

PREFERRED MENSTRUAL ABSORBENTS, AWARENESS AND HYGIENE PRACTICES DURING MENSURATION AMONGST WOMEN IN CHENNAI, INDIA

Dr. Afrose Fathima Farid

Abstract— Mensuration is a part of the reproductive cycle of women. India is said to have approximately 355 million menstruating women. The female reproductive health is said to be poorly understood and much neglected in India due to taboos, myths and beliefs associated with it. Poor hygiene leads to Reproductive Tract Infection (RTI), a silent epidemic that devastates the life of millions of women. Past studies quote that 88% of the Indian population do not have access to proper sanitary pads. This survey study was undertaken to assess their awareness about hygienic practices and the practiced menstrual hygiene and the preferred menstrual absorbent among the women of Chennai, Tamil Nadu India. It was found that, almost all the women, in urban Chennai used sanitary pads. The type of sanitary pad, its cost, frequency of changing the pad in a day, the hygiene practiced and the awareness about RTI significantly differed based on the family monthly income and their educational level.

Index Terms— Health, hygiene, infection, mensuration, women.

I. INTRODUCTION

Mensuration is a phenomenon unique to the woman [1]. Mensuration is a natural cyclic phenomenon, which signifies a healthy individual. It is supposed to be invisible and silent and sometimes the women too are supposed to be invisible and silent due to taboos, myths and beliefs. Reproductive Tract Infection (RTI), a silent epidemic that devastates millions of women is closely interrelated to their poor menstrual hygiene [2]. According to Dasra [3] 88% of the Indian menstruating women do not have access to proper

sanitary pads and that, this has a direct bearing on their health.

II. REVIEW OF LITERATURE

Historically women and girls have used wide variety of products to absorb menstrual flow with implications of disposal both culturally and environmentally. These include mud, ashes, straws, cow dung, leaves, sea sponges, corncobs, wood ash, cotton wool, tissue paper and strips of clothes to absorb the menstrual flow [4]. The first modern disposal pads were produced in 1890's and menstrual tampons in 1920's. Since, their introduction their usage has continued to raise in both high and low income countries. Majority of the Indian women approximately 75% still use cloth and rags to absorb the flow. The percentage usage of cloth and sanitary napkins varies from place to place within India based on many factors such as awareness, finance, availability and social norms [5].

While a majority of the women employ clothes and rags only 12 % of the Indian women use designated menstrual hygiene products like sanitary pads, tampons. An average woman is expected to use about 125 – 150 kg of disposable products over her lifetime. Amounting to about 433 million such products being discarded every month in India [6].

According to previous studies among the respondents who used cloth as an absorbent revealed that very few used new cloth for every cycle and that majority of them reused the same clothe every time, some findings even revealed that sometimes they shared that cloth with others. Such clothes are unclean and lead to increased chances of RTI. Studies revealed that cloth was used due to lack of awareness, low cost and ease of availability [2,5,7,8,9].

The frequency of the change of the pads when studied revealed that most of the school going girls never changed their pads due to poor facilities provided at school. The use of soiled pads for a long period of time makes them prone to more RTI infections [10].

Women and girls of reproductive age need access to clean and soft absorbent sanitary products, which in the long run protect their health. The hygienic menstrual practice is not just about health but human rights of every menstruating

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Dr. Afrose Fathima Farid, Department of Post Graduate Studies and Research in Home Science, Justice Basheer Ahmed Sayeed College for Women., Chennai, India.

female [11]. Recognizing this Government of India under National Rural Health Mission (NRHM), self help groups and some NGO's like Aakar Innovations and Goonj have been developing solutions to provide affordable sanitary pads [6].

While data about the menstrual hygiene of women from states such as Rajasthan and Andhra Pradesh is widely available, there is a paucity of data regarding the status and awareness level of women living in Chennai, Tamil Nadu, India.

III. OBJECTIVE OF THE STUDY

This research study on menstrual absorbent was undertaken to understand the awareness status, hygiene, preferences and practices among the women of Chennai city.

IV. METHODOLOGY OF RESEARCH

This study is based on empirical research conducted with the aid of a structured questionnaire. The questionnaire was administered online and in person to women living in Chennai, irrespective of caste, age, belief, educational background and income.

The questionnaire was constructed using Google Forms; the questions were framed to understand the background of the respondents and to study their awareness and practices in connection with mensuration. 83 respondents undertook the survey, which was complete, with no missing answers.

V. RESULTS AND DISCUSSIONS

The background details of the samples are tabulated in Table I, which clearly shows a heterogeneous mix of samples. All the 83 respondents were Indian women residing in different parts of Chennai, Tamil Nadu, India. From the table it can be understood that majority of the respondents were menstruating women who attained menarche between 9

From the Figure 1 it can be seen that majority of the respondents 81 (97.6%) used sanitary pads irrespective of their age, income or employment status. Cloth and disposable panties were used in addition to pad by few. Only 2 respondents used tampons alone and none of them used cups. The figure regarding the use of sanitary pad contradicts the data available in many other Indian studies perhaps due to the difference in the level of literacy and per capita income of an average individual living in rural and Urban City. Upon chi square analysis it was found that there was significant influence on the choice of the absorbent material based on the age and educational level of the respondents ($p < 0.01$).

Fig 1 - Types of Menstrual Absorbent used by the Respondents

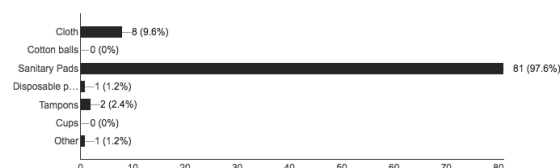


Table 2 - Preferred Absorbent Brand among respondents

Brand Preferred	Frequency	in Percentage
Whisper	45	54%
Stayfree	20	24%
Stayfree / Whisper	5	6%
Sofy	4	5%
Always	4	5%
Pink anee	1	1%
Kotex	1	1%
Belle	1	1%
Ob Tampon	1	1%
Old Cloth	1	1%
Total	83	100%

With regards to the brands preferred (Table 2) Whisper was preferred by majority of the respondents (54%), followed by Stayfree (24%), and 6% of the respondents used both Whisper and Stayfree. Both Whisper and Stayfree are

Table 1 - Background Details of the Respondents

Variable	Respondents Status					N=83
Age in Years	17 - 23	24 - 34	35 - 44	45 and more		
Percentage Frequency	36.1 %	22.9 %	37.3 %	3.6 %		
Education	Illiterate	Below 10 th Standard	10 th to 12 th Standard	Diploma	Graduate (ing) and above	
Percentage Frequency	2.4 %	20.5 %	3.6 %	1.2 %	13.3%	
Employment Status	Employed	Not-employed			Studying	
Percentage Frequency	49.4 %	16.9 %			33.7 %	
Family Size	4 or Less	5 - 6		7 & More		
Percentage Frequency	2.4 %	10.8 %		24.1 %		
Family Monthly Income	Below 5,000	5,001 – 10,000	10,001 – 25,000	25,001 – 50,000	50,001 and above	
Percentage Frequency	6.0 %	21.7 %	14.5 %	18.1 %	39.8 %	
Menarche at age	10 years and below	10 -12 years	12 – 13 years	14 years and above		
Percentage Frequency	4.8 %	28.9 %	47 %	19.3 %		
Marital Status	Married			Single		
Percentage Frequency	56.6 %			43.4 %		
Mensuration Status	Have Regular Mensuration		Have irregular Mensuration		Have no mensuration	
Percentage Frequency	75 %		22 %		4 %	

years to 19 years.

Type of Absorbents used

commercially available with many features and wide cost range. On Chi square analysis it was found that there was

high significant difference ($p < 0.01$) in the amount of money spent on sanitary pads based on the family income. (Table 3)

The place of purchase of the menstrual absorbent is tabulated in Table 3. On Chi squared analysis it was inferred

$p < 0.01$. It can be observed from the table that majority of the respondents irrespective of income, marital status, education and employment status preferred to wear regular clothes in darker shades, perhaps to camouflage in case of some

Variable	Respondents Status N = 83							
Cost of Absorbent in Rs.	Below 50 Rs.	50 to 300 Rs.	301 to 800 Rs.	Below 1500 Rs.	No idea	Other		
Frequency in percentage	23%	57%	4%	0%	14%	2%		
Place of Purchase	No Idea	Small Shops	Departmental Stores		Chemist			
Frequency in percentage	1 (1.2%)	27 (32.9%)	49 (59.8%)		30 (36.6%)			
Clothes preferred during menses	Regular wear	Longer Tops	Jeans	Dark Coloured Clothes	Cotton Clothes	Synthetic clothes	Form Fitting & Short Clothes	Others
Frequency in percentage	49 (59%)	9 (10.8%)	3 (3.6%)	41 (49.4)	20 (24.1)	2 (2.4 %)	1 (1.2%)	2 (2.4%)
Consult Dr. in case of problem	Yes				No			
Frequency in percentage	16 (19.3%)				67 (80.7%)			
Aware about RTI	Yes				No			
Frequency in percentage	44.6				55.4			
Tampons Awareness	Used It			Heard but never used		Never heard		
Frequency in percentage	4 (5%)			35 (42%)		44 (53%)		
Cups Awareness	Used It			Heard but never used		Never heard		
Frequency in percentage	0 (0%)			16 (19%)		67 (81%)		
Disposal method	Wash & reuse	Wrap & Discard	Flush it off	Just throw	Bury it	Burn it	Other	
Frequency in percentage	2 (2.4 %)	75 (90.4)	1 (1.2%)	3 (3.6 %)	1 (1.2%)	3 (3.6%)	4 (4.8%)	
Frequency of absorbent changing in hours	Every 3hrs or less	Every 4 – 5 hrs.	Every 6 – 8 hrs.	Every 8 -12 hrs.	Once in 12 – 18 hrs.	Once in a day		
Frequency in percentage	7.2%	43.4 %	20.5 %	9.6%	18.1 %	1.2 %		
Hygienic Practices	Low hygiene	Regular hygiene	Clean	Very Clean	Excessively clean			
Frequency in percentage	(12%)10	9 (10.8%)	19 (22.9%)	29 (34.9%)	16 (19.3%)			
Use of Hygiene Products	Never knew	Rarely use	use sometimes	Use frequently	Regularly use			
Frequency in percentage	20 (24.1%)	3 (3.6%)	18 (21.7%)	26 (31.3%)	16 (19.3%)			

that the place of purchase of the sanitary pads differed significantly based on the monthly family income with

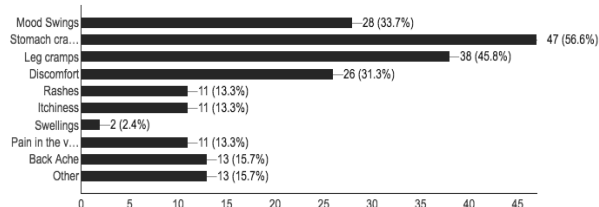
unexpected spotting.

Table 3 – Practices and Awareness of the Respondents in Percentage

Problems Associated with Menstruation

From Figure 2 and Table 3 it can be inferred that all the respondents experienced pain or discomfort or mood swings during their menses, but only 19.3% of them had consulted a Doctor for it. The incidence of reproductive tract infection was low and only 7 respondents had been affected, this perhaps can be attributed to the use of hygienic sanitary pad.

Figure 2 - Problems Associated with Menstruation



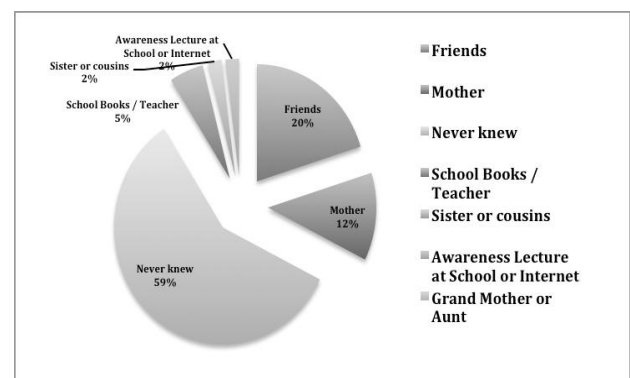
Awareness

Awareness about menses before the respondent's attained menarche and source of their information is presented in Figure 3. The pie clearly shows that 59% never knew about menarche or menstruation till they attained menarche. The most popular source of information was from friends who had perhaps attained menarche followed by their mother. Schoolbooks, teachers and awareness lectures have brought about low level of awareness only. It was inferred that respondents from smaller families and higher monthly

family income were significantly aware about menstruation before they attained menarche with $p < 0.01$.

With regards to reproductive tract infection (RTI) respondents from higher monthly family income were significantly aware ($p < 0.01$). Similarly significant trend was noticed amongst the respondents with regards to their awareness and use of menstrual products such as tampon and cups ($p < 0.01$) based on their educational level and income.

Figure 3 – Source of Awareness About Menstruation Before Attaining Menarche



Hygiene and cleanliness practices during menses

Data with regards to the frequency of changing the absorbent material in a day, the use of hygiene products during menses and the hygiene level during menstruation are tabulated in Table 3. Significant trend was noticed with regards to all the three based on the family income and the respondents educational level on chi square analysis, the value of $p < 0.01$.

Disposal of Soiled Pads

It was found that 90.4% of the respondents wrapped the soiled pads and threw it into dustbins. Only 3.6% and 1.2 % burnt it or buried it.

Preferences amongst the respondents

It was noticed that preference in terms of sanitary pads with dry cover, gel absorbent, wings, antibacterial layer, fragrance and extra long size differed with the monthly family income level of the respondents. The higher the family income the more importance they gave for these features. It was also noticed that all the respondents irrespective of age, education and family income preferred to rest on these days to food or any other physical or emotional comfort.

Conclusion

It can be concluded that sanitary pad is preferred and is being used by most of the urban dwellers especially in Chennai, Tamil Nadu, India. The cost of the purchased pad and the place of purchase differ with the family income level. Awareness with regards to menses prior to menarche, about the availability of other menstrual product especially tampons and about the reproductive tract infection is better among the higher income group and those with higher education. Hygiene and hygiene products usage was significantly low with the lower income group and those with lower education. It was also noticed that almost all the respondents suffered some kind of discomfort or pain during menses but rarely sought medical attention for it.

It can be concluded that literacy creates awareness and that brings about better livelihood and healthier practices in the society and the individual.

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Author :



Dr. AFROSE FATHIMA FARID is an Assistant Professor, in the Department of Post Graduate Studies and Research in Home Science – Textile Science and Fashion Designing, Justice Basheer Ahmed Sayeed College for Women, Chennai, Tamil Nadu, India.

She completed her B.Sc. in Home Science in the year 1998, M.Sc. and M.Phil. in Home Science – Textiles and Clothing in the year 2002 and 2003 respectively from Justice Basheer Ahmed Sayeed College for Women, Chennai, under the University of Madras. She completed her Ph.D. in Textiles and Clothing in the year 2009 from the same college under UGC - JRF & SRF Fellowship.

She has 8 years of academic experience, including her tenure at National Institute of Fashion Designing (NIFT) as an Associate Professor. She has five research publications in textiles and clothing in reputed Research Journals. She has presented papers in many National and International Conferences.

She is a part of the Editorial Panel for The Journal of Research Studies in Home Science, Justice Basheer Ahmed Sayeed College for Women and REVIEWER for many national and international textile journals including Textile Research Journal.

As a member of a group called Mother India Crochet Queen, contributed and achieved GUINNESS Record for the worlds largest crochet blanket measuring 11148 sq.mt. on 31st January 2016. She as a coordinator organized for Justice Basheer Ahmed Sayeed College for Women to enter the LIMCA book of INDIAN Records in 2015.

Dr. Afrose Farid guides M.Sc. and M.Phil. students with their research dissertations.