

A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge and Attitude of Adolescent Girls Regarding Menstrual Hygiene Management

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Abstract- A study to assess the effectiveness of structured teaching program regarding the knowledge and attitude of adolescent girls regarding Menstrual Hygiene Management at selected schools of Uttar Pradesh was undertaken by Clinical Instructor Anugrah Charan, Staff Nurse Shanthi A Thomas at Nightingale Institute of Nursing, NOIDA, Chaudhary Charan Singh University, Meerut during the year 2013-2014. The objectives of the study were: 1. Develop a structured teaching program for adolescent girls regarding menstrual hygiene management. (2). Assess and evaluate the knowledge of adolescent girls regarding menstrual hygiene management. (3) Assess and evaluate the attitude of adolescent girls regarding menstrual hygiene management. (4) Seek the relationship between post-test knowledge scores and post-test attitude scores of adolescent girls regarding menstrual hygiene management. An evaluative research approach was considered to be appropriate for the present study, and the research design adopted was one group pretest and post-test research design. In this study, the independent variable was the Structured Teaching Programme regarding Menstrual Hygiene Management, and the dependant variable was Knowledge and Attitude levels of Adolescent girls regarding Menstrual Hygiene Management. The population of the present study includes 30 Adolescent Girls studying in G S Model School NOIDA. The purposive sampling technique was used for selecting Adolescent Girls. Based on the objectives of the study, the following instrument was developed in order to generate the data. (1). Structured Knowledge Questionnaire. (2). Attitude Scale. . The tools along with rating scale were submitted to the 7 experts from the field of nursing. . Pilot study was conducted from 10/03/14 to 12/03/14 on 10 adolescent girls, followed by the final study. Analysis and interpretation of data were based on the objectives of the study. Data were analyzed and interpreted using both descriptive and inferential statistics in terms of frequencies, percentages, correlation. The findings of the study had several implications on nursing practice, nursing research, nursing education, and nursing administration. Based on the findings, recommendations for further

research were made. The results of the study showed that Most of the Adolescent girls-18 (60%) were in the age group of 13-14 years. Majority of samples [83.3%] were informed about periods, and [16.6%] were not informed, [83.3%] were informed about menstrual hygiene, and [16.6%] were not informed about menstrual hygiene. Majority of the samples [90%] use sanitary pads during periods, and [10%] use cloth pads. Structured Teaching Programme was effective in enhancing the knowledge and changing the attitude of adolescent girls regarding Menstrual Hygiene and Management.

Keywords: Knowledge, attitude, adolescent girls, Menstrual hygiene, Management.

I. INTRODUCTION

In many countries, the concept of a transitional period between childhood and adulthood is relatively new. During this period known as Adolescence, individuals move toward physical and psychological maturity and economic independence and acquire their adult identity.

Adolescent Girls constitute about 1/5th total female population in the world. Adolescence in girls has been recognized as a special period in their life cycle that requires specific and special attention.[1]

WHO has defined Adolescence as the period between 10 – 19 years of life.[2]

India has one of the fastest-growing youth populations in the world, with an estimated 190 million adolescent girls below 19 years of age comprise one-quarter of India's rapidly growing population.[3]

The onset of adolescence is usually associated with the commencement of puberty and the appearance of secondary sex characteristics. It is also a formative stage in terms of sexual and reproductive maturity, which influences one's reproductive health and wellbeing throughout life. During the whole period of adolescence, Menarche is the most important event in the life of an adolescent girl.



Menarche is considered to be the first menstrual period that occurs between the age of 12 – 15 years and is an important landmark of a women's life. Menarche marks the beginning of a multitude of physical, physiological, and psychological changes in the life of adolescent girls.[4]

Menstruation is a phenomenon unique to females. Menstruation is not an illness. It is a healthy, normal, and mature process.

The menstrual cycle is the scientific term for the physiological changes that can occur in fertile women for the purpose of sexual reproduction and fertilization. Menstruation is monthly uterine bleeding for 3- 5 days after 28 days from puberty till menopause.

Personal Hygiene to be followed during menstruation is to use sterile pads during the early period of heavy flow, bath daily for comfort and feel fresh, keep perineal area clean from anterior to posterior, cotton undergarments preferred. Hygiene-related practices of women during menstruation are of considerable importance, as it has a long-lasting impact on health, and if it is a negative impact, then it can cause 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 suffering from RTI, and its complications and infections are often transmitted to the offspring of the pregnant mother.

Menstruation and menstrual practices are still clouded by taboos and socio-cultural restrictions resulting in adolescent girls remaining ignorant of the scientific facts and hygienic health practices, which sometimes result in adverse health outcomes.

Myths, superstitious beliefs, and cultural taboos substitute appropriate information in the adolescent.[5] Menstrual education is a valid aspect of health education. Adolescent Girls constitute a valuable group, particularly in India; a female child is a neglected one. Menstruation is still regarded as something unclean or dirty in Indian society.[6] The reaction to menstruation depends upon awareness and knowledge about the subject, the menarche. Although menstruation is a natural process, it is linked with several misconceptions and practices.

II. NEED FOR THE STUDY

Today's adolescents (24%) are tomorrow's adults who are the strength of the Nation.

The word adolescent is derived from the Latin word Adolescence which means to grow in maturity. Adolescence is a dynamic face of development in the life of an individual. WHO considers adolescence to be the period between 10 to 19 years which generally

encompasses the time from the onset of puberty to the full legal age. Half of the adolescence age 12 to 15 years residing in 9 to 12th standard doesn't know about menstruation until its onset, and the girl's menarche is started during this period.[7]

Menstrual practices are clouded by taboos and socio-cultural restrictions even today, resulting in adolescent girls remaining ignorant of the scientific facts and hygienic health practices necessary for maintaining positive reproductive health.

III. MATERIALS AND METHODS

A. Research Methodology

The purpose of the present study is to accomplish the research objective that is to assess the effectiveness of structured teaching programs regarding the knowledge and attitude of adolescent girls regarding Menstrual Hygiene Management.

B. Research Approach

An evaluative research approach is considered to be appropriate for the present study.

C. Research Design

Research design is an overall plan for collecting and analyzing data, including specialization for enhancing the internal and external validity of the study. Research design for this study is one group pretest and post-test research design.

D. Variables

a) Independent variable - In this study, the independent variable was the Structured Teaching Programme regarding Menstrual Hygiene Management.

b) Dependent Variable -In this study, the dependant variables were Knowledge and Attitude levels of Adolescent girls regarding Menstrual Hygiene Management.

c) Setting

The setting is the physical location and condition in which data collection takes place in a study. In this study setting is GS Model School, NOIDA.

d) Population

The need for identifying a population for the research project arises from the requirement to specify the group to which results of the study will be applied.

The population of the present study includes Adolescent Girls studying in G S Model School NOIDA.

e) Sample and Sampling technique

The sample of the present study comprised of 30 Adolescent Girls studying in G S Model School NOIDA.

f) Sampling technique

The purposive sampling technique was used for selecting Adolescent Girls.

g) Criteria for selection of sample included:-

- Adolescent girls who were willing to participate in the study
- Adolescent girls who were available during the data collection period.

E. Sample Size

For the final study, a total of 30 Adolescent girls were selected as samples.

F. Data collection tools and techniques

The most important and crucial aspect of any investigation is the collection of appropriate information, which provides necessary data for the study

G. Based on the objectives of the study, the following instruments were developed in order to generate the data:

1. Structured Knowledge Questionnaire
2. Attitude Scale

Table 1: Summary of data collection tools and techniques

Sl.no	Tool	Purpose	Technique
1.	Structured knowledge questionnaire Sec A Part 1: Demographic data Part 2: Total knowledge items (20 multiple choice questions)	To assess the knowledge of adolescent girls regarding menstrual hygiene management	Paper, pencil
2.	Section B: Attitude scale Total statements: 10	To assess the attitude of adolescent girls regarding menstrual hygiene management	Paper, pencil

H. Description of Structured Knowledge Questionnaire**a) Sec A: Demographic data**

It includes the demographic characteristics of the samples such as the age of the student, mother's qualification, family income, age of menarche, were informed about periods, were you informed about menstrual hygiene, source of information, duration of periods, any problems facing during menstruation.

b) Sec B: Multiple Choice Questions:

It considers 20 knowledge items [multiple choice types]. Each item had one correct response, and the score of one [1] was assigned to a correct response, and zero [0] was assigned to each wrong answer. The total score of the questionnaire was 20.

c) Description of attitude scale**Sec C: Attitude scale**

An attitude scale was developed to assess the attitude of adolescent girls regarding menstrual hygiene management. The attitude scale consists of items

concerning attitude-related issues. 10 statements were developed for the respondents to respond on a 3 point scale that is – agree, uncertain, and disagree with the statements. Each statement in the attitude aspect of favor or against. Each respondent was required to give her opinion for each of the statements.

IV. RESULTS AND DISCUSSION

The chapter deals with the analysis and interpretation of the data collected to evaluate the effectiveness of a structured teaching program on knowledge and attitude of adolescent girls regarding menstrual hygiene management at selected schools of UP. The data were collected using a structured knowledge questionnaire and attitude scale. It was analyzed and interpreted by using descriptive statistics based on the objective of the study. Data were tabulated and summarized in the master datasheet. The purpose of data analysis is to organize the data into interpretable forms so that research problems can be studied and tested.

SECTION I**Table-2 Frequency and Percentage Distribution of Sample by their Characteristics**

S. No.	Sample Characteristics	Frequency	Percentage
1.	Age of the adolescent girls		
	11-12 yrs	-	-
	13- 14 yrs	18	60%
2.	Mother's Educational Qualification		
	a. Higher secondary	12	40%

N=30

	b. Senior Secondary c. Graduate d. Post Graduate e. Others	10 10 5 3 2	33% 33% 17% 10% 6.6%
3.	Family Income a. Less than 20,000 Rs b. 20,000- 40,000 Rs c. 40,000-60,000 Rs d. More than 60,000 Rs	2 8 9 11	6.6% 26.6% 30% 36.6%
4.	Religion a. Hindu b. Christian c. Muslim d. Others	30 - - -	100% - - -
5.	Were informed about periods a. Yes b. No	25 5	83.3% 16.6%
6.	Were you informed about menstrual hygiene? a. Yes b. No	25 5	83.3% 16.6%
7.	Source of Information a. Mother b. Media c. Peer Group d. Relatives	26 - 4 -	86.6% - 13.3% -
8.	Duration of Periods(in days) a. 3- 5 days b. 6- 8 days c. 8-10 days	24 6 -	80% 20% -
9.	Any problems faced during menstruation. (Pain abdomen, Vomiting, Headache) a. Yes b. No	20 10	66.6% 33.3%
10.	What did you use during periods? a. Cloth pads b. Sanitary pads	3 27	10% 90%

SECTION- II

Findings Relating to Evaluation of Effectiveness of STP in terms of Knowledge

This section describes the findings relating to the evaluation of the effectiveness of STP in terms of knowledge of Adolescent Girls regarding Menstrual Hygiene Management.

Table-3 Mean, Median, Standard deviation of pre-test & post-test knowledge scores

N=30

Knowledge Scores	Mean	Median	Standard deviation
• Pre-test	9.93	9.5	5.76
• Post-test	17.2	17	1.34

Maximum score = 20

Table 4: Mean, Mean difference, Standard deviation of the difference, Standard Error of Mean difference of pre-test and post-test knowledge scores

N=30

Knowledge Scores	Mean	Mean _D	SD _D	SE _{MD}	t Value
Pre test	9.93				
Post test	17.2	7.27	4.42	1.079	6.73

Df =29, P<0.05 level of significance “t” = 2.73

SECTION III***Finding relating to evaluation of the effectiveness of Structured Teaching Programme in terms of attitude***

This section describes the findings relating to the evaluation of the effectiveness of the Structured Teaching Programme in terms of the attitude of adolescent girls regarding menstrual hygiene management.

Table - 5 Mean, median, the standard deviation of pre-test and post-test attitude scores

N = 30

Practice scores	Mean	Median	Standard Deviation
Pretest	24.8	24	2.67
Post test	28	28	1.66

Max score: 20

Table – 6 Mean, mean difference, the standard deviation of the difference, standard error of the mean difference of pretest and post-test attitude scores

N=30

Attitude score	Mean	Mean _D	SD _D	SE _{MD}	t value
Pretest	24.8				
Posttest	28	3.2	1.01	0.573	5.58

Df= 29, P<0.05 level of significance, t= 2.73

SECTION –IV**Table – 7 Correlation between knowledge scores and attitude scores of Adolescent girls**

Variable	Mean	SD	“r”
Post-test knowledge scores	17.2	1.34	
Post-test attitude scores	28	1.66	0.28

The findings in the table show that the Coefficient of Correlation between Post-test Knowledge scores and Post-test Attitude scores of adolescent girls was 0.28, indicating a significant relationship between the post-test knowledge scores and post-test attitude scores at a 0.05 level of significance. The findings suggested that there was a marked relationship between the Post-test Knowledge scores and Post-test Attitude scores of adolescent girls regarding Menstrual Hygiene and Management.

V. SUMMARY OF FINDINGS

- The mean post-test knowledge score (17.2) is higher than the mean pre-test knowledge score (9.93).
- Mean post-test attitude scores (28) are higher than the mean pre-test attitude scores (24.8).
- The coefficient of Correlation between Post-test Knowledge scores and Post-test Attitude scores of Adolescent girls was 0.28.

- The structured Teaching Programme was effective in enhancing the knowledge and changing the attitude of adolescent girls regarding Menstrual Hygiene and Management.

VI. DISCUSSION

- The researcher in this study tested the effectiveness of the Structured Teaching Programme on knowledge and attitude of adolescent girls regarding menstrual hygiene management at selected schools of U.P.
- The findings of the present study revealed that initially, the adolescent girls had a low level of knowledge and negative attitude regarding menstrual hygiene and management as evident from mean pretest knowledge scores [9.93] and mean pre-test attitude scores [24.8] after exposing them to the STP the adolescent girls score that is the mean post-test knowledge scores [17.2] and mean post-test attitude

scores [28] were significantly higher than the pre-test knowledge scores and attitude scores.

- There was a positive correlation between the post-test knowledge scores and pre-test attitude scores. The STP was found to be effective in increasing the knowledge and attitude of adolescent girls.

VII. CONCLUSIONS

The following conclusions were drawn on the basis of the finding of the study.

- A deficit in knowledge was found regarding menstrual hygiene and management in adolescent girls at selected schools of U.P.
- There was a significant positive correlation between post-test knowledge scores and attitude scores.
- Thus the Structured Teaching Programme regarding menstrual hygiene and management was effective in terms of

enhancing the knowledge as well as attitude of adolescent girls.

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