



ASSESSMENT OF KNOWLEDGE REGARDING MENSTRUAL CUP AND ITS USAGE AMONG STUDENTS

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ABSTRACT

Menstruation is a unique phenomenon in women which is a healthy and normal part of life. Menstrual hygiene is an important aspect during menstruation. For this various menstrual hygiene products are available. Menstrual cup has been available for decades, but its use in India is limited because of lack of awareness and popularity of sanitary pad. Menstrual cup is a better alternative to the current methods of menstrual sanitation as it is durable, eco- friendly, comfortable, safe, have no need for frequent changing in a day, and have no disposal issues. The objectives of the study were to assess the level of knowledge regarding menstrual cup and its usage and to find an association between the knowledge of menstrual cup and its usage among students and selected demographic variables. A quantitative research approach was used for the study. A sample of one hundred and twenty students were selected using convenience sampling. The knowledge on menstrual cup and its usage was assessed using a self-structured questionnaire. The present study revealed that majority (70.83%) of students of selected college had moderate knowledge, (26.67%) had good knowledge and (2.5%) had poor knowledge regarding menstrual cup and its usage. The study reported that there was no association between knowledge and socio demographic variables (age of student, religion of student, hometown, family income in rupees, educational status of mother, educational

status of father, type of resident, previous knowledge regarding menstrual cup, type of sanitary product used and difficulty faced while using sanitary pad). The study concludes that awareness programmes including campaigns, health education programmes must be conducted to promote menstrual cup usage.

Keywords: Assess; Knowledge; Menstrual cup; Students.

INTRODUCTION

BACKGROUND OF THE PROBLEM

Menstrual cycle is an important indicator of women's reproductive health. It is a physiological process which is associated with the ability to reproduce. Females need effective, safe, and affordable menstrual products. Menstrual cups were found in the 1930s but were not popular among women till 1980s. It is a small, flexible funnel shaped cup made of medical grade silicone that is inserted into the vagina to collect blood. Menstrual cups are not yet widely promoted in low-income countries but there is increasing interest and growing evidence of their acceptability.

Menstruation is a normal body function and a sign of reproductive health. But culturally in many parts of India, it is considered to be dirty and impure. As a result only a few solutions are available to manage menstruation due to lack of education and guidance including ignorance, prejudice, costs and safety fears. All these factors limit girls and women from testing the full range of products available. It is reported that in India, 62% of young women in the age group of 15-24 years still use clothes during menstruation. Approximately, 43% to 88% of the women still wash their cotton cloths and reuse them instead of using disposable pads. In rural areas, maintenance of menstrual hygiene is therefore an important yet unrecognized issue. Due to the lack of awareness and popularity of sanitary pads, the use of menstrual cups in India is limited.

According to the 2017 census, it is globally estimated that 1.9 billion women, which is around 26% of the population, were of menstruating age. They spent an average of 65 days dealing with menstrual blood flow. Menstruation and menstrual practices still face many social, cultural and religious restrictions in many parts of India.

STATEMENT OF THE PROBLEM

A descriptive study to assess the knowledge regarding menstrual cup and its usage among students at selected college in Kozhencherry, Pathanamthitta.

OBJECTIVES

1. Assess the level of knowledge regarding menstrual cup and its usage among students.
2. Find out the association between the knowledge of menstrual cup and its usage among students and the selected demographic variables.

OPERATIONAL DEFINITIONS

1. **Assess:** In this study, assess refers to evaluation and estimation of the knowledge level of students regarding menstrual cup and its usage.
2. **Knowledge:** In this study, knowledge refers to the correct response given by students regarding menstrual cup and its usage assessed by self-structured questionnaire.
3. **Menstrual cup:** It is a menstrual hygiene device which is inserted into the vagina during menstruation to collect menstrual fluid.
4. **Students:** In this study, students are those under the reproductive age group between 18 to 25 years.

ASSUMPTION

Students may vary in their knowledge towards menstrual cup and its usage.

RESEARCH APPROACH

The research approach used in the study was **Quantitative Research Approach**.

RESEARCH DESIGN

The research design used in the study was **Descriptive Design**.

POPULATION

Students in the age group 18-25 years.

SAMPLE AND SAMPLING TECHNIQUE

Sample size: 120 students in the age group 18-25 years.

Sampling technique: Non-Probability Convenience sampling technique.

DESCRIPTION OF THE TOOL

Section A consists of demographic variables including age, religion, hometown, family income, education of mother and father, type of residence sanitary product used, difficulty faced during usage of sanitary product.

Section B consists of 18 questions from different aspects of menstrual cup and its usage.

CONTENT VALIDITY

Content validity is the degree to which a multi-item instrument has an appropriate set of relevant items reflecting the full content of the construct domain being measured.

To establish content validity the tool along with objectives, hypotheses, operational definitions and criteria were submitted to eight experts from nursing education (Child health department, Obstetrics and Gynaecology department, Medical Surgical department, Community health department and Mental health department).

Suggestions and recommendations given by experts were accepted and research tool was finalized according to the expert's opinion.

DATA COLLECTION PROCESS

The study was conducted at Poyanil College of Nursing, Kozhencherry on 16/12/2022 and the data was collected using self-structured questionnaire among 120 students who were in the age group of 18-25 years.

After obtaining a formal permission from the principal of the college, the students from the second year, third year and fourth year were selected for the data collection. The students were selected on the basis of inclusion and exclusion criteria by convenience sampling technique. Written informed consent from the participants were obtained after explaining the purpose and need of the study. The confidentiality of the

information was maintained. Data was collected using self-structured questionnaire. A time period of 15 minutes was provided for completing the questionnaire. The subjects were co-operative during the study.

PLAN FOR DATA ANALYSIS

Data analysis is planned based on the objectives of the study. After collection of data, data were organized, tabulated by using descriptive and inferential statistics manually in MS Excel 2007 version. Frequency and percentage were used to define baseline data and knowledge scores. As the knowledge was in the ordinal data, non-parametric test was adopted for the association of the knowledge scores with demographic variables, Chi square test was computed.

FINDINGS OF THE STUDY

Data analysis is condensed under the following headings:

Section I: Description of demographic variables.

With reference to age 41.7% students were in the age group of 18-20, 56.7% were in the age group of 21-23 and 1.6% were above 23 years of age. With reference to religion, 73.33% of the students were Christians, 21.67% were Hindus, 4.17% were Muslims and 0.83% was others. With reference to the hometown, 54.17% of the students were residing in urban areas and 45.83% were residing in rural areas. With reference to family income in rupees, 5% of the students were having family income below 5000, 40% were having an income between 5000-10000, 45.83% were having an income between 10000-50000 and 9.17% were above 50000. With reference to educational status of mother, 0.83% were illiterate, 15.84% were having secondary education, 52.50% were having higher secondary education and 30.83% were graduates or postgraduates. With reference to educational status of father, 0.83% were illiterate, 25.84% were having secondary education, 50% were having higher secondary education and 23.33% were graduates or postgraduates. With reference to type of residents, 80% of the students were hostelites and 20% were day scholars. With reference to previous knowledge of students regarding menstrual cup, 92.5% were having previous knowledge and 7.5% were not having previous knowledge. With reference to the kind of sanitary product used, 100% of the students used sanitary pad. With reference to the difficulty faced while using sanitary pad, 51.67% of the students were having difficulty in frequent changing of the sanitary pad, 22.5% had leakage, 17.5% had rashes and irritation skin and 8.33% had foul odour.

Section II: Description of level of knowledge of students regarding menstrual cup and its usage

With reference to knowledge scores, 70.83% of students had moderate knowledge on menstrual cup and its usage, 26.67% had good knowledge and 2.5% had poor knowledge.

Section III: Association between knowledge on menstrual cup and its usage with demographic variables

The Chi square test was used to find out association between knowledge scores and demographic variables. The Chi square value showed that the research assumption has no association with age of student, religion of student, hometown, family income in rupees, educational status of mother, educational status of father, type of resident of student, previous knowledge of student regarding menstrual cup, type of sanitary product used and difficulty faced while using sanitary pad.

NURSING IMPLICATIONS

The findings of the present study generate some implications to the health care delivery system. It has implications in nursing practice, nursing administration, nursing education and nursing research.

Nursing Practice

1. Nurses can help to increase the knowledge regarding menstrual cup and its usage among patients, nursing students and other health care workers for selection of appropriate sanitary product.
2. Menstrual cup usage facilitates proper menstrual hygiene management among nurses.
3. Specific guidelines regarding menstrual cup and its usage should be implemented among nurses.
4. Health education should be provided for the nurses on menstrual cup usage to improve the quality of working without any hindrance.

Nursing Administration

1. The nurse administrators can use the study result as the base line data to organize educational programs regarding menstrual cup and its usage among outpatient department and community settings.
2. Nurse administrator can encourage the nursing personnel to use menstrual cup.
3. Improve the knowledge level of staff nurses by conducting campaigns and awareness program.
4. Clinical nurse provides information to the public about the effectiveness of learning practice.

Nursing Education

1. The nurse can act as an educator by educating the students.
2. The knowledge level of student nurses regarding menstrual cup and its usage should be improved by conducting webinar, orientation programs and quiz competitions.
3. Nurse educator should focus on the health issues associated with the usage of sanitary pads, cloths and other carcinogenic materials.
4. Community health nurses can take an active role in health awareness program and conduct health education program, health camps and exhibition to educate women of reproductive age group regarding menstrual cup and its usage.
5. Nurses can conduct in-service education for the JPHN and Asha workers regarding menstrual cup and its usage in order to educate women at their doorstep.

Nursing Research

1. The nurse researcher can work towards developing a tool to measure various dimensions in terms of knowledge, attitude and practice towards the proper selection of appropriate sanitary product.
2. Nurse researcher can organize service for educating nurses regarding various aspects of prevention of menstrual health problems.

Conclusion of the study

The findings of the study concluded that the students have moderate knowledge regarding menstrual cup and its usage. Study concluded that there is a need for educational programs, campaigns and continuous monitoring to improve and reinforce the knowledge regarding menstrual cup and its usage among students.

REFERENCES

1. Omidvar S, Amiri FN, Bakhtiari A, et al. A study on menstruation of Indian adolescent girls in an urban area of South India. J Family Med Prim Care [Internet].2018 [cited 2023 Jan 6];7(4):698–702.
2. Van Eijk AM, Zulaika G, Lenchner M, et al. Menstrual cup use, leakage, acceptability, safety, and availability: a systematic review and meta-analysis. Lancet Public Health [Internet]. 2019 [cited 2023 Jan 6];4(8): e376–93.
3. Menstrual cups [Internet]. Femcareanswers.com. [cited 2023 Jan 6].

4. Cabrera-Clerget A. Guide to menstrual hygiene materials. Unicef.org. 2019
[cited 2023 Jan 6].
5. Garg S, Anand T. Menstruation related myths in India: strategies for combating it. J Family Med Prim Care [Internet]. 2015 [cited 2023 Jan 6];4(2):184–6.
6. Azad S. 62% young women in country using cloth for menstrual protection, says NFHS report [Internet]. Times Of India. 2018 [cited 2023 Jan 6].
7. Das P, Baker KK, Dutta A, et al. Menstrual hygiene practices, WASH access and the risk of urogenital infection in women from Odisha, India. PLoS One [Internet]. 2015 [cited 2023 Jan 6];10(6):e0130777.
8. Eti M, M. S, P. SM. Knowledge about menstrual cup and its usage among medical students. Int J ReprodContraceptObstetGynecol [Internet]. 2019 [cited 2023 Jan 6];8(12):4966.
9. Kaur R, Kaur K, Kaur R. Menstrual hygiene, management, and waste disposal: Practices and challenges faced by girls/women of developing countries. J Environ Public Health [Internet]. 2018 [cited 2023 Jan 6]; 2018:1–9.
10. Meghana, Gomathy. Knowledge, attitude, and practices regarding menstrual cup among reproductive women in a rural tertiary care Hospital. Int J ClinObstetGynaecol [Internet]. 2021 [cited 2023 Jan 6];5(2):211–4.
11. Eti M, Shreya MS, Sailakshmi MPA. Knowledge about menstrual cup and its usage among medical students. Int J ReprodContraceptObstetGynecol 2019;8:4966-70.
12. World Bank Group. Menstrual Health and hygiene. World Bank Group; 2022.
13. Alvarez A. Period Poverty [Internet]. American Medical Women's Association. 2019 [cited 2023 Jan 6].
14. Geng C. What is period poverty? [Internet]. Medicalnewstoday.com. 2021 [cited 2023 Jan 6].
15. Choi H, Lim N-K, Jung H et al. Use of menstrual sanitary products in women of reproductive age: Korea Nurses' Health Study. Osong Public Health Res Perspect [Internet]. 2021 [cited 2023 Jan 7];12(1):20–8.

16. Beksinska ME, Smit J, Greener Ret al. Acceptability and performance of the menstrual cup in South Africa: a randomized crossover trial comparing the menstrual cup to tampons or sanitary pads. *J Womens Health (Larchmt)* [Internet]. 2015;24(2):151–8.
17. Suresh K Sharma. *Nursing research and statistics*, 1st edition. Noida: Reed Elsevier India (p) Limited, publishers:2011, P :35-45.
18. Sreedevi, Jayasree, Zachariah SM et al. Experience and adaptability of menstrual cup as a menstrual hygiene management method among its users in Kerala. *Int J Community Med Public Health* [Internet]. 2022;9(2):918.
19. Singh R, Agarwal M, Sinha S, et al. Study of adaptability and efficacy of menstrual cups in managing menstrual health and hygiene: A descriptive longitudinal study. *Cureus* [Internet]. 2022 [cited 2023 Jan 7];14(9):e29690.
20. Kakani CR, Bhatt JK. Study of adaptability and efficacy of menstrual cup in managing menstrual health and hygiene. *Int J ReprodContraceptObstetGynecol* [Internet]. 2017 [cited 2023 Jan 7];6(7):3045.
21. Gharacheh M, Ranjbar F, Hajinasab N, et al. Acceptability and safety of the menstrual cups among Iranian women: a cross-sectional study. *BMC Womens Health* [Internet]. 2021;21(1):105.
22. Howard C, Rose CL, Trouton K, et al. FLOW (finding lasting options for women): multicentre randomized controlled trial comparing tampons with menstrual cups. *Can Fam Physician* [Internet]. 2011 [cited 2023 Jan 7];57(6):e208-15.
23. Araujo MP de, Chimello L, Brigido BP, et al. Evaluation of the safety and comfort of menstrual cup during sport: A prospective cohort study [Internet]. *Research Square*. 2020.
24. Beksinska M, Nkosi P, Zulu B, et al. Acceptability of the menstrual cup among students in further education institutions in KwaZulu-Natal, South Africa. *Eur J ContraceptReprod Health Care* [Internet]. 2021 [cited 2023 Jan 7];26(1):11–6.
25. Itaya Y, Kuramoto N, Furukawa Y. Menstrual cup use in Japanese women: Subjective evaluations and changes in menstrual symptoms. *women midwives & midwifery* [Internet]. 2022 [cited 2023 Jan 7];2(2):1–14.
26. Cheng M, Kung R, Hannah M, et al. Menses cup evaluation study. *FertilSteril* [Internet]. 1995 [cited 2023 Jan 7];64(3):661–3.

27. Siji, Jincy, Aiswarya., Anagha, et al. A quantitative study to assess the level of knowledge and attitude on menstrual cup among adolescent girls in selected School, Thrissur. Res J SciTechnol [Internet]. 2022 [cited 2023 Jan 7]; 14(3):139–44.
28. Abisha Bel GL, Bright R. Study on Effectiveness of Computer assisted instruction over the usage of Menstrual cup among Select College Students. Int J AdvNursManag [Internet]. 2022 [cited 2023 Jan 7];10(3):263–5.
29. Divakar H, Singh R, Narayanan P, et al. Menstrual health and hygiene- study of knowledge attitudes and practices of obgyns on usage of menstrual cups. J Evid Based Med Healthc [Internet]. 2020;7(8):372–6.
30. Ganz C, Lever E, Bredenkamp J, et al. The understanding and perception of the menstrual cup among medical students. J ObstetGynaecol India [Internet]. 2022 [cited 2023 Jan 7];72(5):439–45.
31. Denis F Polit, Cheryl Tatano Beck. Nursing Research – Generating and Assessing Evidence for Nursing Practice, 10th edition, New Delhi, Wolters Kluwer 2017 Pg no 743,739,731,724.
32. Burns N, Groovs K K, Understanding Nursing Research-Building An Evidenced Based Practice , USA, WH Saunders,2005.
33. Wood G. L, Heber J, Cameron C. Nursing Research: Methods and Critical Appraisal for Evidence based practice, Elseivier Publication, 2014, 8th edition, pg 73.
34. SreevaniRentala, Basics in Nursing Research And Biostatistics, 1st edition, Jaypee Brothers Medical Publisher (P) Ltd, New Delhi.
35. José S, Dunton R. Discussion Section for Research Papers [Internet]. Sjsu.edu. [cited 2023 Jan 9].
36. Researchgate.net. [cited 2023 Jan 9].
37. Lekshmi. RS, Jawahar RK, Rajamani K, Vinotha C. Awareness, preference and attitude towards the usage of menstrual cups among girls and women. pnr [Internet]. 2022 [cited 2023 Jan 9];13(S01):1023–31.
38. Garg S, Anand T. Menstruation related myths in India: strategies for combating it. J Family Med Prim Care [Internet]. 2015 [cited 2023 Jan 9];4(2):184–6.