A Conference paper on

Spatiality of menstrual hygiene practices at informal settlement of Mujgonni, Khulna

Asrafi Bintay Akram, MScHS 190105 Architecture Discipline. Khulna University, Khulna

(It is followed the guideline of conference of Loughborough University Institutional Repository, UK)

Abstract:

Space impacts women directly during menstruation. In all sorts of households especially in informal settlements, girls and female are not prepared and aware of good practices so they face many difficulties and challenges at home, schools, and work places and thus space restricts them in menstrual hygiene practices. Any research has not been found which has described how space play pivotal role during women's menstruation. The aim of this study is to explore the spatiality or spatial dimension of menstrual hygiene practices adopted by women. Mujgonni residential area of Khulna has been selected as study area for this research. JMP indicators and guiding questions are used for conducting FGD to collect data. Study has revealed that the living space at informal settlement is favorable for continuing unhealthy conventional menstrual hygiene practice for a woman and that woman is bound to change her practices due to shifting to formal space. The expected outcome of this study might add new dimension of the existing model of good practices regarding MHM (Menstrual Hygiene Management). This study has significance to suggest that spatial usages could contribute to overcome the difficulties and challenges faced by women in menstrual hygiene practices.

Key words: Spatiality, menstrual hygiene practices, and informal settlement

Background:

Women and men have specific sanitation needs, preference, access requirements, and utilization patterns and experiences (Elledge and et al,2018). The menstruation is a natural part of the reproductive cycle of women. But in many developing countries, the lack of information about menstrual hygiene and materials themselves create a culture of taboos and misinformation about menstruation and it causes potential health risks such as vaginal infections.

Good menstrual hygiene practice means that women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary for the duration of a menstrual period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials (SSIDC, 2016).

In Bangladesh menstruation is not openly discussed due to social norms and cultural beliefs around the body and blood. As a result, girls are often not prepared for their first period and women and girls lack the necessary skills and information to hygienically manage their periods. Moreover, women and girls face several limitations during their periods that prevent them from contributing in normal daily life.

Rapid urbanization and inadequate capability of the respective authority to manage with the housing needs of people in urban areas have contributed to the development of informal settlements. Living in these settlements often poses significant health risks. The sanitation and drinking water quality of the informal settlements are often poor. About 30 percent (9 million) of them are living under poverty level and about 17 percent (5 million) are living in slum areas(Tanni and et al. 2014). According to World Bank there are 12.45 million urban poor and 6.97 million urban hard-core poor in Bangladesh, who lived in slum and squatter settlements or in informal settlements (ibid).

The girls and women are more vulnerable in terms of economic condition in informal settlement. They have no or limited income generating activities. They mainly depend on male counterpart of their family in order to get any livelihood support. So, the girls have limited affordability to buy menstrual products. Girls and women of informal settlement of Bangladesh have little choice regarding menstrual hygiene products due to limited options in the market, which are often targeted to female of formal settlement of urban and elite consumers. For menstruating girls and women, the accessibility of market is not easy. As girls and women normally do not visit market place, they get limited opportunity to buy those products. In order to get the product, they have to depend on male members of their family as males usually visit outside and the market places. Besides, the girls and women feel shy to buy the products from male shopkeepers as all the grocery and medical stores are run by males. In informal settlements of Bangladesh, there are also a lot of social taboos around menstruation that create problem for girls to continue their routine life. It is believed that menstruating girls and women are impure and more often they should not attend in religious activities and even in socio-cultural activities. The menstrual management decisions are based on their cultural belief instead of proper practices. In these communities, it is believed that menstruation is a sign of marriage due to lack of education and consciousness.

Urban informal settlements are characterized by crowding, extreme poverty, lack of land or property tenure, lack of services and infrastructure, and a predominantly informal economy. Because many slum dwellers are recent migrants from rural areas, many of them live without the social networks and kinship ties that can provide emotional, physical, and financial support in times of crisis (Buttenheim, 2009).Sanitation in urban slums is a particular problem. More than one-quarter of the urban population worldwide has inadequate sanitation; the proportion is much higher for slum dwellers. Inadequate sanitation compels slum residents to use hanging latrines, unhygienic pit latrines, or nearby open spaces, creating significant disease-related hazards (ibid). Insufficient and shared toilets are common characteristics in sanitary sector of informal settlement. Besides, women and girls face is the lack of access to proper sanitary facilities, including clean water, to wash themselves and change their cloth or napkins, especially in informal settlements

Another challenge is the cloths that are used by most women to manage their bleeding are often reused and washed with dirty water. They often hide their cloths and don't dry them in the sun to prevent bacteria growth, because men are not allowed to see these cloths. Due to lack of education, superstitions make different rigidity in informal settlement. Around 86% uses old cloth, some of whom do not use soap or an improved water source for washing and rinsing and many dry cloth in hiding (MLGRDC, 2014). Women use old cloths for several menstrual cycle without proper cleaning, drying and laundering (B.K.Mondal, 2017). Around 90% girls store their menstrual cloths in a hidden place for repeated use without washing them in a hygienic manner (B.K.Mondal, 2017). Lack of natural ventilation, some dark, hidden and damp space of household of this settlement have been created that help girls and women to dry their menstrual reusable cloth in unhygienic way. And thus reproductive tract infections are 70% more common in women who use unhygienic alternatives (Sinha, 2011). Girls mostly get information about menstruation form their mothers and other female members from family. Another study revalued that 70% get the information about menstruation from their mothers and 20% get information from their teachers (MLGRDC, 2014). Due to restrictions and the lack of information and facilities, women and girls struggle to maintain the necessary hygiene during their menstruation. This results in discomfort and increased occurrence of infections and can jeopardize women's sexual and reproductive health (https://simavi.org/long-read/ritu-is-promoting-menstrual-hygiene-management-in-bangladesh/).

Study area:

For this study a small informal settlement or slum named Mujgonni Uttarpara consist of 13 households has been selected as study area. Around 65 people live in this slum. As per ratio, the number of female is less in this slum. The slum dwellers resides in a private land. The dwellers are renter here for a long time due to cheap rent. The dwellers use two shared slab toilets and one common space there for bathing that are surrounded by tin and cloth. Deep tube well is the source of water in this settlement. Due to much salinity they cannot use the water for drinking and thus they collect their drinking water from another tube well beyond the slum. There is no separate drainage system in this slum. Toilets and bathroom are constructed in the back portion of the houses because of the connection with the main drainage system of Khulna town. According to the drainage accessibilities toilets are narrow, and cozy because of lack of natural ventilation.

Methodology:

A guiding question has been followed for conducting FGD (Focus Group Discussion) to collect data. 8 females of different ages were there of this slum and duration of FDG was 30 minutes. Permission was taken to capture their photographs and recorder was used for transcription. In this study the researcher has followed the JMP (joint Monitoring Programme) indicators to evaluate the water, sanitation and hygiene condition in the context menstrual hygiene practice at informal settlement of Khulna, Bangladesh. It has been carried out based on primary data collection through observation. The JMP is established by WHO and UNICEF for Water Supply, Sanitation and Hygiene in 1990, and published regular global updates throughout the Millennium Development Goal period. The JMP estimates for a total 26 indicators related to water, sanitation and hygiene to date and includes a wealth of new information on the types of facilities people use and the level of service they receive. Additionally, these indicators includes the information of people who have access to soap and water for hand washing. These new

indicators correspond with the ambition of the SDG targets, and raise expectations for both service providers and monitoring systems. (SDG-6, 2017)

The study has covered in informal settlements, women face a lot hinders (unhygienic and unavailability) while in need of safe water and sanitation during menstruation. So, the study has highlighted these issues to get an idea. The data have given quite a clear picture of the obstacles and poor condition of women access to WASH.

To portrait the overall situation as to menstrual hygiene practices fish bone analysis has been presented in this study. This analysis might help a reader to be informed regarding this curial issue at a glance.

Result:

WHO and UNICEF Joint Monitoring Program (JMP) for drinking water, sanitation and hygiene has used the following definition of MHM: "Women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary for the duration of a menstrual period, using soap and water for the washing body as required, and having access to safe and convenient facilities to dispose of used menstrual management material. They understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear" (Unicef, 2019).

The result of the study are summarized through different charts, figures and interpretation is given thereafter. Results include existing practices of menstrual hygiene management and its causes of girls and women linking with their living space.

Indicators	Informal Settlement: Mujgonni Uttarpara
Improved Drinking water source	No
Piped improved drinking water sources	No
Non piped improved drinking water sources	Beyond the settlement
Unimproved drinking water sources	Yes
No. drinking water facility (surface water)	No
Improved water sources exceeding 30 minutes collection time (limited drinking	No
water services)	
Improved water sources exceeding 30 minutes collection time (basic drinking	Have to collect drinking water
water services)	from tube well beyond settlement
	and it takes 15 minutes
Improved water sources which are accessible on premises	No
Improved water sources which are available when needed	From tube well in settlement
Improved water sources which are free from contamination	Salinity
Safely managed drinking water services	By physical labor of women

Table 1.1: Use Pattern of water by the respondents

Deep tube well is the source of water in this informal settlement. There is one tube well in this settlement. Due to much salinity they cannot use this water for drinking and thus they collect their drinking water from another tube well beyond the slum. Women are main water collector here. Only for household activities and toilet and bathing they use the water of in-situ tube well.

Indicators	Informal Settlement: Mujgonni Uttarpara
Improved sanitation facilities	No
Improved sanitation facilities connected to sewers	No
Improved sanitation facilities connected to septic tanks	No
Improved pit latrines or other on-site improved facilities	Yes
Unimproved sanitation facilities	Yes
No sanitation facility (open defection)	No
Improved sanitation facilities which are shared (limited sanitation services)	2 toilets for 65
	peoples
Improved sanitation facilities which are not shared (basic sanitation services)	Shared toilets and bathroom

Sewer connections where wastes research treatment plants available and are	No
treated	
On site sanitation facilities where wastes research treatment plants and are	No
treated	
On –site sanitation facilities where wastes are disposed of in situ	Connected with main drainage system
	of town
Safely managed sanitation services	No

The dwellers use two shared slab toilets and one common space there for bathing that are surrounded by tin and cloth. 65 people including male, female and children of 13 families have shared this sanitary system which is totally insufficient and unhygienic. Women face troubles during menstruation lack of privacy which violets the rule of good menstrual hygiene practices and JMP defined MHM. Women find scope to change or wash the menstrual cloth when there is no male person stays in the settlement at day time. Woman's privacy is totally ignored and hampered in this informal settlement. There is no separate drainage system in this slum. Toilets and bathroom are constructed in the back portion of the houses because of the connection with the main drainage system of Khulna town. According to the drainage accessibilities toilets are narrow, and uncomfortable because of lack of natural ventilation.

Table 1.3: Hygiene facilities of the selected settlement

Indicator	Informal Settlement: Mujgonni Uttarpara
A hand washing facility on premises	Individual arrangement
A hand washing facility on premises with soap and	Yes
water available (basic hand washing facility)	
A hand washing facility on premises lacking soap	No
and /or water (limited hand washing facility	

In this settlement hygiene is managed in individual level. Very few women use hot water, soap in maintaining hygiene during menstruation. Maximum women use salty water of tube well for cleaning during menstrual period and it is harmful for health or not might be another issue of research.

Fish bone analysis for identifying the existing practices and factors behind the practices and unfocused indicator which impacts on menstrual hygiene practices in Mujgonni informal Settlement:



unfocused indicator which impacts on menstrual hygiene practices

Figure: Fish bone analysis (Akram, 2020)

Use of menstrual materials during menstruation:

In the studied area, almost all people belong to the lower incoming group. Thus the hygiene management system of this area is not satisfactory at all. There are only two toilets and one bathroom for total 13 households which is not adequate at all. Since the income of the people of this area is limited and the socioeconomic condition is poor, females of this area lack enough opportunities to manage their menstrual period in a proper hygienic way. Most of the females especially the middle aged females use clothes during menstrual period as menstruation material.

The young girls especially the school going young girls prefer pads to clothes because using clothes at school hour is very much loathsome for them. Though some females of this area have the sense that using clothes as menstrual material may cause infection, they use it because they cannot afford the cost of sanitary pads. Those who use clothes as a menstrual material reuse the same clothes for several months. They wash the clothes secretly and let them dry in a dark corner of their room so that others especially the male members of the family or community may not see the clothes. This practice of these females is unhygienic and cause serious negative consequences to their health.

Factors affecting unhygienic menstrual management by the women of informal settlement:

Various factors work behind the unhygienic practices of females in the informal settlement. Some of them are as follows:

Economic condition:

As the economic condition of these households is not fair enough, they have to compromise with many needs. The cost of sanitary pads is beyond the reach of these females. Thus, they are bound to use old clothes as their menstrual material.

Cultural practice:

Using clothes as menstrual management is a cultural practice for the females of this area. The middle aged people have acquired the knowledge of using clothes as menstrual material from their mothers and thus they practice it and also try to convince their daughters to practice it. Thus it has become an essential part of the cultural practice of the females of any informal settlement. Lack of education and adequate knowledge about menstrual hygiene management practice helps to capture the practice of using clothes from one generation to another. Moreover, women who are using clothes as menstrual material for a long time are habituated to use it and are less likely to change this habit.

Norms and values:

There are norms and values existed among these females that menstruation is a secret issue of female and it should not come to the knowledge of males. Thus, they try to hide it and to hide their menstrual clothes from the males, they let the clothes dry in the dark corner of their room.

Superstition:

Some of them especially the middle aged and old aged females believe that throwing menstrual waste like pads is harmful. The supernatural power may harm them if they smell the blood of menstruation.

Common myths and taboos about menstruation in the study area: identified from the study area

- Males should not know about the menstruation of females.
- Menstruation is a sign of impurity of female.
- Females should take bath early in the morning before doing any household during menstruation.
- Females should avoid eating protein especially beef during menstruation.
- If the menstrual blood is smelled by rats or other animals, it will adversely affect the fertility of women.
- Supernatural powers will harm if they smell the blood of menstruation pain in abdomen during menstruation is caused by supernatural powers.

Spatiality which impacts on menstrual hygiene practices at informal Settlement:

Same girl uses cloths during menstruation at home due to lack of economic solvency. At home she uses this cloth several times after washing. But when she go to school she is bound to change her practice. Because school is formal place. There she is bit afraid and feel ashamed if any blood spot marked in her cloth and thus for safety, comfort and disposal facility again and again she prefer to use sanitary commercial pad. Another challenge is the cloths that are used by most women to manage their bleeding. These cloths are often reused and washed with dirty water. They often hide their cloths and don't dry them in the sun to prevent bacteria growth, because men are not allowed to see these cloths. Due to lack of education, superstitions make different rigidity in informal settlement. Some of whom do not use soap or an improved water source for washing and rinsing and many dry cloth in hiding. Women use old cloths for several menstrual cycle without proper cleaning, drying and laundering. Lack of natural ventilation, some dark, hidden and damp space of household of this settlement have been created that help girls and women to dry their menstrual reusable cloth in unhygienic way which is almost invisible in formal space.

Findings:

The important learnings of the study have been articulated in the following:

- Menstrual hygiene management system is not satisfactory in informal settlement.
- Privacy is ignored during cleaning body and washing menstrual cloth in informal settlement due to crowed space and shared toilet and lack of absence of male in living space.
- Aged women prefer to use cloths because of staying home, lived experiences, lack of facing feminine health hazard in their life span but for mother preference school going girls use commercial sanitary napkin which is not cost effective.
- School is a formal place and girls have no scope to change cloth, wash or dump menstrual cloth. It will be shameful for her.
- Culturally girls and women are socialized that menstruation is a forbidden issue and male persons of the family are restricted to notify it. And thus women and girls who stay at home make dark space in their settlement and at home where male will not go for drying menstrual cloth. This practice is only possible where natural ventilation is seized.
- In informal settlement low incoming and uneducated persons live and superstitions makes rigidity in their live in one sense which is not visible in formal one.
- The physical settings and space of informal settlement are liable to retain the unhygienic menstrual practices.

Conclusion:

From this study it is found that the females living in informal settlement are not conscious about their menstrual hygiene management practice. Their norms, beliefs, lack of adequate knowledge as well as their poor income resist them to get access to the safe menstrual materials like sanitary pads. These unhygienic practices have an adverse effect on their reproductive health. Moreover, they consider their hygiene management practices are generally overlooked by the male members of their family. Besides, the physical setting of informal settlement support them to unhygienic practice of menstrual period which is almost unfocused in existing literature.

We cannot neither think of changing the socioeconomic condition of the people living in informal settlement overnight nor can change their menstrual hygiene management practices. As the study evident most of the women use clothes as menstrual materials, and clean it in an unhygienic way, we can try to make them understood of cleaning it in a proper way. If they dry their clothes in the sun ray, it will be hygienic. Since, we cannot provide separate toilet or bathrooms to the female during menstruation, but we can manage a separate chamber in their existing toilets. The roof of the toilets or house can be designed in such a way that women can dry their menstrual clothes in the sun. In the same way, the design of the rooms can be changed by arranging the secret place where women usually dry their clothes. It should be designed in such a way that sun ray may reach there. Since, we cannot change the practice immediately, we should focus on managing these practices in a hygienic technique and how space helps them to turn unhygienic practice into hygienic way as well. In conclusion it is said, space is very vital mechanism to change human behavior. Since our land is limit and it is quiet impossible to provide formal space for everyone. The result of this study has focused how space can impact on women and girls' menstrual hygiene practices and some space related suggestions can reshape the physical structure of informal settlement to solve the problem of unhygienic practice during menstruation in existing settings of informal settlement.

References:

- T. T. (2014). State of the Environment of Slum Area: A case study on Khora Slum, Khulna. *Environmental Science and Natural Resource*, 1-10.
- B.K.Mondal, M. A. (2017). Practice and effects of Menstrual Hygiene management in rural Bangladsh . *40th WEDC International Conferance Loughborough*, (pp. 1-6). UK .
- Buttenheim, A. M. (2009). The sanitation environment in urban slums: implications for child health. *HHS Author Manuscript*.
- child, U. f. (2019). Guide To Menstrual Hygiene Materials . Unicef .
- M. F. (2018). Menstrual Hygiene Management and Waste Disposal in Low and Middle Income Countries- A review of the literature. *International Journal of Environmental Research* and Public Health, 3-20.
- Ministry of Local Government, R. D. (2014). *Bangladesh National Hygiene Baseline Survey Preliminary Report*. Dhaka: Bangladesh Government.

Organization, W. H. (2018). JMP Methodology 2017 UPdate and SDG Baselines. Unicef.

- Rankin, S. R. (2015). Suggested Indicators for MHM Programming . Plan International .
- SID (2014). *Census of Slum areas and Floating Population 2014*. Dhaka : Bangladesh Bureau of Statistis (BBS).

Sinha, K. (2011, July). Menstrual Hygiene Scheme . The Times of India .

(SSIDC), S. I. (2016). Menstrual Hygiene Management . Stockholm, Sweden : Agency SSIDC.

https://simavi.org/long-read/ritu-is-promoting-menstrual-hygiene-management-in-bangladesh/