the health and education officers. Yet, adequate facilities and low-cost sanitary protection materials are only part of the solution. Education and information sensitize women with factual information about their bodies (House, 2012). Empowering women and girls are also necessary so that the demands are heard and their menstrual hygiene needs are taken into consideration. Because a lack of factual information compounded by the prevalence of myths means that that girls' needs related to handling menstruation are often not valued or suitably addresses (Kirk, 2006). Com-

munity-wide approaches, which particularly involve boys and men, are encouraging ways of improving menstrual hygiene management. Obstacles and barriers to and women because of insufficient sanitary means are often connected to social barriers like taboos and stigmas and need to be considered collectively.

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