



A COMPARATIVE STUDY TO ASSESS THE ATTITUDE TOWARDS USAGE OF MENSTRUAL CUP AMONG USERS AND NON-USERS FROM SELECTED INSTITUTIONS AT MALAPPURAM.

Authors:

1. Ms Rahmath Niza
2. Mr Rashid Mohammed
3. Ms Revathi C R
4. Ms Risana Jasmin C

III year Bsc Nursing Students, Al Shifa College of Nursing, Perinthalmanna

Co Author:

Mrs Ancy P A

Assistant Professor

Department of Community Health Nursing

Al Shifa College of Nursing

Perinthalmanna

Abstract:

The present study entitled “A comparative study to assess the attitude towards usage of menstrual cup among users and non-users from selected institutions at Malappuram” is based on following. **Objectives:** Assess the attitude towards usage of menstrual cup among users, Assess the attitude towards usage of menstrual cup among non-users, Compare the attitude towards the usage of menstrual cup among users and non-users, find out the association between the attitude towards usage of menstrual cup and selected demographic variables and Identify the prevalence of attitude towards usage of menstrual cup among user and non-users. **Methodology:** Quantitative approach was used for the study and Non-experimental, comparative research design was selected. The study was conducted in selected institutions at Malappuram among menstrual cup users and non-users, using simple random sampling technique. In this study the investigator has used a modified Likert scale to assess attitude towards the usage of menstrual cup. **Analysis:** data were

analyzed by using descriptive and inferential statistics. **Result:** attitude towards the usage of menstrual cup among users, that out of 30 menstrual cup users, 26 (86.66%) of samples strongly agree and 4(13.33%) of sample agree towards the usage of menstrual cup. Attitude towards the usage of menstrual cup among non-users, that out of 30 menstrual cup non users, 6(20%) of samples strongly agree, 21(70%) of sample agree and 3(10%) of sample have uncertain attitude towards usage of menstrual cup. While comparing the attitude towards the usage of menstrual cup among users and non-users, the users have the higher level of attitude than non-users. The demographic variables like education status and Previous knowledge shows association with attitude towards usage of the menstrual cup. Prevalence of menstrual cup users and non-users is 0.22. **Conclusion:** from the study it is evident that the menstrual cup users have the higher level of attitude towards the usage of menstrual cup than the non-users. The investigator found that there was no association between attitude towards usage of menstrual cup among non-users and demographic variables and two associations between attitude towards usage of menstrual cup among users and demographic variables.

Keywords: compare, assess, usage of menstrual cup, menstrual cup users and menstrual cup non-users

BACKGROUND OF THE STUDY:

Menstruation is a complex coordinated biological process and its onset indicates the start of reproductive years in female life. Women and adolescent girls worldwide need safe, effective and affordable menstrual hygiene management product. A basket of choices like sanitary napkins, tampons, menstrual cup etc., are available in the market. The manner in which the girl learns about the menstruation and its changes may have an impact on her response to the event of menarche. It is known that menstrual practices developed at menarche may persist throughout life. Effective management of bleeding requires access to information and education on the safe practice of menstrual hygiene.

In developing world menstrual management is not only difficult, it also may have serious adverse impact on the lives of women. Even when taboos are not a major problem, convenient or inexpensive menstrual collection materials may simply not be available. Most common methods are cloths and sanitary napkins which are used by placing it within garments to cover the vaginal opening to absorb menstrual discharges. In order to manage menstruation women have developed different methods depending on their cultural, social and economic background.

A study conducted in October 2010 by A.C Nelson called sanitation protection: In every women health right provides in-depth analysis prevalent unhygienic practice like India. The survey covered 1033 women in menstrual age and 151 Gynaecologists studied them. The survey result says that 12% of women use-sanitary napkins and rest 88% of women use home based soaking alternatives. Such unhygienic practices can result in acquiring infection of lower genital tract.

The menstrual cup is more economical and reusable feminine hygiene product which catches and collect the menstrual bleed instead of absorbing it. it is manufactured by using health - grade, nontoxic, non-allergic silicon. it is absolutely insert into vagina thereby almost nullifying the problem like infections, allergic, rashes and eliminates foul odour and feeling of wetness. it can also be worn for long hours because of its capacity and the ability to adopt to the body completely menstrual cups can be sterilised or autoclaved before use and this is most hygienic and safe menstrual sanitary protection. The menstrual cup has been explored as a mean of menstrual hygiene management in developing countries like India. Hence it leaves as cope for study to evaluate the menstrual cup as an alternative to conventional sanitary protections in terms of adaptability and efficacy of user.

NEED AND SIGNIFICANCE:

Menstrual hygiene is an important to be practice by women to promote their health and prevent illness. The two most popular menstrual hygiene products are sanitary pads and tampons. Advantages of pad and tampons are they are convenient, stick-on inner wear or inserted in the vagina. Pad and tampons are extremely expensive, causes infection. If not changed regularly and leads to risk of toxic shock syndrome with so many disadvantages.

“According to World Health Organizations (2015) there are about 74% of adolescent girls are suffered with reproductive tract infections due to improper menstrual hygiene.” The study was conducted to assess the effectiveness of structured teaching programme on knowledge regarding menstrual hygiene among adolescent girls. In this study, it is found that the pretest knowledge among 30 respondents, majority of girls 18 (60%) had inadequate knowledge, 10 (33%) girls had moderate knowledge and minority of girls 2 (7%) had adequate knowledge on menstrual hygiene.

A descriptive study design conducted in Karnataka, India. In this study conducted among 200 young women to assess the knowledge and attitude regarding menstrual cups. Among 200 women, 64.5% of young women had neutral attitude, 31% had positive attitude and 4.5% had negative attitude regarding menstrual cups.

An innovation in the field of menstrual hygiene products is gaining access day by day. A new product that has been introduced into the market is menstrual cup. It has advantages over the sanitary napkins and tampons. There is no proper management or recycling of this non-biodegradable waste, and hence it ends up in landfills, where it stays for centuries and over the years will add to the microplastic pollution. A single menstrual cup costs around 400-600 INR depending on brands which can be used up to 10 years, which is 1/100th of cost spent on other menstrual products. For low-income women who experience so-called period poverty and are unable to afford sanitary products when needed, the cup can be a lifesaver. Just having access to this reusable product can eliminate some of the struggle's girls experience when they can't leave the house and have to miss school or work because they don't have sanitary products. This study aims to assess the attitude regarding usage of menstrual cups among reproductive age group women.

REVIEW OF LITERATURE:

A qualitative study was conducted in Uganda to assess Drivers and challenges to use of menstrual cups among schoolgirls. The school-based controlled trial was done with a total of 194 schoolgirls from grade levels P5-P7. Cups were distributed for free in two public schools versus no distribution in one public school. The study concluded that the menstrual cup would likely be an acceptable Menstrual Hygiene. To ensure family and peer support, it is recommended that relevant persons including parents, teachers, community leaders, and boys are involved in menstrual cup interventions, and the opportunity is used to break down taboos surrounding menstruation.

A Quasi-experimental study was conducted in selected areas of Pune city, India. Non- probability purposive sampling technique was used. Total 60 sample of working women were included in this study. Attitude scale was prepared to identify the attitude of women towards the use of menstrual cup. The study revealed that in majority of samples i.e., 51.7% had positive attitude towards menstrual cup use before the administration of intervention i.e., leaflet, and after the administration of intervention i.e., leaflet, that majority of samples i.e.,73.3% had positive attitude towards menstrual cup use. The results showed that the mean post interventional attitude score is 42.67 which is greater than the is pre interventional mean attitude score (38.60), indicated that there is change in pre interventional and post interventional attitude among working women towards menstrual cup use.

A qualitative study was conducted to assess the knowledge of menstrual cup in managing menstrual health and hygiene. The study was conducted at Gujarat Medical Education and Research Society, Gujarat. Total 158 participants aged between ages of 20 to 50 years with regular menstrual cycle were enrolled in the study. They were given detailed explanation/information about its usage. Feedback was obtained after every cycle for three cycles using a structured questionnaire. In this study, Insertion was easy for 80% participants and 90% participants found removal easy. The problem of leakage was encountered in 3-6%. There were few side effects like rashes, dryness, or infection. The study conclude that this reusable vaginal device has no significant health risks and is acceptable to many women without the need for fitting or other medical services.

A study on variation in feminine hygiene practices as a function of age. The objective of the study was to examine variation in feminine hygiene practices as a function of increasing age. A non-experimental descriptive research design with study samples stratified by age. A study of 713 women over 18 years of age were given the questionnaire regarding feminine hygiene practices. In all age group 20-30% of women reported douching, even facing the dangers in this practice. In addition, reduced number of women in all age group number of women in all age group reported washing hands before using tampons and pads, although more reported washing their hands afterwards. The conclusion was that there should be continuing education about proper feminine hygiene practices, especially regarding douching and handwashing before and after genitourinary contact.²⁶

A study to compare the use and acceptability of menstrual cup and sanitary pads in school girls between the age of 14-16 years in rural Western Kenya .195 participants received menstrual cups and 255 received pads. Cup use was 39% in the first month, rising to 80% by 12th month. Pad use rise from 85%-92%. Measures of cup acceptability demonstrated girls had initial problems using the cup but reported difficulties with insertion, removal and comfort reduced over time. Girls using pads reported fewer acceptability issue. A smaller proportion of girls provided with cups used them in the first months compared to girls given pads, reported use was similar by study end, and early acceptability issue reduced over time.³⁶

STATEMENT OF PROBLEM:

A comparative study to assess the attitude towards usage of menstrual cup among users and non-users from selected institutions at Malappuram.

OBJECTIVES:

1. Assess the attitude towards usage of menstrual cup among users.
2. Assess the attitude towards usage of menstrual cup among non-users.
3. Compare the attitude towards the usage of menstrual cup users and non-users.
4. Find out the association between the attitude towards usage of menstrual cup and selected demographic variables.
5. Identify the prevalence of attitude towards usage of menstrual cup among user and non-users.

HYPOTHESIS:

H1: There is a significant difference between attitude towards usage of menstrual cup among users and non-users.

H2: There is a significant association between attitude towards usage of menstrual cup and selected demographic variables.

CONCEPTUAL FRAMEWORK:

The Health Belief Model (HBM) by Rosenstock and Becker and Maiman (1978)

METHODOLOGY:

Research approach: Quantitative approach.

Research design: Non experimental comparative research design.

Variables:

❖ Research variable.

Usage of menstrual cup

❖ Demographic variable

Age, education, Marital status, previous knowledge, source of information, number of female siblings,

Menstrual cycle regularity, users or non-users, if yes duration of usage

Setting of the study: The study was conducted in selected institutions at Malappuram.

Population:

Target population: Menstrual cup users and non-users.

Sample: In this study, subset of population selected to participate in the research study were the menstrual cup users and non-users at Malappuram.

Sampling Technique

➤ First phase

Non probability convenient sampling technique

➤ Second phase

Simple random sampling technique

Sample size: 60 women (30 menstrual cup users and 30 non-users)

Criteria for sample selection:

❖ Inclusive Criteria

Women,

- Who are using menstrual cup.
- Who are not using menstrual cup.

❖ Exclusive Criteria

Women,

- Who are not willing to participate.
- Who are absent on the day of data collection.
- Who are out of reproductive age.
- Who are not having menstruation in regular menstrual period.
- Who are having any medical or surgical problems of reproductive system.

Tools/ Instruments

Demographic perfoma and Modified Likert scale were used for this study.

*Description of the tool

The tool used in this study was structured questionnaires which include 2 sections.

Section A: Demographic profile of menstrual cup users and non-users.

Section B: modified Likert scale regarding menstrual cup.

❖ Section A: Demographic profile of menstrual cup users and non-users

Section A consists of structured questionnaire to assess the basic live data of the menstrual cup users and non-users which comprises of 10 items such as Age, education, Marital status, previous knowledge, source of information, number of female siblings, Menstrual cycle regularity, users or non-users, if yes duration of usage.

❖ Section B: modified Likert scale regarding menstrual cup

The tool consists of 20 items to assess attitude towards menstrual cup.

❖ Scoring techniques: -

Section A: Scoring key was prepared by coding the demographic variables to assess the background of the subjects and assessment of association by statistical analysis.

❖ Section B: In section B there were 20 numbers of Likert questions. It was developed to measure the attitude of menstrual cup users and non-users. The scale developed with five-point scale (strongly agree, agree, neutral, disagree and strongly disagree).

The responses are scored as,

<u>COMPONENTS</u>	<u>RATING</u>
Strongly agree	5
Agree	4
Uncertain	3
Disagree	2
Disagree	1

Table1: scoring table.

Data collection process

*First phase:

In the first phase, give a brief self-introduction the investigator explains the study. Using google form we assess prevalence of menstrual cup users and non-users from 300 women. The samples are collected by using Non probability convenient sampling technique and giving structured questionnaires

*Second phase:

By using simple randomised sampling 30 users and non-users will be obtained from first phase. In second phase data will be collected from 30 menstrual cup users and non-users who fulfil inclusion criteria. After that, Formal permission was obtained from the authority of our college to conduct the main study. After a brief self-introduction, the investigators explained the purpose of the study and obtained informed consent from the subject. On the investigators assessed the demographic data as well as attitude by giving modified Likert scale.

Data analysis

The data obtained were analysed on the basis of the objectives of the study using descriptive and inferential statistics.

Descriptive statistics: It includes Frequency, percentage, Mean and standard deviation.

Inferential statistic

- Z-test was used to determine the attitude towards usage of menstrual cup among users and non-users.
- Chi square was used to find out the association between attitude towards usage of menstrual cup and selected demographic variable.

Ethical consideration

The ethical clearance was taken from institutional authorities and ethical committee.

RESULTS:**SECTION I: DISTRIBUTION OF MENSTRUAL CUP USERS AND NON-USERS BASED ON DEMOGRAPHIC VARIABLES**

Characteristics of the study population were as follows which reveals the percentage distribution of subjects according to the baseline variables like age, educational status, marital status, previous knowledge, source of information, number of female siblings, religion, menstrual cycle regularity and usage of menstrual cup.

- Regard to age, 15(25%) menstrual cup users and non-users were between age group below 21, 43(71.6%) were between age group 21 – 30 and 2(3.33) were between the age group of 31 – 40.
- Regard to educational status ,8(13.33%) were diploma students and 52(86.66%) were undergraduate.
- Regard to marital status, 15(25%) were married, 45(75%) were unmarried.
- that 56(93.3%) of the samples have previous knowledge and remaining 4(6.6%) have no previous knowledge.
- Regard to source of information, 1 (1.66%) were having health care teams as source of information, 8(13.3) were having family members as source of information, 23 (38.33%) were having peer group as source of information, 24 (40%) were having mass media as source of information and 4 (6.66%) have no source of information.
- Regard to number of female siblings, 23 (38.33%) of samples have no female siblings, 25 (41.66%) have one female sibling, 7 (11.66%) have 2 female siblings and 5 (8.33%) have more than 2 female siblings.
- Regard to religion 14(23.33%) samples were from Hindu religion, 39(65%) samples were from Muslim religion and the remaining 7(11.66%) were from Christian religion.
- Regard to menstrual cup regularity, 49 (81.665) of samples were having regular menstrual cycle and 11 (18.033) were having irregular menstrual cycle.
- Regard to usage of menstrual cup, 30(50%) of samples were using menstrual cup and 30(50%) of sample were not using menstrual cup.

SECTION II: ATTITUDE OF MENSTRUAL CUP USERS

- Assess the attitude towards the usage of menstrual cup among users, that out of 30 menstrual cup users, 26 (86.66%) of the samples were strongly agree and 4(13.33%) of sample were agree to the attitude towards the usage of menstrual cup.

SECTION III: ATTITUDE OF MENSTRUAL CUP NON-USERS

- Assess the attitude towards the usage of menstrual cup among non-users, that out of 30 non-users, 6 (20%) of the samples were strongly agree, 21 (70%) of sample were agree and 3 (10%) of sample were having neutral to the attitude towards the usage of menstrual cup.

SECTION IV: COMPARISON OF ATTITUDE AMONG MENSTRUAL CUP USERS AND NON-USERS

- This section deals with the comparison of attitude towards the usage of menstrual cup among users and non-users, that the mean of attitude towards the menstrual cup among users are 86.87 with a standard deviation of 5.14 and that of non-users are found to be 72.83 with a standard deviation of 10.29. menstrual cup users are found to possess higher attitude towards usage of menstrual cup when compared to non-users.

SECTION V: ASSOCIATION BETWEEN ATTITUDE OF MENSTRUAL CUP USERS TOWARDS USAGE OF MENSTRUAL CUP AND SELECTED DEMOGRAPHIC VARIABLES

- This section deals with that, in chi square test, the table value is greater than the obtained value in case of 8 demographic variables. There exist no significant association between the attitude towards usage of menstrual cup among non-users and these demographical variables and the table Value is greater than the obtained test value in case of 2 demographic variables. So there exist a significant association between attitude towards usage of menstrual cup among users and these 2 demographic variables.

SECTION VI: ASSOCIATION BETWEEN ATTITUDE OF MENSTRUAL CUP NON-USERS TOWARDS USAGE OF MENSTRUAL CUP AND SELECTED DEMOGRAPHIC VARIABLES

- This section deals with that, in chi square test, the table value is greater than the obtained value in all case of 9 demographic variables. There exist no significant association between the attitude towards usage of menstrual cup among non-users and these demographic variables.

SECTION VII: PREVALENCE OF ATTITUDE TOWARDS MENSTRUAL CUP AMONG USERS AND NON-USERS

- Regards to prevalence of menstrual cup users and non-users among 300 samples. Here, 233 (77.66%) of samples were not using menstrual cup and 67 (22.33%) of samples were using menstrual cup. The prevalence of menstrual cup users and non-users is 0.22.

DISCUSSION

In depth analysis of the demographic variables, it shows that majority of sample age is between 21- 30 years old. Menstrual cup users and non-users were participated. Regarding year of age 15 (25%) samples are of below 21 years age, 43 (71.6%) samples are of 21-30 years of age, 2(3.3%) samples are of 31-40. Regarding the educational status, 8 (13.3%) samples were diploma, 52(86.6%) samples were under graduates. Regarding marital status, 15 (25%) samples were married, 45 (75%) samples were unmarried. Regarding previous knowledge, 56 (93.3%) samples having previous knowledge regarding menstrual cup and 4 (6.6%) samples don't have previous knowledge regarding menstrual cup. Regarding the number of female siblings, 23 (38.3%) samples doesn't have female siblings, 25 (41.6%) samples have 1 female sibling, 7 (11.6%) samples have 2 female siblings and 5 (8.3%) samples have more than 2 female siblings. Regarding the religion, 14 (23.3%) samples were Hindu, 39 (65%) samples were Muslim, 7 (11.6%) samples were

Christian. Regarding regularity of menstrual cycle, 49 (65.6%) samples have regular menstrual cycle, and 11 (18.3%) samples have irregular menstrual cycle. Regarding menstrual cup users and non-users, 30 (50%) were menstrual cup users and 30 (50%) were menstrual cup non-users. Among users, 17 (56.6%) samples were using menstrual cup for less than one year, 12 (20%) samples were using menstrual cup for 1-5 years, 1 (1.6%) sample were using menstrual cup for 5-10 years. The present study was conducted to assess and compare the attitude towards usage of menstrual cup among users and non-users from selected institutions at Malappuram. The study was conducted among 60 women, 30 menstrual cup users and 30 menstrual cup non-users.

The study is in order with another study A quasi experimental design to assess effectiveness of leaflet toward the attitude of menstrual cup use among working women in selected instituted at Pune city . Non probability purposive sampling technique was used .Total 60 sample of working women were included in study.Likert scale was prepared to identify the attitude of women towards the usage of menstrual cup.The collected data were analysed using descriptive, frequency and percentage statistics.Chi-square was used to find out the association in the attitude towards the menstrual cup use with selected demographic variables. Result revealed that in majority of samples that is, 51.7% had positive attitude toward menstrual cup use before the administration of intervention and after the administration of intervention the majority of samples that is 73.3% had positive attitude towards menstrual cup use. The results showed that the mean post interventional attitude score is 42.67 which is greater than the pre interventional mean attitude score (38.60).

SUMMARY

In the present study we investigated that the comparative study to assess the attitude towards usage of menstrual cup among users and non-users from selected institutions at Malappuram. As this was a comparative descriptive study researcher selected 60 samples, 30 users and 30 non-users selected by simple random sampling. The tool used for the study was modified Likert scale. The data collected were analysed by descriptive and inferential statistics. The unpaired t value is 6.680. The researcher found that, out of 30 menstrual cup users, 26(86.66%) possess strongly agree towards the usage of menstrual cup and 4(13.33%) possess agree towards the usage of menstrual cup. Out of 30 menstrual cup non users, 6 (20%) of the samples were strongly agree, 21 (70%) of sample were agree and 3 (10%) of sample were having neutral to the attitude towards the usage of menstrual cup. In menstrual cup users, there is a significant association in educational status and previous knowledge and all other demographic variables has no significant association. In case of menstrual cup nonusers, there is no significant association between attitude towards usage of menstrual cup among non-users and 8 demographic variables.

CONCLUSION

The following conclusions was drawn on the basis of the study. On assess the attitude towards usage of menstrual cup among users and non-users from selected institutions at Malappuram. There exists a significant association between attitude towards usage of menstrual cup among users and 2 demographic variables. There exists no significant association between attitude towards usage of menstrual cup among non-users and 8 demographic variables. On analyzing mean of attitude towards the menstrual cup among users are 86.87 with a standard deviation of 5.14 and that of non-users are found to be 72.83 with a standard deviation of 10.29. Menstrual cup users are found to possess higher attitude towards usage of menstrual cup when compared to non-users.

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