

A Study to Evaluate the Effectiveness of Video-assisted Teaching Programme on Various Menstrual Products among Adolescent Girls in Selected Colleges at Raipur, Chhattisgarh

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ABSTRACT

BACKGROUND OF THE STUDY: Menstruation and menstrual practices still face many social, cultural, and religious restrictions which are a big barrier in the path of menstrual hygiene management. In many parts of the country especially in rural areas girls are not prepared and aware about menstruation so they face many difficulties and challenges at home, schools, and work places. While reviewing literature, we found that little, inaccurate, or incomplete knowledge about menstruation is a great hindrance in the path of personal and menstrual hygiene management. Girls and women have very less or no knowledge about reproductive tract infections caused due to ignorance of personal hygiene during menstruation time. In rural areas, women do not have access to sanitary products or they know very little about the types and method of using them or are unable to afford such products due to high cost. So, they mostly rely on reusable cloth pads which they wash and use again. Needs and requirements of the adolescent girls and women are ignored despite the fact that there are major developments in the area of water and sanitation. Women manage menstruation differently when they are at home or outside; at homes, they dispose of menstrual products in domestic wastes and in public toilets and they flush them in the toilets without knowing the consequences of choking. So, there should be a need to educate and make them aware about the environmental pollution and health hazards associated with them. Implementation of modern techniques like incineration can help to reduce the waste. Also, awareness should be created to emphasize the use of reusable sanitary products or the natural sanitary products made from materials like banana fibre, bamboo fibre, sea sponges, water hyacinth, and so on.

STATEMENT OF THE PROBLEM: A Study to Evaluate the Effectiveness of Video-Assisted Teaching Programme on Various Menstrual Products Among Adolescent girls in Selected Colleges at Raipur, Chhattisgarh

OBJECTIVES:

- To Assess the pre test and post-test knowledge among Adolescent College Girls Regarding Various Menstrual Products.
- To Evaluate the Effectiveness of Video-Assisted teaching programme Regarding Various Menstrual Products Among Adolescent College Girls.
- To find out the Significant Association between pre- test Knowledge Score of Adolescent College Girls Regarding Various Menstrual Products with their selected Demographic variable.

HYPOTHESIS:

- **H₁:** There is Significant Enhancement in the post-test knowledge score regarding Various Menstrual Products among Adolescent Girls in Selected Colleges at Raipur, Chhattisgarh.
- **H₂:** There is Significant Association between pre test knowledge score of Adolescent Girls regarding Various Menstrual Products with their selected Demographic variables.

METHODOLOGY: An extensive review of literature was undertaken. The conceptual framework adopted in this study is based on Imogene-Kings Goal Attainment Theory. A quantitative research approach is used. One group pre and post-test research design was used. The research tool was prepared with structured knowledge questionnaire with 34 knowledge questions to collect the data. Tool was prepared in English. The tool was found reliable ($r=0.87$) by using split half method of reliability testing. A pilot study was done on 10 Adolescent college girls to find out the feasibility of the study. Balaji College of Nursing was selected for the main study, purposive sampling technique was adopted to select 60 samples of adolescent college girls receiving Video-Assisted teaching programme about regarding Various Menstrual Products. Data collection was analyzed by using descriptive statistics and Karl Pearson and chi square test and “z” test were used in inferential statistics.

RESULT: The study reveals that Video-Assisted teaching programme is effective in improving the knowledge regarding various menstrual products among Adolescent College Girls, The data depicts that mean post test knowledge score 22.3 was higher than mean pretest knowledge score 13.7, which was found by using z test (10.26). Hence the z test calculated value is more than ($z < 0.05$) the tabulated value. On the basis of this the research hypothesis (H₁) was accepted. This indicates that the Video-Assisted teaching programme was effective in increasing the level of knowledge of subjective girls. The association between the mean pre test knowledge score of Adolescent College Girls with their selected demographic was found by using Chi square test at 0.05 level of significant. The findings shows that there is significant association with Age in Years, Social status, Area of Residence, Number of girl siblings, Type of family, and Source of information at 0.05 level of significant in chi-square test ($p > 0.05$), and research hypothesis (H₂) is accepted.

CONCLUSION: The present study evaluate the Effectiveness of Video-Assisted Teaching programme on knowledge regarding Various Menstrual Products among Adolescent Girls in Balaji College of Nursing, Raipur (C.G) the result of the study concluded that the Video-Assisted teaching programme is effective in improving the knowledge Regarding Various Menstrual Products Among Adolescent girls.

Keywords: Adolescent College Girls, Menstrual Products, Effectiveness, Video-Assisted teaching programme.

INTRODUCTION

Menstruation is the normal physiological process, which each and every normal woman faces through out her reproductive age period. It is a phenomenon unique to the females. The onset of menstruation is one of the most important changes occurring among the girls during the adolescent years. The first Menstruation (Menarche) occurs between 11 and 15 years with a mean of 13 years. Over decades our Indian women have been taught that having periods is shameful. No mother or elder woman teach about Menstrual Hygiene practice to their daughter or youngers. Many girls attain their Menarche during the school hours and return back to their houses without help.

Menstrual pads have been mentioned in history as early as the 10th century in Ancient Greece, where a

woman is said to have thrown one of her used menstrual rags at an admirer in an attempt to get rid of him. Before the disposable pad was invented, most women used rags, cotton, or sheep's wool in their underwear to stem the flow of menstrual blood. The very first disposable pads were thought up by nurses, looking for new methods to stop excessive bleeding, particularly on the battlefield. The first pads were made from wood pulp bandages by nurses in France. Commercial manufacturers borrowed this idea and the first disposable pads were available for purchase came as early as 1888 called the Southball pad. In America, Johnson & Johnson developed their own version in 1896 called Lister's Towel: Sanitary Towel's for Ladies.

According to World Health Organization (2014) there are about 74% of college going girls had suffered with Reproductive tract infection due to improper use of Menstrual products. The poor Menstrual Hygienic products also leads to several problem among college going girls which include dropped out from the college inability to continue the education and reduction of self-esteem. It occurs because the girls don't practice Menstrual Hygiene products and don't have accessibility for Sanitary napkin.

NEED FOR THE STUDY

Use Menstrual Hygiene products is important to be practiced by the college going girls to promote their health and prevent illness. Inadequate Menstrual hygiene management is connected with the use of cloth, ashes and husk sand during menstruation, thereby it causes severe Reproductive Health problem.

According to UNICEF, Globally, 2.3 million people live without basic sanitation services and in developing countries, only 27% of people have adequate facilities at home. Not being able to use these facilities makes it harder for women and young girls to manage their periods safely and with dignity. Government agencies can take help of female health workers to increase the awareness and assist the use of this device and thus improving the menstrual hygiene at lower cost which will be of significant importance in developing countries like India. And in India, only 12% of menstruators have access to sanitary products, leaving the rest to use unsafe materials like rags and sawdust as an alternative, the Indian ministry of health reported.

The biggest barrier to adopt the quality of Sanitary napkin in India are lack of affordability and accessibility as reported by him there are about 70% of school girls and their the family cannot affords Sanitary napkin. It is further supported by the report of **Times of India (2014)** which unveiled that 50% of the girls who dropped out the college are due to lack of sanitary napkin, coupled with lack of separate toilet facilities and water resources within the college campus. Many studies have reported that the girls, who were unable to afford sanitary napkin they miss college in order to avoid the embarrassment of staining the clothes. Many studies, across India have reported poor Menstrual Hygiene practice among girls in that majority of them are at risk for Reproductive tract infections.

OBJECTIVES OF THE STUDY

1. To Assess the pre-test and post-test knowledge among Adolescent Girls Regarding Various Menstrual Products.
2. To Evaluate the Effectiveness of Video-Assisted teaching programme Regarding Various Menstrual Products Among Adolescent Girls.
3. To find out the Association between pre- test Knowledge Score of Adolescent Girls Regarding Various Menstrual Products with their selected Demographic variable.

HYPOTHESIS:

H₁: There is Significant Enhancement in the post-test knowledge score regarding various Menstrual products among Adolescents girls in selected Colleges at Raipur.

H₂: There is Significant Association between the pre test knowledge score of Adolescent Girls regarding various Menstrual products with their selected Demographic variables.

METHODOLOGY

Research approach: A quantitative evaluative approach was adopted to the evaluate effectiveness of Video-Assisted teaching programme regarding various Menstrual products among Adolescent girls in selected colleges at Raipur, Chhattisgarh.

Research design: The research design selected for the study was an pre-experimental, one group pre-test post-test design.

Setting of the study: The study was conducted at Balaji College of Nursing, Raipur. The investigator selected place on the basis of feasibility of conducting the study and the availability of the samples. Balaji College of Nursing was situated 15 kilometers away from Raipur city. The place was accessible easily by road. It was a Nursing college with MSc, B.Sc. and Post Basic B.Sc. Nursing Courses for Students.

Population: Adolescent college girls who are studying in Shri Balaji institute of Nursing

Sample: The sample of present study include all the Adolescent girls studying in Shri Balaji Institute of Nursing and who met the inclusion criteria.

Sample size: In this study, the Sample consisted of 60 Adolescent girls who met the inclusion criteria.

Sampling technique: Non-Random Sampling technique, convenience method was used to select the sample.

Criteria for sample selection:**Inclusion criteria:**

Girls who were:

1. Studying in Balaji College of Nursing
2. Were Adolescent girls (17-19 years)
3. Were able to read and write English or Hindi.
4. Were willing to participate in the study.

Exclusion criteria:

Girls who were:

1. Physically or mentally challenged
2. Absent during data collection.

Variables under study:

According to Polit & Hungler, (1999), variables are an attribute of a person or object that vary and take on different value within the population under study.

Independent variable: Video-Assisted Teaching Program on knowledge regarding various Menstrual products among Adolescent college girls.

Dependent variable: Knowledge level of Adolescent girls related to various menstrual products.

Demographic variable: Demographic Variable describes the attributes of study subjects that may indirectly influence the dependent variable or the research study are termed as demographic Variables.

In this study, the demographic variables are as Age of the Adolescent girls, Religion, Educational status, Type of family, Area of Residence, Social class, Number of girl siblings, Type of Educational institution, and Source of Information.

Reliability of tool: The reliability was tested by split-half method for the internal consistency. The scale was first divided into two equivalent halves by taking odd and even items and administered to 17 Adolescent girls. The score was calculated for each halves for the 17 Adolescent girls then correlation for the both half tests was found using Karl Pearson's Correlation Coefficient formula. The reliability coefficient of the whole test was then estimated using Spearman Brown Prophecy formula. The value found as 0.09 so the rating scale is found reliable.

RESULT

The study reveals that Video-Assisted Teaching programme is effective in improving the knowledge regarding various Menstrual products among Adolescent girls. The data depict that mean post test knowledge score 13.3 was higher than mean pre test knowledge score 12, which was found by using 'Z' test (11.85). Hence the 'Z' test calculated value is more than ($z < 0.05$) the tabulated value. On the basis of this the research hypothesis (H_1) was accepted. This indicates that the Video-Assisted Teaching programme was effective in increasing the level of knowledge of subjective girls. The association between the mean pre test knowledge score of Adolescent girls with their selected demographic was found by using Chi square test at 0.05 level of significant. The findings shows that there is significant association with Age in Years, Social status, Area of residence, Number of girl siblings, Type of family and Source of information at 0.05 level of significant in chi-square test ($p > 0.05$), and research hypothesis (H_2) is accepted.

Table No 1: Frequency and Percentage distribution of Adolescent girls according to socio demographic variables.

N = 60

S. No	Demographic variables	Frequency (f)	Percentage (%)
1	Age in years		
	a. 17	17	29%
	b. 18	22	36%
	c. 19	21	35%
2	Religion		
	a. Hindu	20	33%
	b. Christian	8	14%
	c. Muslim	18	30%
	d. Others	14	23%
3	Educational status		
	a. Diploma	32	54%
	b. Graduate	28	46%
4	Social class		
	a. Upper	20	34%
	b. Middle	15	25%

	c. Lower	25	41%
5	Area of residence		
	a. Rural	28	46%
	b. Urban	32	54%
6	Number of girl siblings		
	a. Nil	34	56%
	b. One	16	26%
	c. More than one	10	18%
7	Type of Family		
	a. Nuclear	42	70%
	b. Joints	18	30%
8	Preference of menstrual product		
	a. Menstrual pads	34	56%
	b. Tampons	6	10%
	c. Menstrual cups	15	25%
	d. Clean clothes	5	9%
9	Source of information		
	Friends	42	70%
	Family members	6	10%
	Teachers	4	7%
	Media	8	13%

Table 1 : Depicts the demographic information such as Age in years, religion, educational status, social class, area of residence, number of girl siblings, type of family, preferred menstrual products and source of information of Adolescent girls those who are participated in the present study.

Table 3: Mean, Mean percentage, Mean difference and Mean percentage difference of pre and post test knowledge among adolescent girls.

N= 60

Knowledge Level	Mean	Mean percentage (%)	Mean Difference	Meandifference Percentage(%)	SD
Pre test	12	35.2%	1.3	3.9%	91.4
Post test	13.3	39.1%			101.5

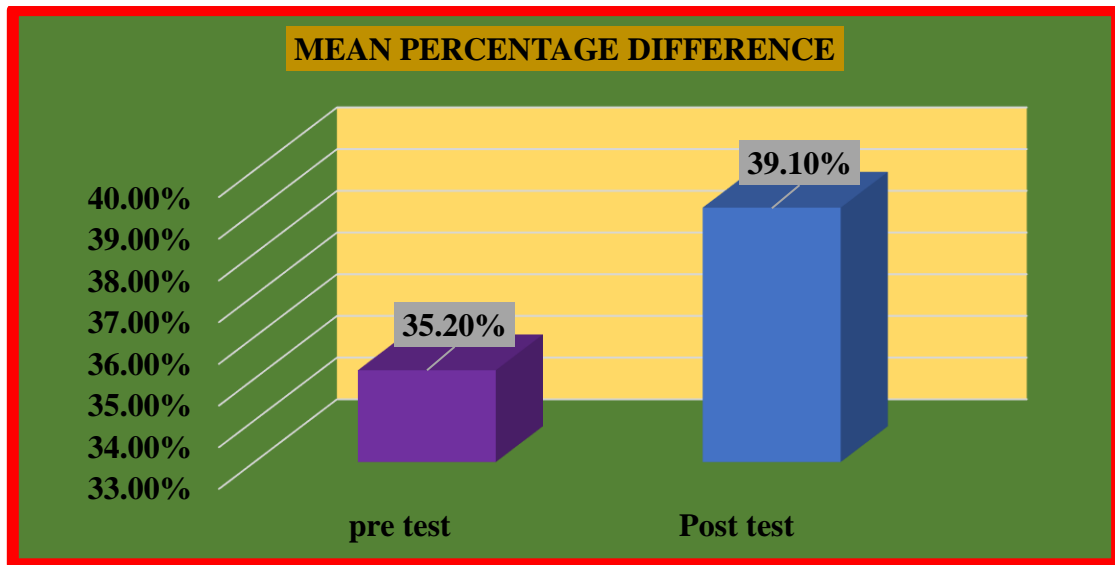


Figure 5: Bar diagram showing the percentage distribution of mean percentage difference between pre and post test knowledge.

Table 4: Z-test value shows the Effectiveness of Video-Assisted Teaching programme.

N= 60

Knowledge	Mean score	Mean percentage (%)	Mean difference	SD	SE	Z- test value		Inference
						Calculated	Table	
Pre Test	12	35.2%	1.3 (3.9%)	91.4	92	11.85	2.0	P<0.05
Post Test	13.3	39.1%		101.5				Significant

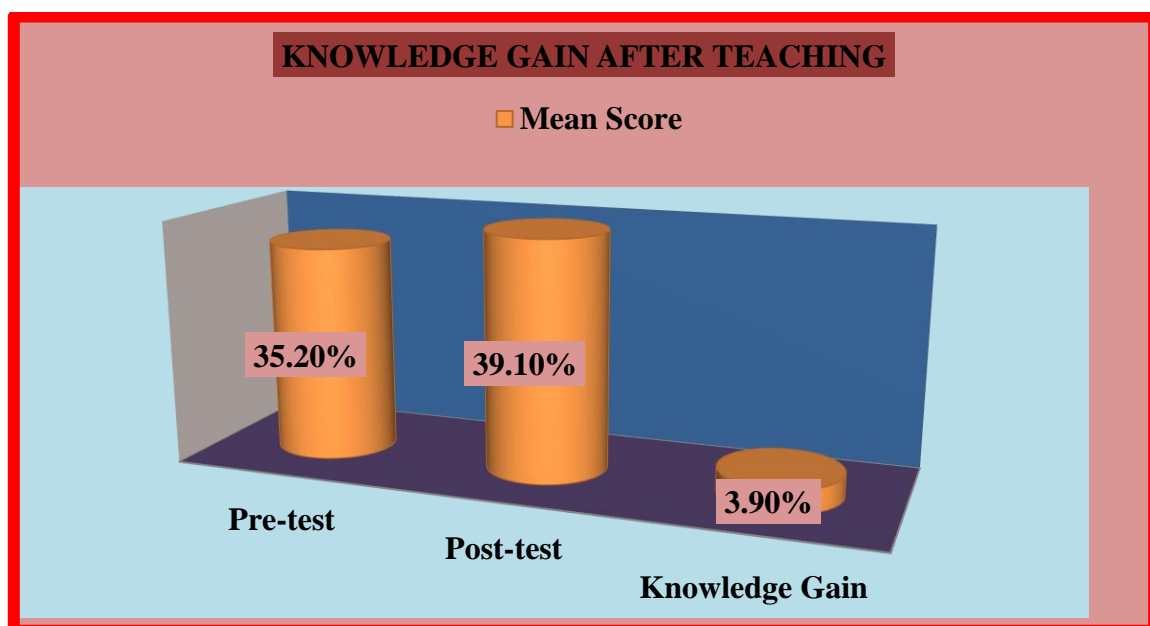


Figure 6: Stacked cylinder diagram showing the percentage of overall gain in knowledge.

DISCUSSION:

According to first Research objective, to assess the pre test and post-test knowledge level among adolescent girls regarding various menstrual products. The findings shows that the difference in over all pre and post test knowledge score of Adolescent girls regarding various Menstrual products was concluded as, majority of Adolescent girls in pre test 31(52%) have poor knowledge, 19(32%) have average knowledge, 5(8%) having good, 5(8%) having excellent knowledge, and in post test 26(43%) having excellent knowledge, 25(42%) having good knowledge, 5(8%) have average knowledge and 4(07%) having poor knowledge. Under Pre-test the Mean of the Scores was 12(35.2%) and under the Post-test the Mean was observed as 13.3(39.1%) and the overall difference was of 1.3 (3.9%).

The mean pre test was 12 and the mean post test was 13.3. The difference in the knowledge level was calculated by 'Z' test and the calculated value is 11.85 ($p < 0.05$) which is higher than the table value. On the basis of this it is concluded that Video-Assisted Teaching programme was highly effective in improving knowledge regarding various Menstrual products.

Thus second Research objective to evaluate the effectiveness of VATP regarding various Menstrual products. On the basis of this the research hypothesis (H_1) was accepted.

CONCLUSION:

Based on the findings of the study the following conclusions were derived

- There is less knowledge regarding various Menstrual products among Adolescent girls in selected areas of Raipur.
- Video-Assisted Teaching Programme was Effective Regarding Various Menstrual products Among Adolescent girls.
- There is an Association between the pre-test mean knowledge and selected Demographic variables.

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