

Study to Assess the Knowledge Regarding Menstrual Hygiene among Adolescent Girls of Nursing Students at Selected Nursing Colleges of Bagalkot

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Abstract: Adolescence refers to the transitional phase of growth and development between childhood and adulthood. It is the period when a child develops into an adult, typically extending mainly over the teenagers and terminating legally when the age of majority is reached. **Background:** The menstrual cycle is a recurring process in the female reproductive system that prepares the body for possible pregnancy. It typically last Menstrual hygiene is a critical aspect of the reproductive lives of all women, and understanding the awareness and behaviours of young adults is crucial for public health initiatives. The study indicates a comprehensive approach, using surveys and interviews to collect data on respondents' knowledge about menstrual hygiene, their perceptions of associated social norms, and the practices they follow during menstruation. The study focuses on college students in West Bengal, acknowledging the significance of this transitional phase in shaping lifelong behaviours. Primary findings indicate varying levels of awareness and adherence to menstrual hygiene practices among the participants. Insights into prevalent misconceptions, cultural influences, and existing hygiene habits contribute to a nuanced understanding of the factors influencing menstrual health in this demographic. This study aims to inform targeted educational interventions and policy recommendations to enhance menstrual hygiene practices among college students in West Bengal. By addressing gaps in knowledge and dispelling myths, the research strives to contribute to the overall well-being and empowerment of young women, fostering a supportive environment for menstrual health management in this regions between 24 and 38 days. The cycle includes four phases. **Methods:** The dates of the descriptive study were MARCH 21, 2025 to APRIL22, 2025. Using the stratified random sample procedure, 120 study participants were chosen. The research was carried out in SELECTED NURSING colleges, Bagalkot. The study involving 120 adolescent girls. Data were collected with a structured questionnaire and variables including socio demographic characteristics, knowledge of menstrual hygiene.

Keywords: Knowledge, menstrual cycle, and Adolescent girls.

1. Introduction

Menstruation is the natural bodily process of releasing blood and associated matter from the uterus through the vagina as part of the menstrual cycle. It is a physiological process that occurs throughout the reproductive years of every woman. Various mental and physical problems like premenstrual syndrome are associated with the process of menstruation. If hygiene is not maintained throughout menstruation, it can also predispose women to life threatening RTI (Reproductive Tract Infection) [1]. Both in rural and urban there has been critical issues for adolescent girls and women of all ages with various beliefs and social taboos related to menstrual hygiene. Even in advanced society, traditional practices and taboos still exists and practiced widely, as a result of which girls and women hesitate to discuss and share any problem on menstruation. On an average, any school going adolescent has to spend long hours in school and becomes even harder for the adolescent girls to clear their need with teachers at school. Adolescence is vulnerable age, both emotionally as well as physically and there is needed to understand, support and provide facilities to these girls [2].

Menstrual hygiene management should be an imperative part of healthcare. The United Nations defines adequate menstrual hygiene management as “women and adolescent

girls using a clean menstrual management material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period, using soap and water for washing the body as required, and having access to facilities to dispose of used menstrual management materials.” Particularly in poor countries, girls and women face substantial barriers to achieving adequate menstrual management.⁷

Objectives:

- To assess the knowledge regarding menstrual hygiene among adolescent girls studying in selected nursing colleges Bagalkot
- To find out association between the knowledge regarding menstrual hygiene with their selected socio demographic variables.

2. Materials and Methods

For the study, a descriptive survey design was adopted. In selected nursing college, Bagalkot, India. 120 Adolescent girls provided samples using a straightforward random approach. A conventional, Multiple-choice questionnaire was used to gather information about Knowledge of menstrual hygiene . Both descriptive and inferential statistics were employed to analyses the gathered data.

Source of data- The present study collected data from Adolescent girls.

Research Approach- The descriptive research methods are developed when the purpose of the research is to describe the knowledge of the phenomenon or to estimate the phenomenon's value to society. The main objective of this study is to evaluate the Knowledge of menstrual hygiene Among Adolescent girls Studying in selected nursing college, Bagalkot.

Research Design- All plans designed by a researcher to answer research questions or test research findings are called research design. A descriptive design means the study involved a one-time data analysis on Adolescent girls. The research design represents the population, sample size, variables, data collection tools and methods, and data analysis plan.

Variables

Dependent Variable - Knowledge about menstrual hygiene among adolescent girls.

Socio-Demographic Variables- Adolescent Girls socio demographic traits are among the socio demographic variables. Age, religion, type of family, education, have you received any information about menstrual hygiene from any where, sources of information, Family history of menstrual diseases, previous intervention related menstrual hygiene.

Setting of Study- Setting is the environment in which information is gathered. The current investigation was carried out at selected nursing colleges of Bagalkot. The convenience of the investigator and the availability of Adolescent girls were taken into consideration when choosing the study setting.

Population

Target Population- This study refers to a group of Adolescent girls in Bagalkot

Accessible Population- This study refers to girls, who are in the state of Adolescent and members of selected nursing colleges of Bagalkot, India.

Sample and Sample Size- Subjects drawn from units that make up the study's population constitute a sample. The sample size for this investigation is (n=120). Sample including Adolescent girls Studying at selected nursing colleges of Bagalkot, India.

Sample Technique- The sampling technique is the researcher's procedure to select the study samples. The sample for the present study is 120 Adolescent girls who are members of selected nursing colleges of Bagalkot, , India. The stratified sampling technique was used to select samples for the present study. The Adolescent girls were selected through stratified sampling method according to duration and who met both the in-sampling technique and the procedure that the researcher adopted in selecting the inclusion and exclusion criteria of the study.

Data Collection Tool- The methods or equipment the researcher employs to measure or observe the important variables in the research problem are known as data collection tools. The data for this study were gathered using a common Knowledge instrument.

Statistical analysis- The methodical arrangement and synthesis of research data, as well as the application of the data to test research hypotheses, constitute statistical analysis. Both descriptive and inferential statistics were used in the analysis of the data. Distributions of percentages and frequencies were used to assess the demographic data. The Adolescent had their scores evaluated using the mean and standard deviation. Adolescent girls Knowledge levels were compared to a set of chosen sociodemographic characteristics using a chi- square test.

3. Results

Description of socio- demographic characteristic of sample

- Percentage wise distribution of adolescent girls according to their age in years that out of 120 adolescent girls, highest percentage (65%) of adolescent girls are in the age of 16 and 17(55%) of adolescent girls are in the age of 18years & above.
- Percentage wise distribution of adolescent girls according to their religion shows that out 120 adolescent girls, highest percentage (88%) of adolescent girls are Hindu, (32%) of adolescent girls are Muslims, (0%) of adolescent girls are Christians and others.
- Percentage wise distribution of adolescent girls according to their year of study out 120 adolescent girls, highest percentage (45%) of adolescent girls are GNM 1st, (40%) GNM II students and (35%) BSC Ist students 35%
- Percentage wise distribution of adolescent girls according to their family monthly income of adolescent girls out 120 adolescent girls, below RS 15000 (88%) highest percentage (15%) of adolescent girl's 15000-30000 and (17%) more than 30000.

Table 1: Frequency and percentage distribution of socio-demographic variables

Socio-demographic factor	Frequency	Percentage (%)
1. Age		
a) 16-17years	65	54.16%
b) 18 and above	55	45.83%
2. Religion		
a) Hindu	108	90%
b) Christian	1	0.83%
c) Muslim	11	9.16%
d) Any other	0	0%
3. Type of family		
a) Nuclear	77	64.16%
b) Joint	43	35.83%
4. Education status		
a) GNM I	40	37.50%
b) GNMII	40	33.33%
c) BSC I	35	29.16%
5. Occupational status of father		
a) Private employee	25	20.83%

b) Govt employee	16	13.33%
c) Business	29	24.16%
d) Agriculture	50	41.66%
6. Occupational status of mother		
a) Private employee	12	10%
b) Govt employee	6	5%
c) House wife	102	85%
7. Monthly family income		
a) <15000	88	73.33%
b) 15000-30000	15	12.50%
c) >30000	17	14.66%
8. Diet		
a) Veg	5	4.16%
b) Non veg	20	16.66%
c) Mixed	95	79.16%
9. Place of residence		
a) Rural	82	68.33%
b) Urban	38	31.66%

Adolescent girls mean percentage of Knowledge score, mean and SD, show that the overall mean percentage of knowledge score was 11.6 with mean and SD of Knowledge 8.019713, which are 11.6 ± 8.019713 . (**Table-2**).

Table 2: Area-wise mean, SD, and mean percentage of Knowledge score

Area	Maximum score	Mean	SD	Mean (%)
Knowledge	1392	11.6	8.019713	58%

The results of the study on the relationship between Adolescent girls Knowledge. they chose to analyses indicate that there is a significant association between Adolescent girls Knowledge and socio demographic variables about menstrual hygiene and age ($\chi^2=1.07$; $p=0.3009$), Religion ($\chi^2=0.38$; $p=0.9443$), Education ($\chi^2=7.05$; $p=0.0295$), Occupational status of father ($\chi^2=1.25$; $p=0.741$), Occupational status of mother ($\chi^2=0.26$; $p=0.8781$), monthly family income ($\chi^2=0.3$; $p=0.8607$), diet ($\chi^2=0.17$; $p=0.9185$), type of family ($\chi^2=0.01$; $p=0.9203$) place of residence ($\chi^2=1.39$; $p=0.2384$).

Table 3: Association of Knowledge of girls with their selected socio-demographic variables.

S. No	Socio-demographic variable	Chi Square	df	P
1	Age	1.07	1	0.3009
	16-17 years			
	18 and above			
2	Religion	0.38	3	0.9443
	a) Hindu			
	b) Christian			
	c) Muslim			
3	Type of family	0.01	1	0.9203
	a) Nuclear			
	b) Joint			
4	Education status	7.05	2	0.0295
	a) GNM I			
	B) GNM II			
	C) BSc I			
5	Occupational status of father	1.25	3	0.741
	a) Private Employee			
	b) Govt Employee			
	c) Business			
	d) Agriculture			

6	Occupational status of mother	0.26	2	0.8781
	a) private employee			
	b) Govt employee			
7	Monthly family income	0.3	2	0.8607
	a) <15000			
	b) 15000-30000			
8	Diet	0.17	2	0.9185
9	Place of residence	1.39	1	0.2384

The results pertaining to the correlation between adolescent girls Practice and the chosen socio demographic variables indicate that there is a noteworthy relationship between Adolescent girls menstrual hygiene and age ($\chi^2=1.07$; $p=0.3009$), Religion ($\chi^2=0.38$; $p=0.9443$), Family monthly income ($\chi^2=0.3$; $p=0.8607$), year of Study ($\chi^2=7.05$; $p=0.0295$).

In this study association in all the socio demographic is < 10 poor knowledge, 11-20 Good knowledge. as

Age wise 16 to 17 age groups are 13 is poor knowledge, 18 and above 30 is poor knowledge and 16-17 age group 32 are good knowledge highest 18 and above 45 adolescents have good knowledge.

Religion <10 poor Hindu 33, were as Christian 00, Muslim 14, and 11-20 Good Hindu 55, Muslim 18 and others 00.

Type of family <10 Poor nuclear family 14, and joint family 35, and 11-20 Good nuclear family having good knowledge 21 is joint family has 50.

In educational status: GNM Ist 22 poor and GNMII 23 poor, Bsc 1st years 10 poor good knowledge GNM Ist 15 good knowledge and GNMII and years 25 good knowledge and Bsc 1st years 25 having good knowledge

Occupational status of father: poor Occupation status of father private 08 and good occupational status of father 17, in govt employee 0f poor 05 and good 11, in business poor 11 and good 18, in Agriculture poor 13 and good 37,

Occupational status of mother: poor occupational status of mother private 5 and govt 2, and good occupational status of mother 7, in govt employee of poor 2 and good 04, in house wife of poor 35 and good 67

4. Discussion

This study aims to measure Knowledge of menstrual Hygiene among Adolescent girls studying at selected nursing colleges of bagalkot. The discussion highlights the main findings of these study and how those findings compare with findings from similar study conducted on the subject of menstrual hygiene.

The study conducted by Bogani et al In this study, out of 60 adolescent girls participate in this study with majority of the subjects 46.7% belonged to 17 – 19 year of age, majority of the subjects 35% had post graduate level of education, majority of the subjects 61.7% were having below 40000 family income and majority of the subjects 46.7% had get knowledge from family members. The level of knowledge score in divided under the following heading of poor, average, good and excellent. 60% of subjects had good level of knowledge score, 25% had average level of knowledge score, 11.7% had excellent level of knowledge score and 3.3% had poor level of knowledge score. Mean

knowledge score of the subjects was 12.16 ± 3.076 . Minimum knowledge score was 05 and Maximum Knowledge score was 18. The level of Likert/practice score is divided under the following heading of very poor, poor, average, good and excellent. 70% of subjects had good level of practice, 21.7% had average level of practice, 6.6% had excellent level of practice, 1.7% had poor level of practice and 0% had very poor level of practice. Mean Likert scale of the subjects was 6.98 ± 1.081 .

Minimum knowledge score was 04 and Maximum Knowledge score was 10. The analysis reveals that there was significant association between knowledge and Likert score with no any demographic variables. There was no significant association between knowledge and Likert score with others demographic characteristics like age, education, family income and source of knowledge. cervical cancer can be fatal to adolescents without proper screening and vaccination. After Assessing knowledge of adolescent girls on cervical cancer gives a clear conclusion of study aims,

5. Conclusion

Menstrual hygiene is a key strategy to early detection of diseases and subsequently critical for effective treatment and cure of the disease. The findings of this study have shown significant low levels of awareness of Menstrual hygiene among adolescent in Karnataka region. This pattern may be similar to other rural communities across the region. The need to create awareness and to educate adolescent girls on importance of Menstrual hygiene as preventive measure of Menstrual hygiene and diseases is paramount.

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