CASE STUDY

CORRELATION BETWEEN MENSTRUAL HYGIENE PRACTICES, LITERACY, FOOD HABITS AND AGE OF MENSTRUATING WOMEN

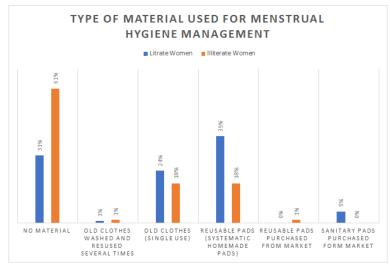*Authors:* Kaustubh Dinkar KUKDE, Amar Mani POUDEL, Suvechhya MANANDHAR

Keywords: menstrual hygiene, menstrual hygiene material, menstruation hut, food habits

This case study establishes relationship between literacy, age, food habits and the trends in menstruation hygiene management practices followed by women in two VDCs of Bajhang

Background: The communities in two VDCs (Sainpasela, Kailash) of Bajhang have similar characteristics and possess similar values and beliefs. The practice of using menstruation hut, a place constructed for menstruating women to isolate them from rest of the community and family is declining. The other practices like using a separate room within the house to isolate women is still being followed. The education and awareness have changed many practices in the communities and, the beliefs and myths are being challenged. Women have started using various materials and have changed practices to improve menstrual hygiene. This changing scenario in the communities is being showcased in this case study by analysing relationship between various factors affecting menstrual hygiene behaviour of the women.

Methodology: A survey questionnaire was used to collect data form the target VDCs. The samples were collected using random sampling method with the confidence level of 95% and confidence interval of 10. The additional 13% samples in case of drop out or some errors. In total, 186 samples of data were collected from two VDCs. The survey was carried out in May 2017 by Nepal Red Cross Society as a part of Australian Red Cross and DFAT supported project.

Literacy Vs. Use of material for menstrual Hygiene: The graph 1 illustrates the use of material for the menstrual hygiene management by literate and illiterate women. The use of material for MHM has been classified into five categories viz.
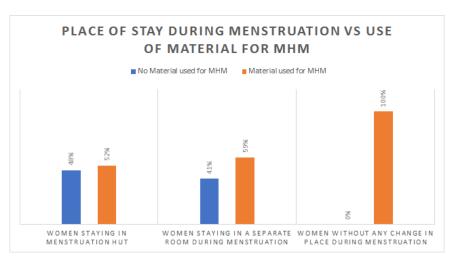
1. No material- in this category women are not using any material.
2. Old clothes reused- old clothes are washed and reused several times.
3. Old cloth single use- Old clothes used only once and then disposed-off.
4. Homemade reusable pads
5. Reusable pads purchased from market.
6. Sanitary pads purchased from market. Each pad is used only once.

Graph 1: Materials used by the literate and illiterate women for the menstrual hygiene management.

Overall, most of the illiterate do not use any material for MHM while most of the literate use homemade reusable pads. Reusable pads purchased from market is the least popular material-use-practice amongst the women. Old clothes and reusable homemade pad are the two popular materials amongst the literate and illiterate women.

Material use for MHM Vs. Place of stay during menstruation: The graph 2 shows that the behaviour of not using any type of material for MHM declines amongst the women as their mobility and acceptance during menstruation period increases which is indicated by the place where they stay as opposed by the increase in use of material by women for MHM as their mobility and acceptance increases which indicates increasing awareness amongst the women for the MHM.

Graph 2: Relationship between behaviour of women to use material or not for MHM and the shelter practice of women during menstruation.

Distribution of the practices of women to use type of material Vs. frequency of replacement of material during the day: The heat diagram shows the distribution of behaviours of the number of women in using the various types of material and frequency of replacing the material during the day. The most rampant behaviour identified is the use of homemade reusable pads replaced twice a day. The two second ranked behaviours based on the distribution of the practices are the use of Old clothes and use of homemade reusable pads which are replaced just once in a day while the

Type of material used for menstrual hygiene	Once	Twice	Thrice	Quarce	More than quarce
Old clothes resusable	1	1	0	0	0
Old clothes	21	18	1	0	0
Reusable pads (Systematic Homemade pads)	21	31	4	2	0
Reusable pads purchased from market	1	0	0	0	0
Sanitary pads purchased form market	1	2	1	1	1

Diagram 1: Distribution of practices of women to use a type of material and frequency to replace it during the day.

third ranked behaviour is use of old clothes which are changed twice in a day. Overall, most of the women practices use of old clothes or homemade reusable pads and replaces the material once or twice during the day.

Risk analysis of the behaviour of women: In order to analyse the risk of the behaviour of women in use of material for MHM and the frequency of replacing the materials are ranked on Critical to Very Low risk scale. The interaction of the two risk scales viz for material and frequency of material

replacement have given 15 Risk levels. Table 1 below shows top five risks and corresponding number of women practicing the behaviour. The risks are ranked as Risk 1 as the highest risk while Risk 15 as the lowest risk. 87.85% (94 out of 107) women fall under top five risks levels. Therefore, any intervention in the given communities should aim to change behaviours so that they move towards risk 15. The best possible lower risk level and the corresponding behaviour could be determined after taking into considerations the factors such as, reusable material cleaning practices, price of the material, material's absorption and adsorption properties, etc.

Assumption: Weightage of variables viz critical, High, Moderate, Low and Very Low risks are assumed to be same on the two risk scales used for material and the frequency of pad replacement in the risk heat diagram.
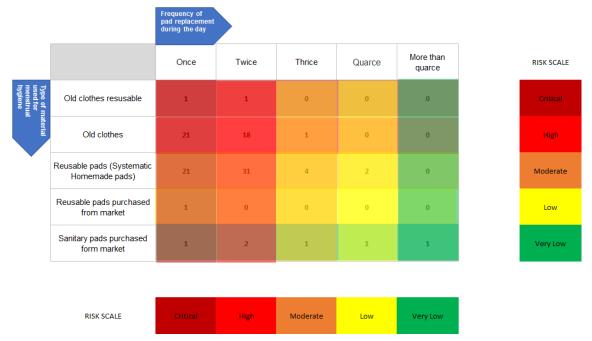
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RISK SCALE: Critical, High, Moderate, Low, Very Low

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Diagram 2: Heat diagram mapping the risky behaviours and distribution of the behaviours of women surveyed against the stated risks.

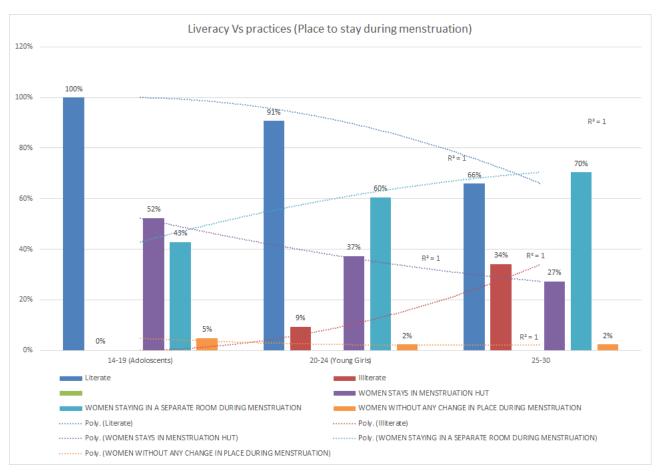| Risk 1-BB	Risk 2-BR	Risk 3-RR	Risk 4-BO	Risk 5-RO
1	22	18	21	32

Table 1: Distribution of the behaviours of the women survey against the top 5 risks identified.

New generation behaviours and practices:

The behaviour of a person depends on the education, knowledge and understanding of that individual but also likely to be influenced by family members, relatives and neighbours. When the data about the new generation i.e. women between the age of 14 to 30 was analysed interesting trends were found.
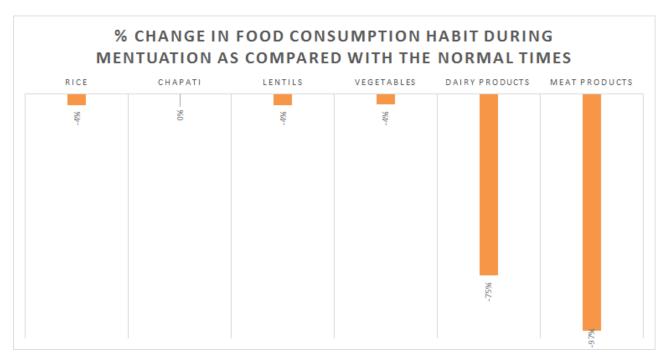
Refer to the Graph 3, the R^2 value of the trendlines is 1 which shows the trendline model is a good fit. The literacy of women is showing the exponential increase from the age group of 25-30 to age group of 14-19 years as opposed by the exponential decrease in the use of menstruation hut from 14-19 years age group to 25-30 years of age group. The practice/behaviour of staying in a room within the house during menstruation is on increase from 14-19 years age group to 25-30 year age group.

The interpretation of above trend indicates that adolescent girls are practicing use of menstrual hut which might be due to the pressure from the family members. Considering most of the girls are married upto the age of 20 years, it shows that after marriage, the use of menstruation hut by young girls is declining. Young girls are increasingly practicing isolation within the house than staying in menstruation hut. They might have been empowered by their education and the say that they have in house where they got married. The new uprising trend can also be seen in the graph 3, where mobility and acceptance of menstruating women is increasing, and they can live normal life during the menstruation period.

Graph 3: Literacy and the behaviour of women (place of stay during menstruation) between the age 14 to 30

Change in food eating habits during the menstruation period: Graph 4 shows percentage change in the food habits of women during menstruation. Most women avoid consumption of meat products during the menstruation which is followed by percentage of women avoiding consumption of dairy products. Women do not give up their habit of eating chapati during menstruation while there is a reduction by 4% each in rice, lentils and vegetables eating practice during menstruation period.

% CHANGE IN FOOD CONSUMPTION HABIT DURING MENTUATION AS COMPARED WITH THE NORMAL TIMES

RICE	CHAPATI	LENTILS	VEGETABLES	DAIRY PRODUCTS	MEAT PRODUCTS
-4%	0%	-4%	-4%	-75%	-97%

Graph 4: Percentage change in the food eating habits of menstruating women as compared to the normal times

This case study has portrayed the changing scenario of the menstrual hygiene management in remote communities of Nepal. It has also established relationship between behaviour of women in managing menstrual hygiene with various factors such as age, literacy, use of material for the menstrual hygiene, frequency of change of material, the place of stay during menstruation and food habits.