



ASSESSMENT OF KNOWLEDGE OF MENSTRUAL HYGIENE AMONG ADOLESCENT GIRLS OF AN INTERCOLLEGE OF HAPUR, UTTAR PRADESH

Varun Toshniwal

Assistant Professor, Rama Nursing College, Pilkhuwa, Hapur.

ABSTRACT Adolescent is the period between 10 to 19 years of age (WHO, 2007). Adolescence girls constitute about 1/5th of the total population in the India.

An adolescent undergoes an important physical and sexual change in this period. Lack knowledge regarding reproductive health including menstruation hygiene which can be due to socio-cultural barriers in which they grow up and lead to various physiological and psychological problems in later stages of life. So the study aims to determine the level of knowledge of adolescence girls regarding menstrual hygiene.

This study was conducted in a conveniently selected school of district Hapur. Data was collected from 50 participants from class 7th to 11th through stratified random sampling technique; a structured questionnaire was used to assess the knowledge regarding menstrual hygiene.

The result shows that the mean knowledge score regarding menstrual hygiene is 15+3.48. Majority of participants (82%) were having average knowledge and only a few (2%) were having poor knowledge. Source of knowledge regarding menarche is having significant association with the knowledge score.

KEYWORDS : Knowledge, Menstrual Hygiene, Adolescents, girls, school.

Introduction

Adolescent has been as the period between 10 to 19 years of age, in their second decade of life (WHO, 2007). This is the age of great challenge to the parents, as well as the child and those concerned for the upbringing of the adolescent (Szilagy, 2003). More than just a physiological process, menstruation may be looked on as a restriction on women's religious and social traditions or as a taboo¹. Menstruation is generally considered unclean in Indian society (Shanbhag D, Shilpa R, Souza DN, Josephine P, Singh J, Br G); which follows restrictions in daily activities such as not being allowed to take bath, change clothes, comb hair and enter holy places and dietary restrictions (taboo on consumption of food like rice, curd, milk, lassi, potato, onion, sugarcane etc.) during the menstrual period are also imposed².

Shukla S. (2005) explored that girls and women teachers of Mumbai were very knowledgeable about the intricate system of taboos and sections that pertained to menstruation but had very little knowledge about the biological process of menstruation and its physiology³.

By late adolescence, 75% of girls experience some problem associated with menstruation⁴ which may lead to both general or reproductive morbidities and other complications, and may affect the well being of future generations when they become mothers⁵. Studies have shown that superstitions, illogical beliefs and misinterpretation are more common than accurate understanding of the process of menstruation, menstrual hygiene and self care practices⁶. Ramchandra C. Goyal (2010) concluded in his study that the girls who developed genital tract infections, 66% used clothes which are very unhygienic as it is neither sterilized nor even washed properly and about 37% girls do not disclose about their menstruation⁷.

Jawaharlal Nehru Institute of post graduate medical education and research (JIPMER) study in Tamilnadu on "Puberty rituals" (2001) showed the association between menstrual hygiene with reproductive tract infections⁸. Several other studies are conducted at many places in India have shown the similar results,^{9,10,11}

Aims and Objectives

The objective of the study was to assess the knowledge regarding menstrual hygiene among adolescent girls of selected school of District Hapur. So they can be made aware regarding the facts and educated regarding menstrual hygiene through educational session.

Methods and Materials

A school based univariate descriptive design was employed in 'DAV Sr. Sec. School, Pilkhuwa' Hapur, Uttar Pradesh. A stratified random sampling technique was used to select 50 participants from age 12-16 years between classes 7th to 11th.

Tools and technique:

A structured questionnaire of 26 questions was administered to respondents to assess their level of knowledge for which 1 point was given for each correct response. Level of knowledge was categorized

into poor (9 marks and below), average (10-18 marks) and good (19-26 marks). Its reliability was assessed with 40 adolescent girls through split half method and scoring was done through set criteria of evaluation. The reliability coefficient of the structured questionnaire was $r=0.99$. The content validity was done through seven experts from the field of nursing, obstetrics and gynecology and community medicine.

Results

Out of 50 samples, all the age groups were having almost equal no. of participants only 16 years girls were less (12%) (Table 1). 48% mothers of participants were highly educated and only 8% were uneducated. Most of the girls (92%) were Hindu, only few (8%) were Muslim; no other religions were found among the sample. More than half of the participants' mothers were housewife (i.e. 80%) and only 20% were employed; private, government or self employed. On the other hand more the 3/4th fathers of the participants (76%) were self employed, while 16% were at private services and only 8% were in government jobs. According to the present income of family, almost half of the samples (46%) belonged to upper middle class (Rs. 20,001 and above per month). Among all the participants 82% had attained menarche and almost all the samples (98%) were having some prior information and knowledge regarding menarche. Among those, more than half of the sample got information from their teachers (56%) and 24% from their family members and remaining 18% got awareness through mass media, social workers and other sources. And only a few (6%) were having family history of hospitalization due to reproductive disease.

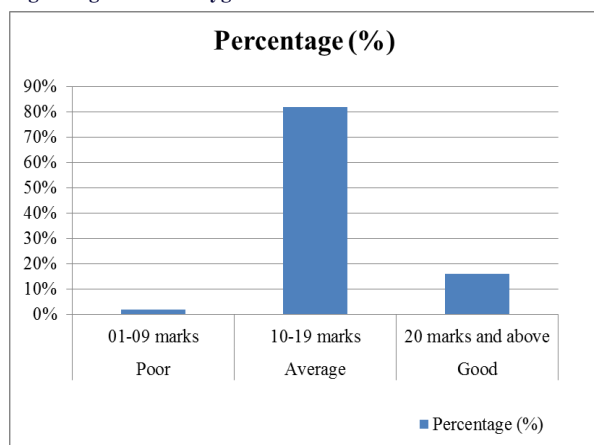
Table 1: Frequency and percentage distribution of socio-demographic characteristics of the study participants

N=50			
S.No.	Demographic Characteristics	Frequency (f)	Percentage (%)
1.	Age		
	12	09	18%
	13	12	24%
	14	10	20%
	15	13	26%
2.	Education qualification of mother:		
	Uneducated	04	8%
	Primarily educated	07	12%
	Secondary educated	16	32%
	Highly educated	24	48%
3.	Religion:		
	Hindu	47	92%
	Muslim	03	8%
4.	Occupation of mother:		
	House wife	40	80%
	Teacher	05	10%

	Tailor	03	6%
	Beautician	01	2%
	Government Service	01	2%
5.	Occupation of father:		
	Self employed	38	76%
	Private service	08	16%
	Government service	04	8%
6.	Family income: (monthly in Rs.)		
	5,000-10,000	04	8%
	10,001-15,000	08	16%
	15,001-20,000	15	30%
	20,001 and above	23	46%
7.	Type of family:		
	Nuclear family	24	48%
	Joint family	26	52%
8.	Have you attained menarche:		
	Yes	41	82%
	No	09	18%
9.	(i) Do you have any knowledge regarding menarche:		
	Yes	49	98%
	No	01	2%
	(ii) if yes, then source of information regarding menarche:		
	Family members	12	24%
	Teachers	28	56%
	Social health workers	06	12%
	Others	03	6%
10.	No. of elder sisters:		
	No elder sister/zero	37	74%
	One	11	22%
	Two	02	4%
11.	History of past hospitalization due to reproductive disease:		
	Yes	03	6%
	No	47	94%

Mean knowledge score of menstrual hygiene is 15 with standard deviation of 3.48. It ranges between 9 – 23. Most of the participants (82%) are having average knowledge score regarding menstrual hygiene, 16% were having good knowledge while only a few are having poor knowledge (2%) regarding it.

Fig 1: Frequency and percentage distribution of knowledge regarding menstrual hygiene:



Only source of education regarding menarche is having significant association with the menstrual hygiene knowledge score at the level of 0.05. Other variables viz. Age (in years), Educational qualification of mother, Occupation of mother, Occupation of father, Family Income (Rs. Per month), Type of family, girls Attended Menarche and no. of elder sisters do not have association with menstrual hygiene knowledge score at 0.05 level of significance (Table 2).

Table 2: Association between knowledge score regarding Menstrual Hygiene and socio-demographic variables

S.No.	Demographic Variables	Mean Level		Chi-Square	DF	Significance*
		Below Mean	Above Mean			
1.	Age (in years) a) 12-13 b) 14-15 c) 16	14 12 5	7 11 1	2.3	2	0.32
2.	Educational qualification of mother a) Primary/Uneducated b) Secondary educated c) Highly educated	10 10 11	0 6 13	8.79	2	0.12
3.	Occupation of mother a) House wife b) Service	24 7	16 3	0.34	1	0.56
4.	Family Income (Rs. Per month) a) <15,000 b) 15,000-20,000 c) >20,000	10 8 13	2 7 10	3.09	2	0.21
5.	Type of family a) Nuclear b) Joint	14 17	10 9	0.26	1	0.61
6.	Source of Information about menarche a) Family members b) Teachers c) Health worker/others	11 13 6	1 15 3	7.38	2	0.03*
7.	No. of elder sister a) No elder sister b) 1 or more	21 10	16 3	1.66	1	0.2

Significance at 0.05 level

Discussion:

Numerous similar studies have been conducted nationally and internationally on the knowledge and awareness regarding menstrual hygiene in the pastii - xii. The present study revealed that 82% had average level of knowledge while 16% and 2% had good and poor knowledge respectively.

Indeed, the findings showed a significant association between knowledge score of menstrual hygiene and Source of Information about menarche only. The educational session was given to all the adolescent and clarified their doubts and queries girls regarding physiological and psychological changes during menarche and effective methods of maintaining menstrual hygiene.

Thus the findings of the present study were similar to the other findings. That confirms the rate of knowledge regarding menstrual hygiene among adolescent girls need to be increased through health educational sessions, conducting special classes for adolescent girls as they are prone to get infection due to lack of information of maintaining personal hygiene during puberty. We can also improve and promote menstrual hygiene in community, by availing special classes or camps free of cost for the mothers and their female child to promote and maintain their personal physical hygiene and to inhibit the further morbidity case.

Conclusion

Adolescent is the developmental age in which various physical, psychological, cognitive and physical changes occur simultaneously and interactively making physiological development a challenge adolescent have to face, with emotional, social and behavioral dimensions specially in the girls; age of 12-16 years.

In every school, a school health nurse (A.N.M., G.N.M. or social health worker) should be appointed who can organize basic health care facilities, educational session and counseling programs for the students to avoid conflict and misconceptions developed at the time of puberty, which can also avail the regular health check up camps for the students to maintain their health record. Similar studies on multiple setting and on large sample size may increase the generalizability of the findings.

References

- Um L, Yusuf NW, Musa AB. Menstruation and Menstrual Hygiene amongst Adolescent School Girls in Kano, Northwestern Nigeria. Afr J Reprod Health. 2010;14(3):201-8
- Dhingra R, Kumar A, Kour M. Knowledge and Practices Related to Menstruation among Tribal (Gujjar) Adolescent Girls. 2009;3(1):43-8

3. Shukla. Working on menstruation with girls in Mumbai, India. Vacha Women's resource centre equals.2005; v(15):4-5. Available from: https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwiU0vXxv8TLAhUh2qYKHVZvAYUQFggBMAA&url=http%3A%2F%2Fwww.rguhs.ac.in%2Fcdc%2Fonlinecd%2Fuploads%2F05_N081_14447.doc&usq=AFQjCNG9o2KlcnMS9J9OjakzywFUYN17LA
4. P Balasubramanian; "Health needs of poor unmarried adolescent girls-a community based study in rural tamilnadu", rural women's social education centre, tamilnadu
5. McCaleb and Cull. Sociocultural influences and self-care practices of middle adolescents. *Journal of pediatric nursing* 2000 Feb;15(1):30-5 : Available from: <https://www.ncbi.nlm.nih.gov/pubmed/10714036>
6. Ray S, Dasgupta A. Determinants of Menstrual Hygiene among Adolescent Girls: A multivariate analysis. *Natl. J. Commun. Med.* 3(2),2012,294-301.
7. Ramchandra C. Goyal (2010). GAPS and FAWE Uganda (1999), Gender and primary school. Kampala: FAWE Uganda. Available from: <http://www.ijsr.net/archive/v3i5/MDIwMTMxNzMw.pdf>
8. P Balasubramanian; "Health needs of poor unmarried adolescent girls-a community based study in rural tamilnadu", rural women's social education centre, tamilnadu
9. Anil K Aggarwal, Anju Agarwal. "A study of dysmenorrhoea during menstruation in adolescent girls", *Indian journal of community medicine*, 2010Jan; v35 (1):p159-164. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/pmc2888348>
10. Anoop khanna, Goyal R S, Rahul Bhawsar, "menstrual practices and reproductive problems, a study of adolescent girls in Rajasthan", *journal of health management*, 2005April, vol 7 no91-107.
- a. Available from: https://www.google.co.in/search?q=knowledge&ie-8&oe=utf-8&gws_rd=cr&ei=QIWUvrb-JYiNuATajquwBA
11. Dasgupta.A, Sarkar. Menstrual hygiene; how hygienic is the adolescent Girl. *Indian Journal of community medicine*. 2008: Available from: <http://www.ijcm.org.in/article.asp?issn=09700218;year=2008;volume=33;issue=2;spage=77;epage=80;aulast=Dasgupta>