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Original Research Article

Knowledge regarding menstrual hygiene among adolescent girls

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ABSTRACT

Background: Adolescence in girls has been recognized as a special period which signifies the transition from girlhood to womanhood. Menstruation is generally considered as unclean in the society. Isolation of the menstruating girls and restrictions being imposed on them in the family, have reinforced a negative attitude towards this phenomenon. And the issue of menstrual hygiene is inadequately acknowledged and has not received proper attention.
Methods: Quantitative approach with descriptive cross-sectional design was used to assess the knowledge regarding menstrual hygiene among adolescent girls. A structured knowledge questionnaire was developed focusing on menstrual hygiene. Validity was ensured in consultation with guides and experts in the field of nursing, medicine and statistics. Reliability of the tool was tested by test retest method and found to be highly reliable with a score of 0.80. The study was carried out in 2 schools of Dharan, Nepal. About 100 adolescent girls were selected by simple random sampling technique. Structured knowledge questionnaire was used to collect needed data on knowledge of adolescent girls. The data collected were tabulated and analyzed by using descriptive and inferential statistics.
Results: Maximum numbers 42 of the subjects were in the age group of 12 years, majority i.e. 81 of the subjects belonged to nuclear family, majority i.e. 39 of the subjects were in 7th standard, maximum of 72 subjects belonged to Hindu religion, majority i.e.79 had family income below 5000, majority of the subjects 35 had their first menstruation at the age of 14, 35 subjects father were self-employed, 60 subjects had their mothers as government employee , majority of the respondents, 80 had previous knowledge on menstrual hygiene. Majority of the subjects 70% had average knowledge, 25% of them had poor knowledge and only 5% had good knowledge regarding menstrual hygiene. There was a significant association of knowledge adolescent girls with demographic variables such as age at first menstruation.
Conclusions: Present study showed overall average knowledge of menstrual hygiene in adolescent girls. Formal as well as informal channels of communication need to be emphasized for the delivery of information on menstrual hygiene through organized community efforts. Institutions and organizations at community level should be strengthened for effective delivery of health and nutrition care services for overall better health of community beneficiaries.

Keywords: Adolescent girls, Knowledge, Menstrual hygiene

INTRODUCTION

Menstruation is a normal biological process and a key sign of reproductive health, yet in many cultures it is treated as something negative, shameful or dirty. The continued silence around menstruation combined with limited access to information at home and in school's results in millions of women and girls having very little knowledge about what is happening to their bodies when they menstruate and how to deal with it.[1] About 52% of the female population is of reproductive age and most of them are menstruating every month. Most them had no

access to clean and safe sanitary products, or to clean and private space in which to change menstrual cloths and pads and to wash. Menstruation is supposed to be invisible and silent, and sometimes, menstruating women and girls are supposed to be invisible and silent, too. Millions of girls and women are subject to restrictions in their daily lives simply because they are menstruating.[2]

Many myths and social norms restrict women and girls' levels of participation in society. This can make their daily lives difficult and limit their freedom. For example, in some cultures, women and girls are told that during their menstrual cycle they should not bathe (or they will become infertile), touch a cow (or it will become infertile), look in a mirror (or it will lose its brightness), or touch a plant (or it will die).[3]

Hygiene-related practices of women during menstruation are of considerable importance, as it has a health impact in terms of increased vulnerability to reproductive tract infections (RTI). The interplay of socio-economic status, menstrual hygiene practices and RTI are noticeable. Today millions of women are sufferers of RTI and its complications and often the infection is transmitted to the offspring of the pregnant mother.[4] Good hygienic practices such as the use of sanitary pads and adequate washing of the genital area are essential during menstruation. Women and girls of the reproductive age need access to clean and soft, absorbent sanitary products which can in the long run, protect their health.[5] A study from UNICEF revealed that 1 out of 3 girls in South Asia knew nothing about menstruation prior to getting it while 48% of girls in Iran and 10% of girls in India believe that menstruation is a disease.[3]

The lack of appropriate, comfortable and affordable materials for MHM, of adequate waste disposal, and of adequate toilet facilities at school made leakage and others seeing their menstrual blood a source of stress for girls. Girls avoided changing their sanitary materials at school because toilet facilities were dirty and lacked privacy. Girls preferred to suffer the discomfort of using thick cloth, restricting their movement, and using friends' toilets rather than use the school toilet.[6]

The issue of menstrual hygiene is inadequately acknowledged and has not received proper attention. Use of sanitary pads and washing the genital area are essential practices to keep the menstrual hygiene. Unhygienic menstrual practices can affect the health of the girls and there is an increased vulnerability to reproductive tract infections and pelvic inflammatory diseases and other complications.[7]

METHODS

Quantitative research approach was adopted for the study. The research design chosen for this study was descriptive cross-sectional research design. Population refers to all the adolescent girls studying in class seven, eight and nine in selected schools, Dharan, Nepal. Adolescent girls who fulfill the sampling criteria were included in the study. The sample size for the study was 100.The technique adopted for this study was simple random sampling technique.

The data was collected between 1 September to 30 September 2016 in selected schools, Dharan, Nepal. The samples of 100 adolescent girls were selected based on inclusion criteria by using simple random sampling technique. The investigator administered questionnaire to assess the knowledge regarding menstrual hygiene among adolescent girls.

Descriptions of the tool

Section I: demographic variables

The section deals with demographic data in relation to as age, religion, educational status, type of family, occupation of father, occupation of mother, family income, age at first menstruation and previous knowledge on menstrual hygiene.

Section II: structured knowledge questionnaire

This section sought information to assess the knowledge regarding menstrual hygiene among the adolescent girls. There were totally 26 items.

RESULTS

Table 1 Depicts the frequency and percentage distribution of adolescent girls according to their demographic variables. Maximum numbers 42 of the subjects were in the age group of 12 years, majority i.e. 81 of the subjects belonged to nuclear family, majority i.e. 39 of the subjects were in 7th standard, maximum of 72 subjects belonged to Hindu religion, majority i.e. 79 had family income below 5000, majority of the subjects 35 had their first menstruation at the age of 14, 35 subjects father were self-employed, 60 subjects had their mothers as government employee, majority of the respondents, 80 had previous knowledge on menstrual hygiene.

Figure 1 depicts that majority of the subjects 70% had average knowledge, 25% of them had poor knowledge and only 5% had good knowledge regarding menstrual hygiene. Table 2 describes the frequency and percentage distribution of knowledge scores and the different domains of knowledge. About different domains of knowledge, 70% of the subjects had knowledge regarding concepts of menstruation, 54% regarding importance of menstrual hygiene, only 45% regarding hygiene measures, 56% regarding nutrition and care and only 22% about menstrual hygiene management.

Table 1: Frequency and percentage distribution of adolescent girls according to their demographic variables.

Demographic variables	Categories	Frequency	Percentage
Age (years)	12	42	42
	13	27	27
	14	31	31
Type of family	Nuclear	81	81
	Joint	19	19
Educational status	7	39	39
	8	30	30
	9	31	31
Religion	Hindu	72	72
	Muslim	2	2
	Christian	23	23
	Others	2	2
Family income/ month	Below 5,000	79	79
	5001 - 10000	14	14
	10001 - 15000	6	6
	Above 15000	1	1
Age at first menstruation	12	25	25
	13	18	18
	14	35	35
	15	22	22
Occupation of father	Government employee	27	27
	Private employee	30	30
	Self-employee	35	35
	Others	8	8
Occupation of mother	Government employee	60	60
	Private employee	15	15
	Self-employee	10	10
	Housewife	15	15
Previous knowledge on menstrual hygiene	Yes	80	80
	No	20	20
N=100.			

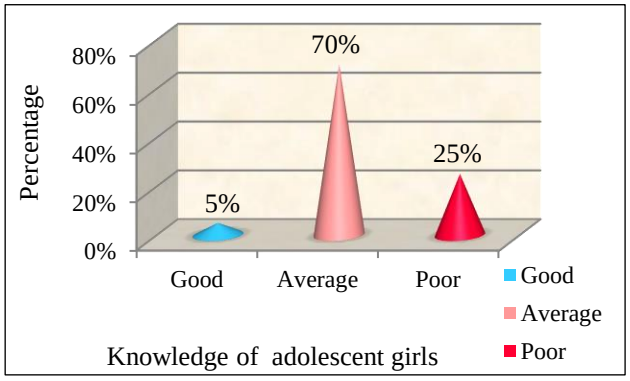

Figure 1: Distribution of adolescent girls according to their level of knowledge regarding menstrual hygiene.

Table 3 envisage the outcome of chi square analysis being carried out to bring out the association between the knowledge of adolescent girls with their demographic variables. Out of which, only age at first menstruation (chi square value= 0.001) was significant and rest of the demographic characteristics such as age, type of family, educational status, religion, family income/month, occupation of father, occupation of mother and previous knowledge on menstrual hygiene were not significant with the knowledge.

Table 2: Knowledge scores of Adolescent girls on knowledge questionnaire.

Knowledge/ domains	Maximum Score	Frequency	Percentage
Concept	3	70	70
Importance of menstrual hygiene	3	54	54
Hygiene measures	6	45	45
Nutrition and other care	4	56	56
Menstrual hygiene management	10	22	22
N=100.			

Table 3: Association of level of knowledge of adolescent girls with their demographic variables.

Demographic variables	Categories	Knowledge level			N	Test statistic χ^2	Inference
		Poor	Average	Good			
Age (years)	12	10	31	1	42	χ^2= 4.1054	NS
	13	5	21	1	27		
	14	10	18	3	31		
Type of family	Nuclear	20	57	4	81	χ^2=0.986	NS
	Joint	5	13	1	19		
Educational status	7	11	25	3	39	χ^2= 1.5127	NS
	8	7	22	1	30		
	9	7	23	1	31		
Religion	Hindu	18	51	4	73	χ^2=0.315	NS
	Christian	5	17	1	23		
	Muslim	0	2	0	2		
	Others	2	0	0	2		
Family income/ month	Below 5,000	19	56	4	79	χ^2=0.452	NS
	5001-10000	6	7	1	14		
	10001-15000	0	6	0	6		
	Above 15000	0	1	0	1		
Age at first menstruation	12	14	10	1	25	χ^2=0.001	S
	13	3	15	0	18		
	14	6	28	1	35		
	15	2	17	3	22		
Occupation of father	Government employee	5	21	1	27	χ^2=4.141	NS
	Private employee	6	22	2	30		
	Self-employee	11	23	1	35		
	Others	3	4	1	8		
Occupation of mother	Government employee	12	46	2	60	χ^2=4.2095	NS
	Private employee	6	8	1	15		
	Self-employee	3	6	1	10		
	Housewife	4	10	1	15		
Previous knowledge on menstrual hygiene	Yes	7	12	1	20	χ^2=0.507	NS
	No	18	58	4	80		

DISCUSSION

The objectives of the study were to assess the knowledge of adolescent girls regarding menstrual hygiene.

Age at menarche of the participants ranged between 12 to 15 years which is comparable to the study conducted by Deo DS and Ghattargi CH that the age of menarche in their study ranged from 12 to 17 years with the maximum number of girls between 13 and 15 years of age.9 While a study conducted by Thakre SB, Thakre S, Reddy M, Rathi N, Pathak K, Ughade S reported that the mean age at first menstruation was found to be 12.85 years whereas it was found to be 13.51±1.04 years in finding of study conducted by Dambhare DG, Wagh SV, Dudhe JY.[10,11]

Assessment of the level of knowledge regarding menstrual hygiene among adolescent girls discloses that 70% had average knowledge, 25% of them had poor knowledge and only 5% had good knowledge regarding menstrual hygiene. This finding is supported by the study conducted by Anusree PC et al which depicted that 46.7% had good knowledge and 48.3% had average knowledge. Minimum girls (5%) had poor knowledge on menstrual hygiene.

About different domains of knowledge, 70% of the subjects had knowledge regarding concepts of menstruation, 54% regarding importance of menstrual hygiene, only 45% regarding hygiene measures, 56% regarding nutrition and care and only 22% about menstrual hygiene management. The result of this study concurred with the result of the study conducted by Anusree PC et al that adolescent girls had highest mean percentage (89.28%) of knowledge in information on anatomy of female reproductive organs and menstruation.

The mean score on information on anatomy of female reproductive organs.

CONCLUSION

That only age at first menstruation (chi square value= 0.001) had significant association with the knowledge.

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