COMMERCIALISING MENSTRUAL CYCLE: THE POLITICAL ECOLOGY OF MENSTRUAL HYGIENE MANAGEMENT

Sameena M.S, Ph.D Research Scholar (UGC Senior Research Fellow), Department of Sociology, Sree Sankaracharya University of Sanskrit, Kalady, Kerala, India

Abstract: This conceptual paper analyses the commercialisation of the menstrual cycle and its resultant socio-political and environmental impacts using a political ecology framework. The modern Neo-Liberal capitalistic economy has changed the prevalent discourse around Menstrual Hygiene Management (MHM) practices through the construction of sanitary napkins as the only means of living clean, healthy and hygienic lives. As a result, the mounting piles of trash produced from menstrual waste have been posing a severe threat for the urban municipal solid waste management throughout the world. A potential solution to this problem is the use of menstrual cups, an environmentally, economically and physically friendly alternative to sanitary pads. The present study also analyses the ways in which women are made silent victims of these patriarchal and commercial motivations of the MHM industry and the factors that inhibit the use of menstrual cups.

Keywords: Menstrual Hygiene Management, Neo-Liberal capitalism, Menstrual Cups, Political Ecology

I. INTRODUCTION

"Menstruation represents the essence of femininity" (Simon De Beauvoir, 1953)

Menstruation is regarded as the first significant milestone in the reproductive history of a woman's life and Menarche is viewed as a sign of sexual maturity (Anuradha, 2000). It is a natural part of the reproductive process that occurs to prepare a woman's body for pregnancy. If a woman does not become pregnant, the uterus sheds its lining. This shedding is called menstruation and is evidenced by the flow of blood through the uterine canal (MHM National Guidelines, 2016).

Because of its relation to the reproductive health of a woman, Menstrual Hygiene Management (MHM) has become a subject of deep concern these days. The lack of proper sanitation facilities and proper affordable hygiene materials for the use by menstruating girls and women at home, at school and at workplaces, affects their health, their potential to access education, employment, overall safely and quality of life. Many girls and women in low- and middle-income countries face various barriers in managing menstruation.

1.1 Menstrual Hygiene Management (MHM)- Definition

According to the United Nations Children's Fund (UNICEF) (2012), good MHM is defined as access to necessary resources (e.g. menstrual materials to absorb or collect menstrual blood effectively, soap and water), facilities (a private place to wash, change and dry re-usable menstrual materials in privacy during menstruation, and an adequate disposal system for menstrual materials, from collection point to final disposal point), and education about MHM for males and females.

According to Archana Patkar (2011), the definition of "menstrual hygiene management includes: (i) articulation, awareness, information and confidence to manage menstruation with safety and dignity using safe hygienic materials together with (ii) adequate water and agents and spaces for washing and bathing and (iii) disposal with privacy and dignity. It also entails methods of handling and storage, not using the product for more than the acceptable duration, maintaining personal hygiene vis-a-vis managing daily activities".

MHM has been a long-neglected issue for many societies around the globe. A review of scholarly articles and literature reveals the fact that menstruating girls and women across a range of local cultures are unable to manage their menses safely, comfortably and knowledgeably. In 2001, the Rockefeller Foundation supported a series of case studies exploring the sexual maturation of schoolgirls in Uganda, Zimbabwe, Kenya and Ghana. Girls across all four countries reported inadequate sanitation facilities, lack of guidance on menstrual management, and a male-dominated teaching staff that made asking for support difficult. More recent research documenting stories from low- and middle-income schoolgirls in Tanzania, Kenya, Uganda, Rwanda, Ethiopia, Nepal, and India reveals a range of difficulties in managing menses in school environments (Sommer, 2013).

When coming to the Asian Scenario of MHM, Van de Walle and Renne (2001) commented that women's individual menstrual needs, as well as their cultural, social, economic and political contexts, are poorly understood in the Global South in general and the Asian women's experience of both menarche and menopause has been understood as a climactic status passage, a social experience made meaningful by the roles associated with it (Bulbeck 2001). In India, menstruation has been dealt with secrecy. A number of taboos and social and cultural restrictions still exists concerning menstruation which intimidates their lives and make their life difficult. Therefore, menstruation is generally unwelcome by the adolescent girls and women. Fernandez M, in his article "Breaking the Silence: Menstrual Hygiene Management in Rural India" presents the common MHM practices in rural India. According to him about 89% of rural women use cloth, 7% use sanitary napkins and 2% use pieces of old saris or other textiles, such as discarded bed linen. This cloth is roughly torn into rectangles and folded or rolled and attached to the genital area with the help of cloth string. After use, the roll is put aside for washing, usually in water with washing soap and dried and stored for reuse. He also shows that menstruation severely limits rural women's mobility and access to education, primarily because public toilets are scarce and most women postpone excessive physical movements order to avoid undue flow staining their clothes. The worst part

their menstruation has been reported as the washing of menstrual rags in communal waters which was extremely embarrassing for women (Dutt, 2013)

Hygiene in the form of sanitised pads is more of a middle and upper social class and urban affair. Women in Indian urban slums also faces severe difficulty in washing and drying menstrual rags, consequently a large number of women suffer from reproductive tract infections (Dasgupta and Sarkar, 20018). Due to economic distress and unavailability of MHM options, women are even compelled to use ashes, newspapers, dried leaves and husk sand in many parts of India. There was also a report from the Silcoorie village of Assam that a school going girl died in April 2017, because of the infection from an unclean cloth she had used for managing her menstruation (Verma and Sambyal, 2018). It is estimated that around 42 per cent of women in India lack access to hygienic means to manage their menstrual cycles (National Family Health Survey, 2015-2016).

Robyn Boosey and Emily Wilson (2017) in their article, "the menstrual hygiene management and the international human rights system: a vicious cycle of silence", presents the Indian conditions of unhygienic menstrual management practices. They argue that, the unhygienic menstrual practices often come as a result of poor MHM knowledge include using unhygienic menstrual materials, such as old or worn cloth or rags; not changing menstrual materials frequently enough; and storing and drying menstrual cloth in unhygienic places, which can be damp and dusty.

When coming to Kerala, the state with highest sex ratio, lowest population growth rate, highest literacy rate, highest life expectancy and the highest Human Development Index (HDI) among the other states in India, reports about girls missing school days during periods due to period cramps and the lack of a safe changing space and clean toilets. Apart from the physiological issues, their mental health also gets affected due to poor hygienic practices during menstruation and the

related social taboo. The issues associated with menstruation are never discussed openly and the silence surrounding menstruation burdens young girls and women by keeping them ignorant of this biological function (UNICEF India, 2008). Therefore, the fundamental problem revolves around the knowledge about menstruation- how the information is sourced and transmitted.

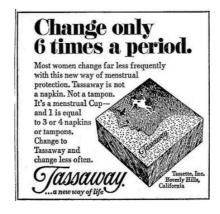
Women traditionally transferred knowledge through the generations and menstruation occurred within the private domain. Kuntala Lahiri Dutt in her article, 'Medicalising menstruation: a Feminist Critique of the Political Economy of Menstrual Hygiene Management in South Asia', exemplifies the global north-south divide regarding menstrual knowledge access. According to her, young girls in the Global North source menstrual knowledge from institutional sources - which impart scientific knowledge about the anatomy and the physiological function of menstruation. In South Asia, where sex education remains a controversial issue, no institutional education system concerning menstruation exists. In South Asia, as in most other parts of the world, the source of knowledge concerning menstruation remains informal, usually through mothers, older female relatives or friends (Thakre et al. 2011). Thus, lack of knowledge surrounding menstruation prior to menarche acts as a hindrance to proper MHM practices.

1.2 History of MHM and Menstrual Cups

Natalie Shurejul, in her article 'why has it taken the menstrual cup so long to go mainstream?' presents the history of MHM practices throughout the ages. She starts with the case of ancient hunter-gatherer cultures, where women spent a week per month in retrospectively dubbed "menstrual huts" stowed safely away from villagers who didn't have their period. Menstruation have traditionally been so hush-hush topic that women's own experiences with their menstrual cycles are practically absent from the historical record. According to her, menstrual technology got its big break when women's fashion changed to reflect their more active lifestyles in the late 19th century, as women's roles expanded to include more employment outside the home. Between 1854 and 1921, several patents were granted for menstrual napkins that could be pinned or clipped to belts or suspenders. By the early 1900s, many women had adapted commercially available gauze and diaper fabric for menstrual purposes. Some advertisements also appeared during this time.

In 1935, Leona W Chalmers came up with a new innovation and filed a remarkable application at the Philadelphia branch of the United States Patent office; a funnel-shaped receptacle of vulcanised rubber inserted low into the vagina to collect menstrual fluid rather than soak it up like sanitary napkins. Thus, the first menstrual cup made its appearance in the market with the brand name Tassaway.

Menstrual cups were marketed as being environmentally, economically and physically friendly and therefore a good alternative to sanitary pads and tampons. It was instructed that a woman washes her hands thoroughly with water and soap prior to engaging with the cup. Once this is done, the cup can be folded in numerous ways prior to insertion. It was also recommended that the cup be emptied every 4-8 hours. When doing so, the cup could be removed, emptied, wiped or washed, and then be reinserted. It was said that it takes up to three months to adjust to using the cup and being fully comfortable with it. When the menstrual cycle is over the cup needs to be disinfected by placing in a container with boiled water for approximately ten minutes, let it dry and then store it in the accompanying bag in a safe place until next use.



(First Menstrual cup advertisement-Source: http://menstrualcup.co/tassad70/



Menstrual cup (source:https://www.herworld.com)

Four years before Chalemers filed her patent, a Denver Physician named Earle Haas filed his for a competing product: a 'catamenial device' that became the world's first commercial tampon and applicator (Ashley Fetters, 2015). But tampons didn't get much acceptance as in the case of menstrual cups. Because they faced severe competition in the market in the era of sanitary napkins. Both tampons and menstrual cups overstepped cultural boundaries because their inception required extensive contact with the genitals and could undermine one's "purity" by snagging the hymen. However, the real story behind menstrual cups getting isolated from the mainstream market was a different one. Natalie finds two reasons for that. One was marketing and the other one was World War II. The first sanitary napkin 'Kotex' was so popular due to its marketing strategies. And Tampons also took off because it made working women's lives easier. It also benefitted from a serious war boost. When women flooded the labor force during World War II, tampons were a natural choice over pads for a long Daya of work. While their total user-ship was still a fraction of that of pads, tampons had begun to cement a reputation as the pick for modern, active women.

The World War II had the opposite effect on menstrual cups. The wartime rubber shortage closed up production for years. During 1960s there was a revival for menstrual cup but it didn't last for a decade. Every major pad and tampon brand has eventually enjoyed increased visibility and distribution after being acquired by a larger company. Why did this happen? Why it never been a viable path for the cup? The answer lies in the question, why would these companies want to rule out repeat customers by selling every woman one cup, when they can instead sell her tampons until her menopause. This very logic of capitalistic economic order (disposable syndrome) and the role of media can be regarded as the key players that hindered the way for menstrual cup.

II. THE POLITICAL ECOLOGY OF MHM

Political ecology is a theory constructed upon a more-or-less Marxist analysis of political economy in which the social relations of production, access to and control over resources, and power relations rooted in state and capital figured centrally. It views this world as an ecological system in which capital necessarily privatizes, commodifies, monetizes, and commercializes every aspect of nature. It presents before us the different ways in which power equations are operating to cause varying environmental impacts. It links the political economy of development and what Harvey (2014: 262) calls the "mindless extension of capital's ecology into our lifeworld". Systems of access to and control over resources, growing commodification of the resource base and social life, circuits of capital accumulation, and the role of the state are central in understanding such an analysis. Therefore, political ecology stresses not just production relations and global political economy, but also gives more attention to the institutional and discursive ways in which power relations play out (Gautier and Kull, 2015).

2.1 Menstruation and its Changing Discourses

"How a society deals with menstruation can reveal much about how it perceives women"

(Laws, 1990)

Menstruation is a multi-faceted concept, It has its own expressions in the social, economic, cultural, physiological, religious, psychological, political and environmental arenas of a woman's life. The physiological occurrence of menstruation, its onset (menarche) and cessation (menopause) translates as a key life-cycle event by marking the milestone of fertility and femininity, marking significant changes in the way that families and societies perceive girls and how girls see themselves (Mc Pherson and Korfine, 2004). It is the 21st century, and the passing of centuries have affected the discourse on menstruation by bringing in elements of science and technology (Dasgupta & Sarkar, 2008). In many cultures, menstruation has been considered as a taboo topic. There are a number of anthropological works on the manner and function of MHM, rituals and cultural practices. These studies showed that menstruation practices are complex repositories of values and that some pre-modern cultural traditions, which are also androcentric, patriarchal and unwilling to discuss women's bodies and sexuality, cultivate quite different values around menstruation (Dutt, 2014). In India, the menstrual cycle was equated by almost all pre-modern traditions to the periodicity of nature, the cycle of life and the creation of the world (Grant, 1993). However, in a patriarchal framework, menstruation is a taboo topic kept outside the purview of polite discussions, which is by far the most important reason why menstruation is poorly managed in rural areas (Pathak and Pradhan, 2016). Menstruation integrates countless myths and mysteries. Most of the religions view it as polluted period for woman. For example, in the Hindu mythology it's believed women got 'Rajaswala Dosha' (menstruation) when Lord Indra (the

king of gods) severed the head of Vishwaroopacharya (the second teacher of the gods). Since Lord Indra killed a Brahmin he got 'Brahmahatya dosha'. He got rid of it by distributing it amongst the Prithvi (land), Samudra (water), Vriksha (tree) and street (women folk). The women from that day on started menstruating every 28-30 days and got the ability to give birth. Hence it is believed that mensuration is dosha. During menstruation some women aren't allowed to enter the kitchen and tells, sleep in the day time, bathe, wear flowers, have sex, touch other males or females, talk loudly and touch pickle. In Sabarimala temple, Kerala (India), women from the age- bracket of 10-50 years are not allowed to enter the temple because they are considered ritually unclean (Bhartiya, 2013).

In the case of Christianity, Judaism and Islam, the history of menstrual taboo has been given as a major justification to keep women away from positions of authority. Menstruating women are considered unclean and they are prevented from touching holy books, offering prayers and entering the place of worship. Buddhism regards menstruation as a natural physical excretion that women have to go through on a monthly basis, nothing more or less. But due to the influence of Hinduism, Buddhist discourse on menstruation has gone through several modifications and women are often prevented from circumambulate around the stupas considering them as unclean. Even Gandhi used to say that menstruation was a manifestation of the distorted souls of women because of their sexuality. He believed that when a woman's souls became pure, then she would automatically stop menstruating. Aru Bhartiya, in her article, 'Menstruation, Religion and Society' finds Sikhism as the only religion where the scriptures condemn sexism and don't impose any restriction on menstruating women. Thus we can see that different kinds of menstrual taboos exist across religions and cultures in the world.

Menstruation is often associated with shame and disgust in different societies. Fernandez, M (2010), in his article "Breaking the Silence: Menstrual Hygiene Management in Rural India", shows that menstruation severely limits rural women's mobility and access to education. This is often due to the lack of public toilet facilities and most women postpone excessive physical movement in order to avoid undue flow staining their clothes. He also shows that washing of menstrual rags in communal waters can be extremely embarrassing for women.

Menstruation also acts as a barrier to accessing education. This is a serious issue as far as the development of a country is concerned. Maria Hyttel.et., al in their study "Drivers and Challenges to use of Menstrual Cups among Schoolgirls in Rural Uganda" identifies the issues such as taboos, lack of knowledge and risks leakage often become prevailing reasons for school attendance short age and even drop outs. Absenteeism during menstrual period affects women's career prospects as well. Women will be constrained to pursue and maintain employment when they are not able to manage their menstruation hygienically and in privacy at work. All these restricting aspects have severe psycho-social impact on women's attitude.

The economic aspects of menstruation cannot be neglected. Because, in the earlier period, women used to handle their menstrual flow through the things which were readily available in their home. For a majority of women in low income countries, procuring a disposable napkin is a difficult task. And in the modern capitalistic economic system, menstruation also underwent commercialisation. With the expansion of television, women are more and more exposed to relentless commercials that use women's bodies as sites either for the expansion of capital consumerism or for improvement: clothes, rags, and sashes are represented in modern, shiny packaging. They idealised sanitary napkins as the only means of living clean, healthy and hygienic lives. The discourse on MHM underwent a complete transformation with the introduction of sanitary napkins. According to Micheal Foucault (1980), discourse analysis focuses on the practices (ideas, ideologies, attitudes, actions, terms of reference) that systematically make up how people talk about the world. Using written records (e.g. personal journals, institutional reports, newspapers) or the spoken word (e.g. speeches), discourse analysis allows the researcher to trace the genealogy of a narrative. Focuses on the interrelationship of knowledge and power. Discourse analysis of environmental problems links political ecology to the analysis of environmental narratives and the structural influences on perception and news. Max Boykoff uses empirical analysis of news and digital media to show discursive biases and their political and cultural implications (Raymon L Bryant, 2015).

In order to understand the environmental issues arising out of modern Neo-Liberal capitalistic notion of MHM, it is crucial to look into the commercialisation of menstrual cycle which idealised disposable sanitary napkins as the best option for MHM.

2.2 The Neo-Liberal Capitalistic Discourse and Commercialisation of Menstrual Cycle

The Neo-Liberal capitalism present an economic order in which capital privatizes, commodifies, monitizes and commercialises every aspects of human life. With this logic, contemporary market dynamics have produced an opening for new patterns of consumption, called the "the disposable syndrome"!. That is the modern Neo-Liberal capitalistic economy produces goods that can be quickly discarded and intended for single usage. And we can find this very same logic operating in MHM industries as well. Sanitary napkins, diapers are the best example for this logic. The mounting piles of trash out of this are posing severe threats to the waste management systems throughout the world. Even though there are eco-friendly options like menstrual cups exists, the tentacles of Neo-Liberal capitalistic logic always promoted the use of disposable sanitary napkins. It is estimated that the average woman spends thousands on some 17,000 and sanitary napkins over the course of her menstruating life. Where as one menstrual cup costs between only 200-300 INR, and it can be reused upto 15 years.

The havoc created by non-disposable, plastic-based sanitary pads is huge (Reshmi Verma and Sambyal, 2018). The adhesive wings and the perforated plastic layers in the commercial sanitary napkins are not easily biodegradable. The sewage blockages were mostly due to accumulation of excessive quantity of solid waste or sand which results in hardening of the sludge in the pits. Blockage of sewage system is a global problem and major contributing factor is flushing of menstrual products in toilets. Deodorised sanitary products used by women/girls contain chemicals used in bleaching such as organochlorines which when buried in the soil disturb the soil microflora and decomposition takes time. People living alongside river banks throw menstrual waste into water bodies which contaminate them. These materials soaked with blood were breeding places for germs and pathogenic microbes. Sanitary products soaked with blood of an infected women/girl may contain hepatitis and HIV viruses which retain their infectivity in soil and live up to six months in soil. The clogged drainage with napkins has to be unblocked and cleaned manually by conservancy workers with their bare hands without proper protection and tools. This exposes the workers to harmful chemicals and pathogens. Incineration is a better technique to dispose of menstrual waste but burning of pads releases harmful gasses that effects health and environment. Burning of inorganic material at low temperature releases dioxins which are toxic and carcinogenic in nature (Rajanbir Kaur.et.al.,2018).

In India, due to economic constraints, there are provision of low-cost sanitary napkins to women in rural areas. And most of these rural sanitary napkins making units are run by self-help groups (SHGs) with a short training and seed grant from the government, multinationals, or NGOs. After the initial training and set-up, the grant providers withdraw and the SG is expected to run the programme as well as educate the buyers. The housing condition and storage facility in most of these villages would not under hygienic and might not be an ideal place to manufacture sanitary napkins. Even though the sanitary napkins might appear white and clean, in reality they have been through rodent infestation, microbial attach and repeated handling with bare hands. Sanitary napkins poses threat not only to the environment, but also to the reproductive health of a woman. Rashmi Verma and Swati Singh Sambyal (2018), in their article "menstrual cycle is normal: our attitude towards it is not", presents some facts about sanitary napkin usage in India. According to which, "on an average, a woman uses around 10,000 sanitary pads during her reproductive age; the stagnant menstual blood on pads has a lot of accumulated bacteria such as Escherichia Coli, which rapidly multiplies at an exponential rate; Each piece of sanitary pad contains around 2 gram of non-biodegradable plastic which takes about 500-800 years to decompose".

2.3 The Role of Media

Media has changed the entire discourse around MHM through advertisements. Advertisements are instrumental in forming people's views. Since advertisements have to be effective and appeal to values that are widely accepted in society, by studying advertisements one can see how people think and talk about things. These advertisements are the ones that create the fear of staining, leaking, bulging and smelling in us. They use the classic advertising technique-'You got the problem, we have the solution.' Femcare companies sell their products using shame. This is turn extends the stigma around talking about menstruation openly. Ads for menstrual sanitary products never show menstrual blood. They replace the blood with a 'blue liquid' to show absorptiveness. The fact that it was and still is unacceptable to show blood on TV or print shows people's approach to it in everyday life (Anu Bhartiya, 2013). By these advertisements, cleanliness and comfort overlaid discourses of purity and pollution. Repeated telecast of television and radio advertisement of factory made sanitary products etches an idea in the minds of the viewers that any piece pleasant smelling, sparkling white absorbent, wrapped in an attractive packaging offers instant hygiene which is far from reality. This commercialisation of menstruation portray women's bodies as sites either for the expansion of capitalist consumerism or improvement (Dutt, 2014). They idealise sanitary napkins as the only means of living clean, healthy and hygienic lives. The message conveyed is that sanitary napkins allow women to function normally. The invasive reach of Television in India ensures that this message is communicated to women without access to a sanitary toilet or municipal water. The promise of a large untapped market lures new entrepreneurial initiatives. The alternative methods of coping with menstruation, such as menstrual cups has been drawn away from the markets because these media are acting as a tool for capitalistic economic order.

2.4 Role of State and NGOs

The dominant discourse around MHM has an influence on the state and other developmental agency's policies and the increasing initiatives promoting sanitary napkins as part of MHM programmes proves it true. That is by Keeping an emphasis on health and hygiene, massive social effort has been invested in menstrual hygiene education with much input from international funders operating through non-state agencies, the various departments and ministries of various Governments across the globe. For example, in India, the Centre has been giving free sanitary pads to a girl student on a regular basis. According to the latest data from the Ministry of Health and Family Welfare, this scheme has been rolled out in 17 states in 1,092 blocks. However, it has been criticised due to lack of funds, which affects the supply of disposable single-use pads, which is not a one-time expense (Verma & Sambyal, 2018). In Kerala, the state Government has launched She Pad scheme to provide free sanitary napkins for girls students. Moreover, the Government also launched sanitary napkin vending machines in 15 schools in Kerala.

Nivedita Pathak and Jalandhar Pradhan, in their article 'Menstrual Management and Low-cost Sanitary Napkins', critically analyses the provision of low-cost sanitary napkins to women in rural areas in addressing the real MHM issues. They observe that, under the guise of social service, the rural market in India offers plethora of opportunities for marketing and selling low-cost menstrual products. And with the advent of low-cost sanitary napkin-making technology, there is a cornucopia of governmental and nongovernmental schemes and policies on procuring, producing and promoting the sale of these products. They also lists a few other initiatives such as the Anandi Pads (Aakar Innovation), Mukti Pads (Society for Rural Industrialisation), Ssodashi (corporate social responsibility project by Jindal Power and Steel Plant) and Freedays (Government of India) that have also catered to smaller pockets in the country.

III CONCLUSION

The political ecology of MHM analysis revealed the ways in which the Neo-Liberal capitalistic order changed the discourse around MHM. That is by pegging menstruation with the concept of hygiene and cleanliness, it opened up new opportunities for the commercialisation of MHM practices and idealised the image of the modern, independent woman managing her menstruation with the sanitary napkin, in contrast to the image of an unhygienic, traditional woman using other means. This logic has made women as the silent victims of the patriarchal, commercial motivations of the MHM industry. The Neo-Liberal Capitalistic discourse not only ignores the physiologically, economically and environmentally viable options such as menstrual cups but also hides the potential environmental and health risks associated with the use of disposable sanitary napkins. It is important to note that the media advertisements are not the only agents of this Neo-Liberal Capitalistic agenda, it also operates in the guise of social service through Government and NGO initiatives as promoting menstrual hygiene.

REFERENCES

(1) Anuradha. R. (2000). Menstrual Hygiene Practices and Reproductive Morbidity: A Community Based Survey in Rural Thiruvananthapuram, Kerala (Unpublished doctoral dissertation). Achutha Menon Centre for Health Science Studies, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram, Kerala.

- (2)Bhartiya, A. (2013). Menstruation, Religion and Society. International Journal of Social Science and Humanity, 523-527. doi:10.7763/ijssh.2013.v3.296
- (3)Boosey, R., & Wilson, E. (2016). The Menstrual Hygiene Management and The International Human Rights System: A Vicious Cycle of Silence. Update of World Bank Group Gender Strategy: Consultations.
- (4) Chakravarty, D. (2016). Fighting the Menstrual Hygiene battle in rural India: A development communication perspective of the menstrual practices of rural India. Journal of Content, Community & Communication, 4(2), 26-32.
- (5)Eijk, A. M., Sivakami, M., Thakkar, M. B., Bauman, A., Laserson, K. F., Coates, S., & Phillips-Howard, P. A. (2016). Menstrual hygiene management among adolescent girls in India: A systematic review and meta-analysis. BMJ Open, 6(3). doi:10.1136/bmjopen-2015-010290
- (6)Feston, B. N., & S. Krishnaraj. (2018). Purpose Of Social Practice: Meet the Organisations in Kerala who Value forWomen Menstruation. Journal Management, 22-32. Retrieved their of 5(1), http://www.iaeme.com/JOM/issues.asp?JType=JOM&VType=5&IType=1
- (7)Garg, S., Sharma, N., & Sahay, R. (2001). Socio-cultural aspects of menstruation in an urban slum in Delhi, India. Reproductive Health Matters, 9(17), 16-25. doi:10.1016/s0968-8080(01)90004-7
- (8) Hyttel, M., Thomsen, C. F., Luff, B., Storrusten, H., Nyakato, V. N., & Tellier, M. (2017). Drivers and challenges to use of menstrual cups among schoolgirls in rural Uganda: A qualitative study. Waterlines, 36(2), 109-124. doi:10.3362/1756-3488.16-
- (9) Kaur, R., Kaur, K., & Kaur, R. (2018). Menstrual Hygiene, Management, and Waste Disposal: Practices and Challenges Faced by Girls/Women of Developing Countries. Journal of Environmental and Public Health, 1-9. doi:10.1155/2018/1730964
- (10)Lahiri-Dutt, K. (2014). Medicalising menstruation: A feminist critique of the political economy of menstrual hygiene management in South Asia. Gender, Place & Culture, 22(8), 1158-1176. doi:10.1080/0966369x.2014.939156
- (11)M. Arya., & S, A. Ambily. (2017). Menstrual hygiene management- a study among adolescent tribal girls in Kannur district with special refrefence to Kolayad Grama Panchayath. Journal of Advanced Research in Dynamical and Control Systems, 9(Sp-6), 978-989. Retrieved from https://www.researchgate.net/publication/320431908.
- (12)Menstrual Hygiene Management. (n.d.). Human Rights Documents Online. doi:10.1163/2210-7975_hrd-9831-2015004
- (13) Pathak, N., & Pradhan, J. (2016). Menstrual Management and Low-cost Sanitary Napkins. Economic and Political Weekly, LI(12), 27-29.
- (14)R. V., & Sambyal, S. S. (2018, March 8). Menstrual Cycle is Normal: Our Attitude towards it is not. Retrieved from https://www.downtoearth.org.in/news/waste/menstrual-cycle-is-normal-our-attitudes-towards-it-are-not-59829
- (15)Sharma, S., Mehra, D., Kohli, C., & Singh, M. M. (2017). Menstrual hygiene practices among adolescent girls in a resettlement colony of Delhi: A cross-sectional study. International Journal of Reproduction, Contraception, Obstetrics and Gynecology, 6(5), 1945-1951. doi:10.18203/2320-1770.ijrcog20171954
- (16)Shure, N. (2016, July 06). Why Has It Taken the Menstrual Cup So Long to Go Mainstream? Retrieved from https://psmag.com/news/why-has-it-taken-the-menstrual-cup-so-long-to-go-mainstream
- (17)Sommer, M. (2015). Menstrual hygiene management in humanitarian emergencies: Gaps and recommendations. Water, Sanitation and Hygiene in Humanitarian Contexts, 63-82. doi:10.3362/9781780448831.005
- (18)The M-Word: Assessing the appropriateness the menstrual (n.d.). Retrieved from https://dspace.library.uu.nl/handle/1874/361324