



# **Impact of Structured Teaching Programme to Enhance the Knowledge Regarding Menstruation and Menstrual Hygiene among Adolescent Girls**

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## **Author's contribution**

*The sole author designed, analysed, interpreted and prepared the manuscript.*

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## **ABSTRACT**

The researcher conducted a quasi-experimental study on menstruation and menstrual hygiene among the adolescent girls at primary girls' school (ajarpura kanyasala) under Anand district Gujarat. The study was intended to see the impact of a structured teaching programme in improving the knowledge of adolescent girls specific to rural areas. The objectives of the study were to assess the existing knowledge, to develop a structured teaching program on menstruation and menstrual hygiene, to assess the knowledge after implementation of structured teaching programmes and to find out the association between the knowledge score of the respondent with the selected demographic variables. The quantitative research approach was used with one group pre-test post-test- quasi experimental research design. The sample of 50 was drawn using probability sampling technique. The tool used was structured knowledge questionnaire. The result shows that majority of the respondents were (92%) in the age group of 12-13 years, most of the respondents (90%) were Hindu religion, the family income for most of the respondent (64%) falls in between Rs. 2000-3000, almost half of the respondents were having an elder female sibling (52%), and initial assessment reveals most of the respondents were (82%) having some knowledge about menstruation and menstrual hygiene. The finding shows significant difference between mean pre-test score (15.56) and post test score (27.80) which also reveals the importance of right information is needed to this group to discard any irrelevant practices. The association with certain demographic variables (age, family income, elder female sibling, information about menstruation) also established at 0.05 level of significance.

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## 1. INTRODUCTION

The human being undergo phases of growth & development. One of the important phase of growth and development is puberty. The World Health Organization (WHO) has defined adolescence as the period between 12-17 years of life [1]. The population of adolescent girl is about 1/5th of total female population of world. The concept of menstruation is individualized. The Indian socio cultural belief of menstruation is different than world [2]. Still it is considered to be unclean or impure or not holy aspect. The onset of menstruation is often associated with unpleasant experiences and also scary sometimes as the adolescent girls may not have information about the same. The average age of menarche among adolescent girls may vary in terms of geographical location, the race of individual, the ethnicity of individual and may be related with some other factors also. It is being observed that the normal occurrence of menarche in low socioeconomic group is between the ages of 8 and 16 with a median of around 13 [3]. As the girls are too young so it is difficult to get them prepared both physically and mentally for Menarche & menstruation. It is a very common to feel shy and at times it is difficult to disclose the matter to their own mothers or closed ones. The importance of hygiene is very negligible matter specially in families where open discussions are not allowed in terms of reproductive health [4]. The digitalization has changed the world's perspective towards this issue. The girls of today's era are more knowledgeable as they use different social media to update themselves, but there are still beliefs that the knowledge is better with practical application. Also There are several minor health problems related to menstruation like back ache, constipation, tension, which are also associated with the pre-menstruation period [5]. There are a number of infections which may precipitate as a result of poor menstrual hygiene practices. They are vaginitis, vulvitis, and urinary tract infection. In India there are many myths, misconceptions and poor traditional practices, which compel the adolescent girl to observe & follow the unhygienic practices which are not recommended. So the imparting of knowledge in terms of menstruation & menstrual hygiene may improvise the practices and eliminate the obstacles relating to practices.

There are some studies in Africa shows the majority of Tanzanian women use cloth or toilet

paper as a menstrual product compared to sanitary pad usage of only 18% [2]. Also studies among the school girls of Nigerian shows the usage of toilet tissue or cloth as menstrual absorber is about 31 to 56% as compared to menstrual pads. The studies in India shows a significant use & reuse of cotton cloth among girls is between 43-88% compared to disposable pads [4]. The hygiene related to menstrual product is very poor as cleaning of used cloths is done either with unclean water without using a detergent soap or the clothes are dried in the shed out of the vicinity area of people so mostly not under the sun. This unhygienic practices will result in poorly sanitized products for menstrual use.

Across studies the problems are more prominent in rural areas and also it is more prevalent amongst the lower socio-economic women and girls. Research Findings also shows that many adolescent girls come to hospital with some of the infection of the genitalia. The reasons for infections in genitalia is mostly due to the poor menstrual hygiene practices [6]. The Women who are more aware about menstruation & safe menstrual hygiene practices are less susceptible to any kind of reproductive tract infections and other relative consequences. Thus the researchers were keen to undertake this study to make adolescent girls more knowledgeable in terms of menstruation & menstrual hygienic practices especially in rural area.

### 1.1 Objectives of the Study

1. To assess the existing knowledge of adolescent girl regarding menstruation and menstrual hygiene.
2. To develop structured teaching program on menstruation & menstrual hygiene.
3. To assess the knowledge after implementation of structured teaching programmes.
4. To find out the association between the knowledge score of respondent with the demographic variables.

## 2. METHODOLOGY

The Research approach in The present study was to evaluate the structured teaching programme on knowledge on menstruation and menstrual hygiene among adolescent girl. The nature of the problem for the study give rise to a

quantitative approach appropriate & suitable for the study group. The objectives of the study give rise to a Quasi-experimental, One Group Pre-test Post- Test Design. The research conducted among adolescent's girls of Kanyasala Ajarpura, under Anand dist. Gujarat. The dependent variable of the present study is the knowledge & The independent variable is structured teaching programme. Extraneous variable are- age, gender, religion, education, socio economic status, course of study, knowledge of siblings regarding menstruation and menstrual hygiene, monthly income, and knowledge regarding how to care during menstruation. In the present study, population consists of adolescent girls coming at Ajarpura Primary Girls School which comprises of 50 students as sample. In this present study, probability sampling technique used. A structured interview schedule was developed & used to identify the knowledge regarding menstruation and menstrual hygiene among the adolescent girls. To assess the demographic variables of the adolescent girls such as age, religion, family income, elder female sibling, place of living and source of information on menstruation and menstrual hygiene, the interview schedule was used. There were totally 33 items in knowledge questionnaire. Each item was multiple choices in nature with adequate responses that carried 1 mark for right response & 0 for wrong response. The total score of level of knowledge is 33. The samples were expected to choose the correct response. Pre-testing done on 10 adolescent girls & data obtain through interview technique. The process took 25 min. this pre-testing done- to test clarity of item, determine the time duration required & To sort out the difficulties. Structured interview reliability obtains through Pearson correlation formula and reliability obtained is 0.76 (reliable). To ensure content validity of the tools which includes demographic data, structure knowledge questionnaire was submitted to six M.sc nursing experts (Principal &Asst.

Professors). All the experts validated the relevancy, objectivity, adequacy & appropriateness of the content areas & majority of the items were found to be accepted and few of the items were modified as per the suggestion. Their suggestion was taken into consideration and the modifications were incorporated in the final preparation of the tool, and corrected tool was validated. A structured teaching programme was developed with the view of the research objectives, structure questionnaire, literature review and the expert's opinion. The main factors that were kept in mind while preparing structure Teaching Programme was the knowledge level of the adolescent girls, method of teaching, simplicity of language, relevance of teaching aids, attention & the availability of study groups. The structure teaching programme was first drafted in English language and translated in Gujarati language. The initial draft was given to experts comprised of medical surgical nursing, psychiatric nursing expert, OBG nursing expert, child health nursing expert & community health nursing experts. The experts validated the structured teaching programme based on criteria of questions and also gave suggestion on the content adequacy and content relevancy. The experts were agreed upon 90% on meeting the criteria, 10% agreement on partially meeting of the content criteria. The acceptance of suggestion was to ensure the clarity and the validity of tool. The structured teaching programme was titled "knowledge of adolescent girls regarding menstruation and menstrual hygiene". The structured teaching programme included the followings areas – Introduction, Definition/ Meaning, Sign and symptoms, Problems during menstruation, Management, Myths and beliefs about menstruation & Summarization along with objectives & references. No ethical issues were raised during the data collection period.

### 3. FINDINGS AND RESULTS

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

Sr. No.	Demographic variables	Frequency (f)	Percentage (%)
1	<b>Age</b>		
	12-13years	46	92.0
	14-15years	04	8.0
2	<b>Religion</b>		
	Hindu	45	90.0
	Muslim	02	4.0
	Christian	03	6.0

Sr. No.	Demographic variables	Frequency (f)	Percentage (%)
3	<b>Family Income</b>		
	2000-4000rs	32	64.0
	5000-8000rs	13	26.0
	>10000rs	05	10.0
4	<b>Elder Female Sibling</b>		
	Yes	26	52.0
	No	24	48.0
5	<b>Place of Living</b>		
	Home	50	100.0
6	<b>Information received</b>		
	Yes	41	82.0
	No	9	18.0

**Table 2. Finding related to knowledge of adolescent girl regarding menstruation and menstrual hygiene at selected community area**

Score	Mean	SD	T value	P value
Pre-test	15.5600	2.66619	21.091	<0.001
Post-test	27.8000	3.21349		

**Table 3. Analysis of association between selected demographic variables and the overall knowledge scores**

Areas	Chi-square	DF	P
Age	1.766	2	0.413
Income	3.447	4	0.486
Siblings	2.123	2	0.345
Information	3.177	2	0.204

#### 4. DISCUSSIONS

Globally, access to menstrual products and education about menstruation varies substantially [7]. Developed countries tend to have a wide availability of feminine hygiene products such as tampons, pads, menstrual cups, and pantliners [8]. In other areas, particularly in parts of Africa, India, and Southeast Asia, access to menstrual products, especially disposable ones, is highly limited though, the study reflected upon the need of education related to available products for menstruation & menstrual Hygiene in rural area where the information seems to be very limited. There are some studies which shows use of cotton clothes during menstruation is very high among Indian girls (43-84%) [9]. Reuse of cotton clothes as menstrual product instead of disposable pad is very common due to non-availability of right information. In Nepal, 92 per cent of 204 adolescent girls surveyed had heard about menstruation, but the majority of respondents reported that they were not prepared in any way for their first period where else in the present study also shows a similar response in terms of prior knowledge of 82%

without proper implementation into practice [10]. The cultural beliefs & conservative thoughts of people have a great impact on the practice of hygienic measures during menstruation specifically in rural India. There is always a constant effort though many external & internal organizations to abolish the wrong practices & adopt to the healthy & hygienic practices specifically during adolescent period for menstruation will give a long term behavioural change & allow a healthy reproductive life. The aim of this study was to see the impact of teaching material regarding menstrual hygiene for adolescent girls in school so as to enhance their knowledge in the areas where least or no concerns are placed. Also this kind of material can easily be accepted when placed as a part of reproductive health education under schools.

#### 5. CONCLUSION

The focus of this study was to create an educational material regarding menstrual hygiene which can be easily accessed by the adolescent girls in schools and utilize it in a productive way to abolish the improper practices

& improve their reproductive health. The sample group showed the success of this research by increase in their knowledge level following education and suggested in implementation of such educative materials in schools specifically in rural India for overcoming the issues related to menstrual hygiene. It is believed that the samples involved in this study were not only benefited but also able to spread the knowledge regarding menstruation and menstrual hygiene to the another person like friends or to other family members. The study findings show the importance of reproductive health for would be women (Adolescents) and when the right practices are adopted in the right age will also help in improving reproductive health. The STP was accepted as a tool for communication to improve the behaviour of adolescent group, as in this age, the group is more receptive to new knowledge & can be incorporated into practice easily. This kind of study also influence to prepare more instructional module related to adolescent health need.

## CONSENT

Informed consent was taken from the subjects after explaining about the purpose of the study and assuring confidentiality of collected data.

## ETHICAL APPROVAL

Ethical consideration, a formal permission was taken from the principal of the Ajarpura primary girl school.

## COMPETING INTERESTS

Author has declared that no competing interests exist.

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