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# EVALUATE THE KNOWLEDGE AND ATTITUDE REGARDING THE USE OF MENSTRUAL CUP DURING MENSTRUATION AMONG GNM NURSING 2<sup>ND</sup> YEAR STUDENTS (20-21 YEARS) AT KIMS COLLEGE OF NURSING AMALAPURAM.

## AFFILIATION DETAILS

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## **ABSTRACT**

A quasi experimental study was conducted "A study to evaluate the effectiveness of video assisted teaching programme on knowledge and attitude regarding the use of menstrual cup during menstruation among GNM Nursing 2<sup>nd</sup> year students (20-21years) at KIMS College of Nursing, Amalapuram."

## **OBJECTIVES OF THE STUDY:**

- To assess the knowledge and attitude regarding the use of menstrual cup during menstruation among GNM Nursing 2<sup>nd</sup> year students.
- To evaluate the effectiveness of video assisted teaching programme on knowledge and attitude regarding the use of menstrual cup during menstruation among GNM Nursing 2<sup>nd</sup> year students
- To associate the post-test level of knowledge and attitude scores regarding the use of menstrual cup during menstruation with selected demographic variables.

The reason approach used for this study was quasi approach and the design selected Pre experimental study with one group pre test-post test design. A total of 50 nursing students were participated in the study. The data was entered in the master sheet for analysis and interpretation. Descriptive and inferential statistical

procedures such as frequencies, percentages, mean, standard deviation, paired t-test and chi square tests were use

## **KEY WORDS**

SD- standard deviation

f - frequency

df - degree of freedom

% - percentage

H - hypothesis

## INTRODUCTION

## BACK GROUND OF THE STUDY:

"MENSTRUATION IS A SMALL PRICE YOU PAY BEING BLESSED WITH THE GRANDEST GIFT YOU CAN EVER WISH FOR, AND THAT IS, TO HAVE THE PRIVILAGE TO GIVE BIRTH." Menstruation is the normal biological process by experiencing millions of women and girl around the world each month. Girls and women need effective, safe, and affordable menstrual products. Menstruation is a normal body function and a sign of reproductive health. Sanitary pad prevents skin from breathing, so they can get irritation of the skin if used constantly. Sanitary napkins are very harmful and its cancer causing Of course these pads will not cause cancer right away, but using them again and again for years can potentially increase the risk of cancer. Some sanitary napkins carry BPA (Bisphenol A) along with other chemicals.A menstrual cup is a menstrual hygiene device which is inserted into the vagina during menstruation. Its purpose is to collect menstrual fluid (blood from the uterine lining mixed with other fluids). Menstrual cups are usually made of flexible medical grade silicone, latex, or a thermoplastic isomer. They are shaped like a bell with a stem or a ring. The stem is used for insertion an removal, and the bell-shaped cup seals against the vaginal wall just below the cervix and collects menstrual fluid. This is unlike tampons and menstrual pads, which absorb the fluid instead. Every 4–12 hours (depending on the amount of flow), the cup is removed, emptied, rinsed, and reinserted. After each period, the cup requires cleaning. A menstrual cups are reusable, they generate less solid waste than tampons and pads, both from the products themselves and from their packaging Most menstrual cup brands sell a smaller and a larger size. Menstrual cups typically do not leak if used properly, though incorrect placement or inadequate cup size can cause some women to experience leakage. Women use cloths, absorbent pads or tampons to manage menstrual flow. Cups are often perceived as better than pads or cloths in relation to ease and avoid of washing, drying and storing, comfort, leakage protection, odour development, quality and length of wearing of cups. Soap for hand washing and a container for boiling and storing are required. It is often recommended that cups are rinsed with clean water after emptying and before re-insertion. The United Nations Defines Adequate Menstrual Hygiene Management (MHN) as "Women and adolescent girls using a clean menstrual management to observe or collect blood that can be change in privacy often as necessary for the duration of the menstruation period, using soap and water for washing. Girls can use up to 15,000 hygiene products in their life time. Based on research, the tampons are made upon cotton fibre and take 6 months to bio degrade, which is hazardous for the environment while cups

are re-usable. Which can hold 10-38ml of blood the menstrual cup should be emptied very 4-12 hours depending on menstrual flow and type of cup. Hence, it is more Eco-friendly. Since it can be used for five or more years, its more economical too.

## **METHODOLOGY**

- **3.1 RESEARCH APPROACH:** The investigator selected "Quasi experimental approach" as research approach on the basis of problem and objectives to be accomplished. in this study knowledge and attitude on the use of menstrual cup during menstruation among GNM Nursing 2<sup>nd</sup> Year students (20-21 years) at KIMS College of Nursing Amalapuram.
- **3.2 RESEARCH DESIGN:** quasi experimental study with one group pre test post test design was adopted for the present study
- 3.3 SETTING OF THE STUDY: KIMS, College of Nursing, Amalapuram.
- **3.4 SAMPLE SIZE:** 50 GNM Nursing 2<sup>nd</sup> year students in KIMS College of Nursing.
- 3.5 CRITERIA FOR SELECTING THE SAMPLE: The sample of this study includes all the GNM Nursing 2<sup>nd</sup> year students those who are in KIMS College of Nursing Amalapuram.

#### **Inclusion criteria:**

- GNM Nursing 2<sup>nd</sup> year students who are willing to participate in the study
- GNM Nursing 2<sup>nd</sup> year Students who can understand language Telugu or English
- GNM Nursing 2<sup>nd</sup> year Students those who are available at the time of data collection.

#### **Exclusion criteria:**

- GNM Nursing 2<sup>nd</sup> year Students those who are not willing to participate in the study
- GNM Nursing 2<sup>nd</sup> year Students those who are not available at the time of data collection
- GNM Nursing 2<sup>nd</sup> year Students who can't understand language Telugu or English
- **3.6 SAMPLE TECHNIQUE:** Simple random technique sampling was used in this study.
- **3.7 VARIABLES OF THE STUDY**: Variables are characteristics that vary among the subjects being studied. It is the focus of the study and reflects the empirical aspects of the concepts being studied, the investigator measures the variable.

**Dependent variable:** dependent variable is the response behaviour or outcome i.e predicted or explained in research. Changes in the dependent variable or presumed to be caused by the independent variable. In this study, level of knowledge and attitude practice of use of menstrual cup during menstruation among nursing students is the dependent variable.

**Independent variable:** independent variable is a variable which influence the dependent variable. In this study, video assisted teaching programme on the use of menstrual cup during menstruation among Nursing students is the independent variable.

**Demographic variables:** base line characteristics are gender, religion, occupation of the family, income of the family, type of house, place of living and source of information.

**3.8 DEVELOPMENT AND DESCRIPTION OF THE TOOL:** Tool development is the complex and time consuming process. It consists of defining the construct to be measured, formulating the items, assessing the items for content validity, estimating the reliability and conducting the pilot study. The tool used for research study was the structured knowledge questionnaire and the Video assisted teaching programme on the use of Menstrual cup during Menstruation among Nursing students.

## 3.9 METHOD OF DATA COLLECTION:

In the present study tool consisted of section-I, section-II

**Section-1:** it comprised or 7 items seeking information on demographic data such as gender, religion, occupation of the family, income of the family, type of house, place of living, source of information.

Section-2: it consisted of (30) structured questions on knowledge And Attitude regarding the use of menstrual cup during menstruation.

Scoring technique: the knowledge and attitude questionnaire consisted of (30) closed ended -multiple choice questions with a single correct answer. Every correct answer was accorded a score of one (1) and every incorrect / unanswered item was accorded zero(0). The maximum score on knowledge questionnaire was twenty(20).

- 3.10 VALIDATION OF THE TOOL: In order to measure the content validity, the developed tool was given to the experts for their opinion and suggestion. The suggestion of the experts was in cooperated in the final studies. After considering the experts suggestion, the tool was modified.
- **3.11 THE RELIABILITY OF THE TOOL:**Reliability is the degree of consistency and accuracy with which an instrument measures an attribute for which it is designed to measure.
- **3.12 DATA COLLECTION PROCEDURE:** In the present study, data was collected by using structured knowledge questionnaire prior to the data collection; necessary formal permission was obtained from the principal, KIMS College of Nursing, Amalapuram. The Data collection is done from 50 samples that were selected according to the criteria. All the selected students are requested to assemble in the classroom The investigators established rapport with people explained about purpose of data collection and nature of the study. The tool was distributed to 50 samples and data was collected. The total time taken to fill structured knowledge questionnaire is about 30 minutes. The researchers have not come across any difficulties during data collection.
- **3.13 PLAN FOR DATA ANALYSIS:** The data obtained were analyse in terms of objectives of the study using descriptive and inferential statistics.

The data was organized and presented under the following section.

**Section I**: Description of demographic variables of GNM nursing 2<sup>nd</sup> Year students. It was analysed by frequency and percentage distribution.

**Section II:** Analysis of pre-test and post-test knowledge and attitude scores of GNM nursing 2<sup>nd</sup> Year

students regarding use of menstrual cup during menstruation. It was analysed by frequency and standard deviation.

Section III: Effectiveness of video assisted teaching program regarding use of menstrual cup during menstruation among GNM Nursing 2<sup>nd</sup> Year students comparing pre-test and post-test scores. It was analysed by Mean, Standard Deviation and Paired t-test.

**Section IV**: Association between level of post-test knowledge scores of GNM Nursing 2<sup>nd</sup> Year students. with theirdemographic variables. It was analysed by Chi-square test

## ANALYSIS AND INTERPRETATION:

Data analysis based on following hypothesis:

- **H0** There will be no significant difference in knowledge and attitude scores between pre-test and post-test regarding knowledge and attitude among use of menstrual cup during menstruation among GNM Nursing 2<sup>nd</sup> Year students
- H<sub>1</sub>: There will be significant difference in pre-test and post-test knowledge and attitude on use of menstrual cup during menstruation among GNM nursing 2<sup>nd</sup> Year students.
- H<sub>2</sub>: There will be association between post-test knowledge and attitude on use of menstrual cup during menstruation with their demographic variables.
- The data was entered in the master sheet for analysis and interpretation. Descriptive and inferential statistical procedures such as frequencies, percentages, mean, standard deviation, paired t- test and chi square test was used.

Table-1

Frequency and Percentage Distribution of Demographic Variables Related to use of menstrual cup during menstruation among GNM Nursing2<sup>nd</sup> Year students.

S.NO	Demographic variables	Frequency (f)	Percentage (%)
1	Gender		
	Male	0	0
	Female	50	100%
2	Religion		
	Hindu	24	48%
	Christian	25	50%
	Muslim	0	0%
	Others	1	2%
3	Occupation		
	Daily labour	23	46%
	Private Employee	13	26%
	Government Employee	5	10%
	Others	9	18%
4	Income	5	
	Rs. Less than 5000	8	16%
	Rs. 5000-10000	13	26%
	Rs.10000-15000	11	22%
	Greater than 15000	18	36%
5	Type of House		
	Pucca House	25	50%
	Katcha House	18	32%
	Hut	1	2%
	Flat	8	16%
6	Place of Living		
	Rural	42	84%
	Urban	8	16%
7	Source Of Information		
	Mass Media	28	56%
	Family Members	12	24%
	Health Workers	8	16%
	Others	2	4%

The data presented in table-1, narrates the frequency and percentage distribution of demographic characteristics of GNM Nursing 2 nd year students at selected college of Amalapuram

**Gender**: With regard to gender 50 (100 %) participants are girls.

Religion: Regarding to religion 24 (48 %) of the participants belongs to Hindu, 25 (50 %) of the

participants belongs to Christian, 1 (2 %) of the participants belongs to others.

Occupation: Among 50 students 23 (46 %) of the participants parents were daily labour, 13 (26%) of the participants parents were private employees, 5 ( 10 % ) of the participants parents were Government employees and 9 (18 %) of the participants parents belongs to other occupations

**Income of the family**: Regarding to income of the family, 8 (16 %) of the participants had an income Rs. Less than 5000/- and 13 (26%) of the participants had an income of Rs. 5000 - 10000/- and 11 (22 %) of the participants had an income of Rs. 10000 - 15000/- and 18 (36%) of the participants had an income of Greater than 15000/-

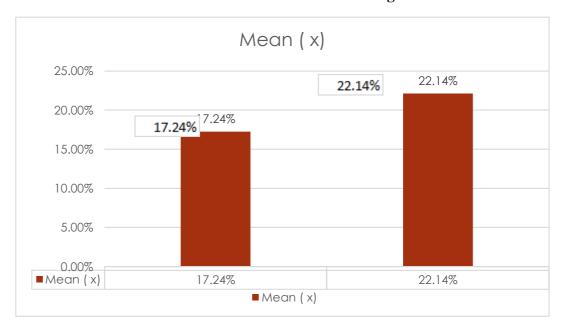
**Type of House**: Among 50 students, 25 (50%) of the participants living in pucca house, 16 (32%) of the participants living in katcha house, 1 (2%) of the participants living in huts, and 8 (16%) of the participants living in flats.

Place of Living: Among 50 participants, 42 (84 %) of the participants living in Rural areas and 8 (16%) of the participants living in urban areas.

Source of information: with regard to source of information, majority 28 (56%) of the participants obtained information from mass media followed by 12(24%) of the participants obtained information from family members and 8 (16%) of the participants obtained information from health workers while 2 (4%) of the participants obtained

#### **GRAPH-1**

Percentage distribution of knowledge regarding the use of menstrual cup by pre-test and post-test mean knowledge scores.



**Pre-Test and Post-Test Knowledge Mean scores** 

#### **GRAPH-2**

Percentage distribution of knowledge regarding the use of menstrual cup during menstruation by pretest and post-test standard deviation scores.

Standard Deviation (SD) 1.40% 1. 221% 1.20% 1.00% 0.80% 0.60% 0.40% 0.1615% 0.20%

**Pre-Test and Post- Test Knowledge Standard Deviation Scores** 

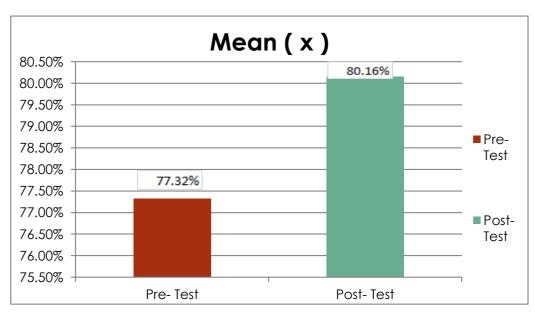
The above table shows that mean, standard deviation and the T-Test of Pre-test and Post - test knowledge scores. The pre-test scores were found to be 17.24, 1.221. the post - test mean and standard deviation scores was found to be 22.14 and 0.1615.

■ Pre - Test ■ Post- Test

#### **GRAPH-3**

0.00%

Percentage distribution regarding the use of menstrual cup during menstruation by Pre- Test and Post - Test mean attitude scores.

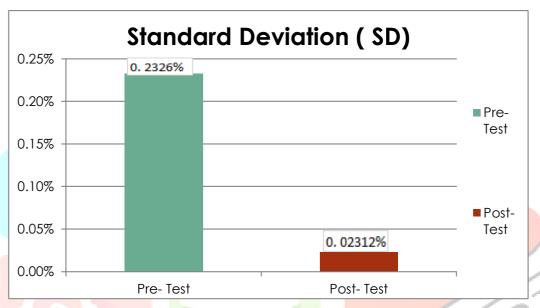


Pre-Test and Post- Test Attitude Mean Scores

Pre - Test

#### **GRAPH-4**

Percentage distribution regarding the use of menstrual cup during menstruation by pre- test and post - test standard deviation attitude scores.



Pre-Test and Post- Test Attitude Standard Deviation Scores

The above shows that Mean, Standard Deviation and the T- Test values of Pre- Test and Post- Test Attitude Scores. the pre - test score was found to be 77.32%, 0.2326% and post - test scores 80.16%, 0.02312 % respectively, which shows a significant difference between pre- test and post - test score on attitude.

## DISCUSSION

An quasi experimental study was conducted to evaluate the effectiveness of video assisted teaching on knowledge and attitude regarding the use of menstrual cup during menstruation among GNM Nursing 2<sup>nd</sup> year students at KIMS College of Nursing ,Amalapuram. The sample size was 50 GNM Nursing students. Data was collected by using video assisted form. The discussion of the study is based on findings obtained from the statistical analysis. The finding were discussed in relation to the objective of the study. Frequency and percentage distribution of nursing students according to their selected demographic variables. Related to out of 50 Nursing students, the knowledge and attitude was assessed in pre-test 13(26%) of the students had inadequate knowledge, 31(62%) had moderately adequate knowledge and 6(12%) had adequate knowledge regarding the use of menstrual cup during menstruation The second objective was to evaluate the effectiveness of video teaching programme on knowledge and attitude regarding the use of menstrual cup during menstruation among nursing students in selected nursing college at ,Amalapuram, In post-test knowledge scores, the majority of the students 36(72%) had adequate knowledge, 14(28%) had moderately adequate knowledge and none of them had inadequate knowledge. The pre-test and post-test knowledge mean were 17.24 and 22.14 respectively. The standard deviation of the pre-test and post-test knowledge was 1.221 and 0.1615 respectively. The statistical t- test value for knowledge was found to be 28.1147 This indicates

that video teaching programme was effective. The pre-test and post-test attitude mean were 73.32 and 80.16 respectively. The standard deviation of the pre-test and post-test attitude was 0.2326 and 0.02312 respectively. The statistical t- test value for knowledge was found to be 86.0084 This indicates that video teaching programme was effective The third objective was to find out the association of post-test knowledge scores regarding the use of menstrual cup during menstruation among GNM Nursing students in selected college, with their demographic variables. The study findings revealed that among 7 demographic variables. Gender, Religion, Occupation of the family, Income of the family, type of house, place of living and Source of information

## **CONCLUSION**

Out of 50 students, regarding to gender 50 (100 %) participants are girls. Regarding to religion 24 (48 %) of the participants belongs to Hindu, 25 (50 %) of the participants belongs to Christian, 1 (2 %) of the participants belongs to others. Among 50 students 23 (46 %) of the participants parents were daily labour, 13 (26%) of the participants parents were private employees, 5 (10 %) of the participants parents were Government employees and 9 (18 %) of the participants parents belongs to other occupations Regarding to income of the family, 8 (16 %) of the participants had an income Rs. Less than 5000/- and 13 (26%) of the participants had an income of Rs. 5000 - 10000/- and 11 (22 %) of the participants had an income of Rs. 10000 - 15000/- and 18 (36%) of the participants had an income of Greater than 15000/-. Among 50 students, 25 (50%) of the participants living in pucca house, 16 (32%) of the participants living in katcha house, 1 (2%) of the participants living in huts, and 8 (16%) of the participants living in flats. Among 50 participants, 42 (84 %) of the participants living in Rural areas and 8 (16%) of the participants living in urban areas. with regard to source of information, majority 28 (56%) of the participants obtained information from mass media followed by 12(24%)of the participants obtained information from family members and 8 (16%) of the participants obtained information from health workers while (4%) of the participants obtained. It shows that the pretest mean was. The knowledge pre-test scores of mean and standared deviation were found to be 17.24, 1.221. the post - test mean and standard deviation scores was found to be 22.14 and 0.1615.the Attitude pre - test scores of mean and standard deviation scores was found to be 77.32%, 0.2326% and post - test scores 80.16%, 0.02312 %. The Calculated 't' value was 28.1447 with 0.001 level of significance.

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