



Assessment of practices on menstrual hygiene in girls reside in university hostel

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Abstract

Background: Menstruation is an important event in the life of a girl and is often associated with menstrual problems such as irregular menstruation, excessive bleeding, dysmenorrhea, spotting etc. It is expected that the girls have proper knowledge about the reproductive issues and their sanitation practices, so that they can protect themselves from the unwanted medical threat. The objective of the study is to assess practices on menstruation hygiene and the awareness about some reproductive issues and.

Data and Methods: The data for this study is taken from a sample survey from girl's hostel located in the Banaras Hindu University, Varanasi. A total of 308 under graduate and postgraduate students provided information on the menstrual hygiene, sanitation practices and about some reproductive issues. Consent is taken from the girls prior to conduct the study using structured questionnaire.

Results: Sixty percent girls mentioned that dysmenorrhea is the major menstrual problem. The practices of menstrual hygiene i.e. using sanitary napkins among girls were found to be 93.5 percent. 81 percent reported normal bleeding rest are facing heavy or spotting.

Conclusion: Dysmenorrhea, irregular period and heavy bleeding is the most common menstrual problem among girls. Some of the girls have little awareness about the reproductive issues thus there is an imperative need of some intervention program related to the issues discussed here for the improvement of the girl's knowledge to avoid menstruation and reproductive issues related medical burden.

Keywords: menstrual hygiene, menstrual problems, dysmenorrhea, irregular period

Introduction

Providing reproductive and sex education during adolescent period is an important and challenging part of Adolescent Reproductive and Sexual Health (ARSH) which is identified as a key strategy in the Reproductive and Child Health (RCH-II) program under the National Rural Health Mission (NRHM). It is important to have specific information regarding the level of knowledge related to reproductive and sexual health issues among girls, so that the clear picture can be assess.

The menstrual period is a physiological process that occurs throughout the reproductive years of every female [1]. The issue related to menstrual hygiene begins with initiation of menstruation and end up to menopause. This process is associated with various mental as well as physical morbidities like premenstrual syndrome, dysmenorrhea and many more. Menstruation can also influence a girl to the RTI/STI (Reproductive Tract Infection/Sexual Tract Infection) if hygiene is not maintained throughout menstruation. Also, girls are at risk of variety of social and psychological consequences such as discontinuation of education, forced early marriages, unplanned pregnancies, unsafe abortions, and depression [2, 3, 4]. The knowledge, attitude and practices which develop at adolescent age, are usually followed by them throughout their life and also this passed on to their next generation. Therefore, any faulty belief or practice pertaining to menstruation will affect health girls. Usually adolescent girls are guided by their mother, elder sister or other family members regarding menstrual hygiene practices [5]. In Indian culture, talking about reproductive issues is considered as a social taboo.

Girls have poor knowledge and lack of awareness about physical and physiological changes associated with the onset and presence of adolescence. They hardly get any chance to learn about menstruation. Studies have also suggested that peer education programs positively motivate them and modify their behaviors and attitudes [6, 7]. Various myths and social beliefs are also prevailing to menstruation. Most girls are unaware about proper menstrual practices and hygiene at the age of menarche [8, 9, 10, 11].

Menstruation is an important part of the reproductive cycle, but menstrual dysfunction in girls can affects normal life of adolescents. Menstrual hygiene problems among girls are generally perceived as a minor health issue and thus irrelevant to the public health agenda particularly in developing countries. Dysmenorrhea, irregular period is a common problem, yet it remains poorly understood and is not taken into consideration when assessing adolescent health problems [12, 13, 14]. This is one of the leading causes of loss of college days. Lack of awareness and the associated problems are responsible for the hesitation, shyness, fear in sharing problems, and health-seeking behavior, which are commonly faced by young girls. Therefore, this study was taken up to assess the menstrual problems among the girls live in the university hostel.

Data and Methods

The sample data for this study is taken from girl's hostel located inside the Banaras Hindu University, Varanasi. A total of 308 under graduate and postgraduate students provided information on the menstrual hygiene practices and about some reproductive issues. Stratified random

sampling has been used.

Sample Size

For populations that are large, the following equation provides a representative sample for proportions.

$$n = \frac{Z^2 p(1 - p)}{e^2}$$

Where *n* is the sample size, *Z*² is the abscissa of the normal curve that cuts off an area *α* at the tails (1-*α* equals the desired confidence level, e.g., 95 percent), *e* is the desired level of precision, *p* is the estimated proportion of girls using hygiene sanitary practices.

We have considered a 95 percent confidence level and 5 percent precision. The estimated proportion of girls using hygiene sanitary practices is taken as 75 percent, thus the estimated sample size come out to be 288. Further 10 percent more samples added for non-response or non-availability in the room. Thus, we started survey with final sample size is equal to 317 but after the end of survey we have gathered information only from 308 girls. The non-response is only 2 percent in the survey.

Results

The normal range for ovulatory cycles is found to be between 21 and 35 days, while the duration of menstrual flow normally ranges from two to seven days. Among the gynecological problems, menstrual problems are said to be the major ones especially among adolescents. These disorders are often the source of anxiety for female adolescents and their families at large. The common menstrual disorders for female adolescents are abnormal/excessive, uterine bleeding, dysmenorrhoea, and premenstrual syndrome. Table 1 shows that the girl's knowledge about some specific terms related to the reproductive issues. The situation is not so good because girl's are educated and living in a highly educated environment. Only 39 percent girls are known about dysmenorrhoea. Even 30 percent girls are not aware with term menarche but about 70 percent girls know emergency contraceptives and 84 percent girls are aware with STI. Table 2 indicates that the poor knowledge about menstruation. About 40 percent says the source of menstrual blood is not uterus. 5.5 percent girls are not known that menstruation is a physiological process. Table 3 expose some issues related to the menstrual observations and practices. 13 percent girls faces irregular menstrual period. About 17 percent girl's menstrual period duration is more than five days. 14 percent girls experiencing heavy bleeding during menstruation however, 5 percents are facing only spotting. The interesting finding is that 58 percent girls are suffering from dysmenorrhoea. 5 Percent girls are still using traditional cloths rather than sanitary napkins or tampons. Table 4 explores some factors associated with dysmenorrhoea. We found that regularity of menstrual cycle, duration of menstrual period and amount of menstrual bleeding is significantly associated with dysmenorrhoea. The girls whose menstrual period is regular, 56 percent are

suffering from dysmenorrhoea while 71 percent are facing dysmenorrhoea whose menstrual period is irregular. Girls whose duration of menstrual period is more are found to be dysmenorrhic significantly. In case of heavy menstrual bleeding the prevalence of dysmenorrhoea is more.

Table 1: Girl's Knowledge about Some Specific terms Related to Reproductive Issues

Specific Terms	Percent Aware
Menarche	70.1
Menopause	86.7
Ovulation	82.5
Premenstrual Syndrome	68.5
Dysmenorrhoea	39.3
Amenorrhoea	41.9
RTI	70.1
Colostrums	46.8
Emergency Contraceptive	69.8
STI	83.8

Table 2: Girl's Knowledge about the Menstruation

Issues	Percentage
What is Menstruation?	
Physiological Process	94.5
Don't Know	5.5
Source of Menstrual Blood	
Uterus	59.7
Vagina	35.4
Don't Know	4.9

Table 3: Girl's observation and practice for Menstruation

Issues	Percentage
Regularity of Menstrual Period	
Regular	86.7
Irregular	13.3
Menstrual Cycle Length	
< 21 days	4.2
21-28 days	45.5
28-35 days	43.2
35 & above	7.1
Duration of Menstrual Period	
< 3 days	12.0
3-5 days	71.4
5-7 days	16.6
Amount of Menstrual Bleeding	
Heavy	14.0
Normal	81.1
Less	4.9
Dysmenorrhoea	
Yes	57.8
No	42.2
Sanitary Practices	
Sanitary Napkins	93.5
Fresh Clothes	4.2
Repeat Used Clothes/Sanitary Napkins	0.7
Tampons	1.6

Table 4: Factors associated with Dysmenorrhoea in Girls

Characteristics	Dysmenorrhoea		χ ² (df)	p-value
	Yes	No		
Regularity of Menstrual Period				
Regular	149 (55.8)	118 (44.2)	3.25 (1)	0.072
Irregular	29 (70.7)	12 (29.3)		

Menstrual Cycle length				
<21 days	9 (69.2)	4 (30.8)	0.82 (3)	0.846
21-28 days	81 (57.9)	59 (42.1)		
28-35 days	76 (57.1)	57 (42.9)		
35 & above	12 (54.5)	10 (45.5)		
Duration of Menstrual Period				
<3 days	20 (54.1)	17 (45.9)	10.68 (2)	0.005
3-5 days	118 (53.6)	102 (46.4)		
5-7 days	40 (78.4)	11 (21.6)		
Amount of Menstrual Bleeding				
Heavy	34 (79.1)	9 (20.9)	9.28 (2)	0.010
Normal	136 (54.4)	114 (45.6)		
Less	8 (53.3)	7 (46.7)		

Conclusion

Dysmenorrhea, irregular period is the most common menstrual problem. Compared to similar study carried out in India [15, 16] menstrual hygiene problem is found to be more or less same in our study. Dysmenorrhoea is a common problem in girls and associated with menstrual irregularity primarily. This is a type of medical burden and need treatment. Thus, study indicates that there is an imperative need of some intervention program related to the issues discussed here for the improvement of the girl's knowledge.

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