



## **“A Study To Assess The Effectiveness Of Structured Teaching Program On Knowledge Regarding Menstruation Among Adolescent Boys In A Selected High School, Muvattupuzha.”**

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### **ABSTRACT**

The present study was aimed at assessing the effectiveness of structured teaching programme on knowledge regarding menstruation among adolescent boys of selected high school, Muvattupuzha. The objectives of the study were to find out the effectiveness of structured teaching programme on knowledge regarding menstruation among adolescent boys, determine the association between knowledge regarding menstruation and selected demographic variables. The conceptual framework applied for the study is Bertalanffy's general system theory. A pre-experimental one group pre-test post-test design was used for this study. A total of 50 adolescent boys were selected through non probability convenient sampling from Nirmala Public School, Muvattupuzha. The tool used for data collection was a structured questionnaire to assess knowledge regarding menstruation among adolescent boys. Result of the study revealed that that 2% adolescent boys had good knowledge on menstruation while 44% boys had average knowledge and 54% students had only poor knowledge on menstruation in pre-test. On post-test 54% boys had good knowledge, 42% boys had average knowledge and 4% boys had only poor knowledge on menstruation. The structured teaching programme on menstruation was effective in producing significant difference in the knowledge regarding menstruation among adolescent boys. Knowledge regarding menstruation among adolescent boys was significantly associated with previous knowledge about menstruation.

**Keywords:** *Structured teaching programme; Adolescent boys; Menstruation; Effectiveness; Knowledge; Selected demographic variables.*

### **INTRODUCTION**

#### **BACKGROUND OF THE STUDY**

Menstruation is a normal physiological process which is essential for and indicative of good reproductive health. Menstruation is the monthly bleeding through vagina of a female. It results in premenstrual pain, muscle cramps, excessive blood loss, back ache, fatigue, and many related effects in female human body, but are highly subjective to variations. Menstruation provides women an advantage of low risk of cardiovascular diseases like coronary artery disease. The psychological experience during menstruation depends upon the supportive system of the person.

#### **NEED AND SIGNIFICANCE OF THE STUDY**

Menstruation is a normal physiological process which happens to every female between menarche and menopause. The process although being necessary for

reproduction it results in increased demand on body. Women experience excessive bleeding, muscle cramps, back ache, menstrual pain, premenstrual dysphoric syndrome etc. The problems faced differ and vary from person to person. All women may have common problems but be of different intensities.

During this time women and girls need considerable amount of support from their partners, sons, brothers, fathers, classmates as well as colleagues. But the consequence is many males are unaware or keeps misconceptions related to menstruation. In schools the boys consider this as an opportunity to tease their classmates. Between partners due to lack of understanding of menstruation among men sexual disharmony and relationship problems may arise. At workplaces increased workload or stress is given upon women without knowing their situation.



### PROBLEM STATEMENT

A study to assess the effectiveness of structured teaching program on knowledge regarding menstruation among adolescent boys in a selected high school, Muvattupuzha.

### OBJECTIVES

- To assess the pre-test knowledge on menstruation among adolescent boys.
- To assess post-test knowledge on menstruation among adolescent boys.
- To compare the pre-test and post-test knowledge scores on menstruation among adolescent boys.
- To find out the association between pre-test knowledge scores on menstruation among adolescent boys with selected demographic variables.

### HYPOTHESIS

**H<sub>1</sub>:** There is significant difference between pre-test and post-test knowledge scores on menstruation among adolescent boys.

**H<sub>2</sub>:** There is significant association between pre-test knowledge scores on menstruation among adolescent boys with selected demographic variables.

### REVIEW OF LITERATURE

The review of literature is the systematic and comprehensive analysis of related literature both published and unpublished to throw light and make clear the whole aspects of the study. A thorough literature review provides a foundation to new knowledge and usually is conducted well before any research.

The review of literature of this study is organized under the following heading as given below,

- Knowledge regarding menstruation
- Impact of dysmenorrhea
- Men's perception about menstruation
- Structured teaching programme

### METHODOLOGY

The research methodology outlined in this chapter focuses on assessing the effectiveness of a structured

teaching program on knowledge regarding menstruation among adolescent boys in Nirmala Public School, Muvattupuzha. Adopting a quantitative research approach, the pre-experimental design chosen is a one-group pre-test and post-test design. The study takes place at Nirmala Public School, with the population being all adolescent boys aged 13-16 years. The sample, selected through non-probability convenient sampling, comprises 50 willing participants meeting the age criteria.

The research tool is a self-structured questionnaire divided into two sections: demographic variables and a structured questionnaire assessing knowledge on menstruation. The questionnaire underwent content validation by experts in relevant fields, and a pilot study with 10 adolescent boys was conducted to test its reliability using the split-half method, resulting in a consistency score of 0.743721.

The actual data collection involved obtaining formal permission from the school principal, conducting pre-tests, administering the structured teaching program, and finally assessing post-test knowledge. Data analysis will include frequencies and percentages for demographic variables, knowledge scores, and the effectiveness of the teaching program. Additionally, the association between knowledge and selected demographic variables will be assessed using the chi-square test. The chapter provides a comprehensive insight into the research design, variables, setting, population, sample, sampling technique, data collection instrument, pilot study, and the plan for data analysis.

**ANALYSIS AND INTERPRETATION OF DATA**

Section I: Description of subject based on demographic variables.

Section II: Pre-test and post-test knowledge among adolescent boys on Menstruation before and after administration of structured teaching programme.

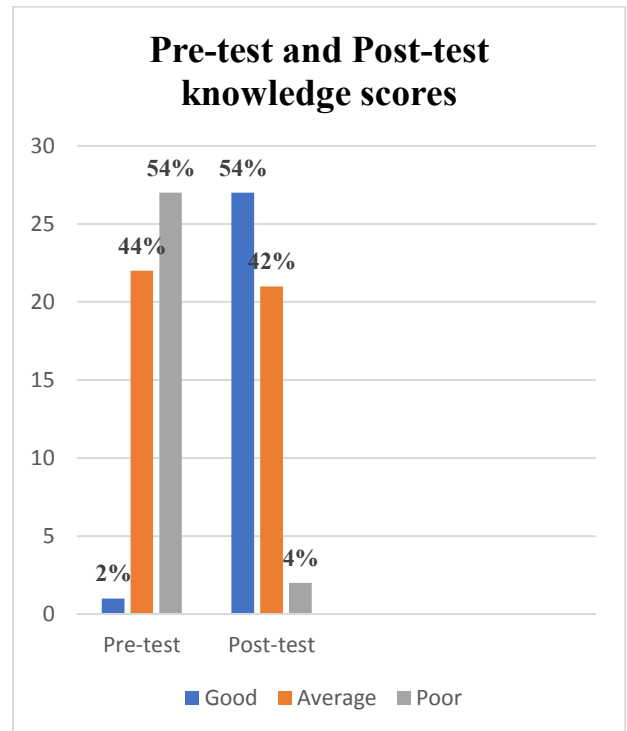
Section III: Effectiveness of structured teaching programme on knowledge on menstruation among adolescent boys.

Section IV: Association between pre-test knowledge on menstruation among adolescent boys and selected demographic variables.

Distribution of knowledge of adolescent boys before and after administration of structured teaching programme.

Grade of knowledge	Range	Pre-test knowledge		Post-test knowledge	
		f	%	f	%
<b>Good</b>	21-30	1	2%	27	54%
<b>Average</b>	11-20	22	44%	21	42%
<b>Poor</b>	0-10	27	54%	2	4%

Table 1 reveals that 2% adolescent boys had good knowledge on menstruation while 44% boys had average knowledge and 54% students had only poor knowledge on menstruation in pre-test. On post-test 54% boys had good knowledge, 42% boys had average knowledge and 4% boys had only poor knowledge on menstruation.



**Figure 2: Graph showing pre-test and post-test knowledge scores.**

**Section III: Effectiveness of structured teaching programme on knowledge regarding menstruation among adolescent boys.**

This section deals with the significance of difference between pre-test and post-test knowledge scores on menstruation among adolescent boys for which Z-test was computed, in order to find out effect the following hypothesis is stated.

**H<sub>1</sub>:** There is significant difference between pre-test and post-test knowledge scores regarding menstruation among adolescent boys.

**Table 2**  
**Mean score, standard deviation and z value of pre-test and post-test scores of knowledge regarding menstruation among adolescent boys.**

Variable	Mean score	SD	Z-value
Pre-test knowledge	10.64	4.17	
Post-test knowledge	20.07	5.24	10.54663 *

\* significant at 0.05 level

Table 8 indicates that the computed 'z' value is greater than table value (1.64). It is significant at 0.05 level. Therefore, it can be inferred that structured teaching programme on Menstruation is effective to improve the knowledge of adolescent boys.

**Section IV: Association between pre-test knowledge on menstruation among adolescent boys and selected demographic variables.**

**H<sub>2</sub>:** There is significant association between pre-test knowledge scores on menstruation among adolescent boys with selected demographic variables.

**Table 3**  
**Association between pre-test knowledge scores on menstruation with selected demographic variables**

Demographic variables	Df	Chi square value	p-value
		$\chi^2$	
Religion	2	0.0408	0.97822
Place of living	1	2.8937	0.088924
Family annual income	3	3.342	0.341838
Parents profession	1	0.0023	0.585024
Having female siblings	1	0.1661	0.68359
Previous knowledge on menstruation	1	5.0814	0.024184

**Table 3:** Shows that there is significant association between pre-test knowledge score on Menstruation among adolescent boys with previous knowledge on menstruation. But there is no association between knowledge score on menstruation and other demographic variables. So, the research hypothesis was accepted and null hypothesis was rejected.

**MAJOR FINDINGS OF THE STUDY**

**Distribution of demographic characteristics of adolescent boys**

Most of the adolescent boys belongs to 13-16 years 26% belongs to Christian community, 58% boys are living in urban area, 32% of boys have family annual income between 100000-200000, 12% boys' parents work in medical field, 50% of boys have female siblings and most of the boys did not have any previous knowledge on Menstruation.

**Distribution of adolescent boys based on knowledge on menstruation before and after structured teaching programme.**

The findings reveal that pre-test score of 54% had poor knowledge, 44% had average knowledge and 2% had good knowledge. In post-test 54% had good knowledge 42% had average knowledge and 4 % had poor knowledge.

**The effectiveness of structured teaching programme**

The improvement is statistically tested by paired Z-test value and the results was found to be significant after the teaching programme. The post-test knowledge score is increased when compared with pre-test score.

**Association of knowledge with selected demographic variables**

The study shows that there is significant association between previous knowledge on menstruation and pre-test knowledge scores. But there is no significant association between knowledge and other selected demographic variables.

**Summary:**

The study aimed to assess the effectiveness of a structured teaching program on knowledge regarding menstruation among adolescent boys at Nirmala Public School, Muvattupuzha. The objectives included evaluating pretest and post-test knowledge, comparing knowledge scores, and exploring associations with demographic variables. The study utilized Bertalanffy's general system theory as a conceptual framework.





The research employed a pre-experimental design with a sample size of 50 adolescent boys aged 13-16 years. A pilot study validated the tool, and the final study, analyzed through descriptive and inferential statistics, indicated that the structured teaching program significantly improved knowledge about menstruation. The findings revealed that 2% of boys had good knowledge in the pre-test, increasing to 54% in the post-test.

Nursing implications suggested strengthening nursing curriculum related to menstrual knowledge and educating male students on reproductive and menstrual topics. The study emphasized the need for further research on the effectiveness of teaching programs. Nursing administrators were urged to organize education programs for staff and hospitalized men regarding menstruation.

Limitations included a small sample size and a short study period, limiting the generalization of findings. The study focused exclusively on adolescent boys, used a non-randomized sampling technique, and employed a closed-ended tool without open-ended questions.

Recommendations for future research included conducting similar studies with larger samples, extending the research to community settings, and exploring the effectiveness of teaching programs among young men in college. Overall, the study suggested valuable insights for enhancing menstrual knowledge among adolescent boys and providing directions for future research and nursing education.

## REFERENCE

1. Munro AK, Hunter EC, Hossain SZ, Keep M. A systematic review of the menstrual experiences of university students and the impacts on their education: A global perspective. *PloS one*. 2021 Sep 10;16(9):e0257333.
2. Patil R, Agarwal L, Khan MI, Gupta SK, Vedapriya DR, Raghavia M, Mittal A. Beliefs about menstruation: a study from rural Pondicherry. *Indian Journal of Medical Specialties*. 2011 Jan 1;2(1):23-6.
3. Chawla J. Matrika. The mythic origins of the menstrual taboo in the Rig Veda. 1992.
4. Puri S, Kapoor S. Taboos and myths associated with womens health among rural and urban adolescent girls in Punjab. *Indian journal of community medicine*. 2006 Oct 1;31(4):295.
5. Kumar A, Srivastava K. Cultural and social practices regarding menstruation among adolescent girls. *Social work in public health*. 2011 Sep 15;26(6):594-604.
6. Penakalapati G. "Boys don't have knowledge about menstruation; they think it is a bad thing"- Knowledge and Beliefs about Menstruation among Adolescent Boys in Gicumbi District, Rwanda.
7. Mason L, Sivakami M, Thakur H, Kakade N, Beauman A, Alexander KT, van Eijke AM, Laserson KF, Thakkar MB, Phillips-Howard PA. 'We do not know': a qualitative study exploring boys perceptions of menstruation in India. *Reproductive health*. 2017 Dec;14(1):1-9.
8. Gundi M, Subramanyam MA. Curious eyes and awkward smiles: Menstruation and adolescent boys in India. *Journal of Adolescence*. 2020 Dec 1;85:80-95.
9. Finlay JE, Assefa N, Mwanyika-Sando M, Dessie Y, Harling G, Njau T, Chukwu A, Oduola A, Shah I, Adanu R, Bukenya J. Sexual and reproductive health knowledge among adolescents in eight sites across sub-Saharan Africa. *Tropical Medicine & International Health*. 2020 Jan;25(1):44-53.
10. Rani A, Sharma MK, Singh A. Practices and perceptions of adolescent girls regarding the impact of dysmenorrhea on their routine life: a comparative study in the urban, rural, and slum areas of Chandigarh. *International journal of adolescent medicine and health*. 2016 Feb 1;28(1):3-9.
11. Wong LP. Premenstrual syndrome and dysmenorrhea: urban-rural and multiethnic differences in perception, impacts, and treatment seeking. *Journal of pediatric and adolescent gynecology*. 2011 Oct 1;24(5):272-7.
12. Mohammed S, Larsen-Reindorf RE. Menstrual knowledge, sociocultural restrictions, and barriers to menstrual hygiene management in Ghana: Evidence from a multi-method survey among adolescent schoolgirls and schoolboys. *Plos one*. 2020 Oct 22;15(10):e0241106.
13. Benschaul-Tolonen A, Aguilar-Gomez S, Heller Batzer N, Cai R, Nyanza EC. Period teasing, stigma and knowledge: A survey of adolescent boys and girls in Northern Tanzania. *PloS one*. 2020 Oct 28;15(10):e0239914.
14. Chothe V, Khubchandani J, Seabert D, Asalkar M, Rakshe S, Firke A, Midha I, Simmons R. Students'



- perceptions and doubts about menstruation in developing countries: a case study from India. *Health promotion practice*. 2014 May;15(3):319-26.
15. Rajak I. She got her period: Men's knowledge and perspectives on menstruation. Minnesota State University, Mankato; 2015.
  16. Kotecha PV, Patel S, Baxi RK, Mazumdar VS, Misra S, Modi E, Diwanji M. Reproductive health awareness among rural school going adolescents of Vadodara district. *Indian journal of sexually transmitted diseases and AIDS*. 2009 Jul;30(2):94.
  17. Mahon T, Tripathy A, Singh N. Putting the men into menstruation: the role of men and boys in community menstrual hygiene management. *Waterlines*. 2015 Jan 1:7-14.
  18. Amann-Gainotti M. Sexual socialization during early adolescence: The menarche. *Adolescence*. 1986 Oct 1;21(83):703.
  19. Allen KR, Kaestle CE, Goldberg AE. More than just a punctuation mark: How boys and young men learn about menstruation. *Journal of Family Issues*. 2011 Feb;32(2):129-56.
  20. Dhanalakshmi N. The Assessment of Knowledge, Beliefs and Practices of Adolescent Girls and the Effect of a Structured Teaching Programme in Knowledge and Beliefs Regarding Menstruation, Pregnancy and Sexual Behaviour in Selected Areas of Pediatric Wards, the Out Patient Department and Medicine OPD of Christian Medical College, Vellore. *Asian Journal of Nursing Education and Research*. 2015 Apr 1;5(2):172.
  21. Savita G, Ranjitha DS. To Assess the Effectiveness of Planned Teaching Programme on Knowledge and Practices Regarding Menstrual Hygiene among the Adolescent Girls in Selected Govt. School of Delhi. *International Journal of Nursing Education*. 2017 Jul 1;9(3).
  22. Savita G, Ranjitha DS. To Assess the Effectiveness of Planned Teaching Programme on Knowledge and Practices Regarding Menstrual Hygiene among the Adolescent Girls in Selected Govt. School of Delhi. *International Journal of Nursing Education*. 2017 Jul 1;9(3).
  23. Kole U, Anuchitra S. A study to evaluate the effectiveness of planned teaching programme on impact of early marriage, pregnancy among adolescent girls in selected rural high schools of Belgaum, Karnataka. *Asian Journal of Nursing Education and Research*. 2014;4(1):61-9.
  24. Asma KM. A Study to Assess the Effectiveness of Planned Teaching Programme on Management of Dysmenorrhoea in Terms of Knowledge and Attitude among Adolescent Girls Studying in selected Schools of Gujarat State. *International Journal of Nursing Education and Research*. 2016;4(2):116-8.

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