

EFFECT OF HEALTHCARE COMMUNICATION THROUGH INFORMATION TECHNOLOGY ENABLED EDUCATION ON MENSTRUAL HYGIENE MANAGEMENT IN ADOLESCENT GIRLS AT ALANDI DISTRICT PUNE

¹Neelam Prakash Redekar, ²RavindraKshirsagar

¹Ph.D Scholar at JJTU University Rajasthan, ², ResearchCoordinator, Dept. of Zoology, Modern College of Arts, Science and Commerce

¹Department of Health Sciences,

¹Symbiosis Institute of Health Sciences, Pune, India

Abstract :

In present research, attention is given to impart effective knowledge through information technology. Menstrual hygiene management (MHM) is a problem for adolescent girls in developing countries, particularly when attending school. Poor water, sanitation and hygiene facilities in schools, inadequate puberty education and lack of hygienic MHM items (absorbents) cause girls to experience menstruation as shameful and uncomfortable. The women should be educated about the significance of menstruation, selection of a sanitary menstrual absorbent and its proper disposal. Differing approaches to menstrual hygiene management have been associated with a wide range of health and psychosocial outcomes in adolescents of lower economic settings. This study aims to find the Knowledge, Attitude and Practices regarding menstrual hygiene in adolescent girls and bring about a positive effect through healthcare communication by means of information technology enabled education towards better menstrual care. A structured interview was conducted among adolescent girls in Alandi visiting an NGO, who were enrolled in the study having given a consent form. An intervention-based study was conducted on adolescent girls encompassing pre and post audiovisual healthcare communication education. After a week, an interview was again conducted. Data was collected pre and post interview and analyzed by SPSS version 23.0 Software. It was observed that the intervention did bring about a positive change in the attitude and knowledge of menstrual hygiene in adolescent girls at Alandi. Findings reveal that structured education is an effective audio-visual communication method in educating adolescent girls for better Menstrual Hygiene Management. Going further an E-portal giving information about menstrual hygiene and clearing queries of rural women would suffice their need and cater to individual issues with utmost confidentiality.

KEYWORDS:

Menstrual hygiene, adolescent girls.

I. INTRODUCTION

INTRODUCTION:

Adolescents in India represent almost one-third of the total country's population.^[5] The onset of menstruation is an important physiological change in adolescent girls which is regarded as phase of unsettled growth when large number of physical and psychological changes occur. Despite the fact that menstruation is a normal physiological process, it is not often discussed openly especially in the rural areas. The menstrual cycle is a natural phenomenon that occurs throughout the reproductive life of every female.^[4] The subject of menstruation and puberty hygiene is not discussed at home as well as at school in most parts of the country especially in the rural areas. This is particularly observed in more traditional and poorly educated environment mainly due to some cultural restrictions which prevent the flow of information to the youngsters. The contradictory confluence of traditional culture and robust influence on the restriction of discussing sex education and related issues with youngsters and their families in remote areas aggravate the situation further.^[1] While the anatomy and physiology of menstruation are taught in schools, the hygiene management of menstruation has often been overlooked.^[3] Myths, superstitious beliefs, and cultural taboos substitute for the information in the growing child.^[1] Menstrual education is a vital aspect of health education. The study of the menstrual practices of adolescent girls shows health issues that affect their reproductive life and provides the basis for framing health education strategies relevant for the menstrual cycle in reproductive life. Recent global concern for menstrual hygiene management (MHM), organized through work to improve WASH (Water, Sanitation and Hygiene) in schools, has focused on the need for raising awareness to make safe and effective MHM absorbents available, and to improve the rural school WASH environment.^[8] As a result of the taboos, communication between girls and teachers about healthy menstrual practices is absent.^[2]

MATERIALS AND METHODS

Research design

An intervention based, cross-sectional, community driven study was undertaken in schools in Alandi. The study was conducted over a period of two months. An interview based research was conducted to collect the information on menstrual health management and healthcare conducted for adolescent girls.

Outcomes were measured and examined on aspects like awareness of menarche before the start of menstruation, and sources of the awareness; knowledge of source of bleeding, perception of menstruation as a normal phenomenon, information sources for menstruation,

type of absorbent used, disposal of absorbents, restrictions imposed, school absenteeism pattern during menstruation and change of absorbent in schools. **Sample size and sampling procedures**

A sample of 200 adolescent girls in the age range of between 11 and 18 years participated in the study. A questionnaire with 21 items, contained also items on demographic characteristics of the respondents was designed by the researcher and was initially pilot tested on 200 students. The concepts of menstruation knowledge and health care behaviours regarding menstruation were used in evolving the questionnaire.

Procedure

The participants in the chosen area completed the structured 22 items within pre-defined setting and were overseen by the researcher. Girls were asked about age of menstruation in years and months, current menstrual status and menstrual cycle length in days and whether they experience any menstrual problems and if so their severity. They were also asked to indicate whether they had sought medical advice or treatment for their menstrual problems in the last 12 months. They were also asked to indicate the materials they use as absorbent and the number of days absent from school during menstruation. Low and middle income settings were chosen as they are the settings where the lack of available resource

to maintain menstrual hygiene is highest. To reduce the social restrictions and poor menstrual cycles, educational interventions and pre-menarche training was conducted. The social outcomes of interest were social restriction and school absenteeism during the menstrual cycle. The questionnaire was prepared in English language and translated into Marathi, the regional language so that the girls who do not know the English language can answer the questionnaire with ease.

Data processing and statistical analysis

Each completed questionnaires was coded on pre-arranged coding sheet by the researcher to minimize errors. Data were cleaned and entered into an Excel sheet with statistical program. Then the data were exported to SPSS Windows version 23.0 for analysis. Ethical clearance and consent was obtained. The purpose of the study was explained to the students and written informed consent was obtained from each participant. Participants were informed of their full right to skip or ignore any question or withdraw from their participation at any stage.

RESULTS

Premenarche awareness and sources of information

From the available information, pre-menarche awareness was 20.5%. Among girls aware prior to menarche, mothers were the most frequent source of information, followed by friends. Other sources such as relatives (including sisters) and teachers were less commonly reported and there were some regional differences.

Knowledge and perception of menstruation and knowledge resources

Overall, about 69.5% of the girls knew that the uterus is the source of bleeding, and about 72% girls considered menstruation normal. Mothers were most commonly mentioned as the knowledge source in 119 studies, with half of the girls reporting her as the main source. Friends and relatives were regularly mentioned, whereas teachers, media and health workers were uncommon resources.

Types of menstrual absorbent used

The use of absorbents was strikingly different by setting, with commercial pads significantly more uncommon in rural areas, and cloths significantly more common in rural areas. 63.5% of the girls used sanitary pads while rest of them used cloths.

Restrictions

Restrictions during menstruation are common. The most frequent were restrictions in visiting places of worship, and touching religious items or praying, with no difference by setting or over time. Girls faced restrictions in cooking, household work, exercise and playing, moving in and out of the house, and attending social functions. 43.5% of the girls faced religious restrictions and 12% of the girls did not do any physical activity.

Attitudes of the participants towards menstruation

From the results obtained from the respondents 72% had positive attitude towards menstruation, they agreed that menstruation is part of a woman's life. The remaining 28% had negative attitude towards menstruation as they thought that menstruation is a curse of god on womanhood.

Table 1 :General Information about menstruation

		Number	Percentage
Age at Menarche	5 th – 6 th	15	7.5%
	7 th – 8 th	57	28.5%
	9 th -10 th	53	26.5%
	11 th -12 th	75	37.5%
Awareness about menstruation before menarche	Yes	41	20.5%
	No	159	79.5%
Source of information before menarche	Mother	97	48.5%
	Relative	0	0%
	Friend	38	19%
	Teacher	43	21.5%
Source of Information after Menarche	Mother	22	11%
	Relative	0	0%
	Friend	0	0%
	Teacher	0	0%
Restrictions during Menstruation	Religious occasions	87	43.5%
	Physical Activity	24	12%
	School absenteeism	89	44.5%
	No restrictions at all	0	0%

Table 2 :Parameters used for assessing the respondents' knowledge and practice of menstruation and menstrual hygiene

		Number	Percentage
Cause of Menstruation	Normal Physiological Process	156	72%
	Curse from god	44	28%
	Caused by a sin	0	0%
	Caused by a Disease	0	0%
From which organ does the menstrual blood come ?	Uterus	139	69.5%
	Urinary Bladder	61	30.5%
	Vagina	0	0%
	Don't know	0	0%
Which absorbent or material should be ideally used during menstruation?	Sanitary pads	137	64.5%
	Cloth Piece	63	35.5%
Material used during menstruation	Sanitary Pads	127	63.5%
	Cloth pieces	73	36.5%
Are the periods irregular or not ?	Yes	144	72%
	No	56	28%
How many times `were the sanitary pads changed?	After 3 hours	54	27.0%
	After 4 hours	3	1.5%
	After 5 hours	143	71.5%
	After 6 hours	0	0%
Medium used for cleaning genitalia area	Plain water	41	20.5%
	Lukewarm water	0	0%
	Soap and water	159	79.5%
	Antiseptics	0	0%
How is the cloth or sanitary pad washed ?	Plain water	161	80.5%
	Lukewarm water	6	0%
	Soap and water	33	16.5%
Method of Disposal	Open Dustbin	175	87.5%
	Closed dustbin	25	12.5%
	Sanitary laterine	0	0%
	Well/lake	0	0%
Reuse of Sanitary pads or cloth piece	Yes	163	81.5%
	No	15	7.5%
	Sometimes	22	11%

DISCUSSION

In this study, more than half (60.9 %) of the students had good knowledge about menstruation and menstrual hygiene. The majority (76.9 %) girls thought that it was a curse from god, whereas 10.7 % knew that menstruation was a physiological process. This difference was due to minimal communication in families about menstruation and menstrual hygiene issues. A possible explanation for this difference may be that girls discuss menstruation and its hygiene with their friends and peers openly than with their parents. The mass media play a prominent role in the dissemination of reproductive health information including than their counterparts. Adolescents who participated in this study were residing in the rural area, it follows therefore that, their cultural background and upbringing is expected to influence their menstrual knowledge and health care attitude.^[1] Almost 50% (49.3%) of study participants belonged to the age group 14 – 16 years 34.7% were between ages 11-13 while the least 16% were between age ranges of 17-19 years. Table 2 which indicates distribution of girls by mothers educational status shows that 11.3% of the study participants were from illiterate mothers. Concerning the influence of maternal educational status on materials used as absorbent majority (44 .1%) of the participants from the illiterate mothers used clothing materials as absorbent for menstruation. While 62.5% of the participants from the literate mothers used sanitary pad as absorbent for menstruation. The finding of this study indicates that majority of the girls from literate home were familiar and were using modern absorbent (sanitary pad) while those from the illiterate mothers were still using clothing materials as absorbent.^[8]Insertable menstrual products such as menstrual cups and tampons were rarely mentioned in the reviewed studies, although there are local manufacturers. Menstrual cups may be economically advantageous given that one cup can last up to 10 years; they were acceptable for schoolgirls. The low use of insertable products may be related to concerns about virginity, despite invalidation of a connection between virginity and breaking the hymen.^[4]

CONCLUSION

Girls of large age groups were included in this cross – sectional study, which provided an advantage of gaining insight as to how the perceptions and practices of girls change with time. Literacy was found as key influencing factor. The role of the mothers in imparting knowledge on menstruation was another significant factor that was observed. Due to some cultural and religion restrictions, many young girls in this country especially in the rural areas received no sufficient information regarding menstrual hygiene, causing incorrect and unhealthy practices during their menstrual period. The results of this study indicate a need for development of a comprehensive education programme with strong puberty education components. The mothers of young girls should be educated with appropriate and menstrual health hygiene, and be empowered with necessary skills to communicate with and transfer the information to their children. Before bringing any change in menstrual practices, the girls should be educated about the facts of menstruation, physiological implications, about the significance of menstruation and development of secondary sexual characteristics, and above all, about proper hygienic practices with selection of disposable sanitary menstrual absorbent. This can be achieved through educational television programmes, school nurses/health personnel,

compulsory sex education in school curriculum and knowledgeable parents, so that her received education would indirectly wipe away the age-old wrong ideas and make her feel free to discuss menstrual matters including cleaner practices without any hesitation. Raising awareness regarding menstruation and hygienic practices has remained largely a neglected area in terms of research, despite its increasing popularity amongst public health organisations. With this review we hope we have provided some basis for those planning future research in this area.

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