

Knowledge and Attitude Regarding Menstrual Cup and its Use among Female Health Personnel

Ansalna Rahim¹, Sisy Jose²

¹MSc Nursing, Govt. College of Nursing, Kottayam, India
Email: [ansalna.rahim7\[at\]gmail.com](mailto:ansalna.rahim7[at]gmail.com)

²Associate Professor, Govt. College of Nursing, Kottayam, India
Email: [sisyjosez\[at\]rediffmail.com](mailto:sisyjosez[at]rediffmail.com)

Abstract: *The present study was conducted to assess the Knowledge and attitude regarding menstrual cup and its use among female health personnel in Govt. Medical College Hospital, Kottayam. A quantitative approach was used for the study. The study was theoretically supported by Nola J Pender's Health promotion model. A total of 200 subjects were selected using simple random sampling technique. The data were collected using socio personal data sheet, questionnaire to assess the level of knowledge and rating scale to assess the level of attitude. A video on use of menstrual cup was given after data collection. The findings revealed that majority (41.5%) of the subjects had average knowledge regarding menstrual cup and its use while 20% had good knowledge and 38.5 % had poor knowledge . Majority (60.5%) of them had unfavorable attitude and 39.5% had favorable attitude towards menstrual cup and its use. There was no significant correlation with knowledge and attitude of female health personnel regarding menstrual cup and its use. There was a significant association between knowledge regarding menstrual cup with occupation and source of information. There was no significant association between knowledge regarding menstrual cup with age, religion and marital status. There was significant association between attitude regarding menstrual cup and its use with age.*

Keywords: Knowledge; Attitude; Menstrual cup; Female health personnel

1. Introduction

The reproductive health is considered as a basic right of every people. The accessibility, affordability, availability, and acceptability of the reproductive health interventions depend to persons to persons and community to community. Menstrual health is considered as one of the important factor associated with the reproductive health of women.¹

Women use cloths, pads or tampons to manage menstrual flow. Washing the clothes or disposing the pads hygienically is a challenge for most of the females. In many cultures, women resort to the use of rags, which must be reused, but washing them may be limited by lack of water or the privacy needed to wash and reuse pads, resulting in forced use of damp or even wet contaminated rags.² Menstrual cup is a device for menstrual flow management and is claimed to be a health and environment friendly alternative to the conventional menstrual sanitary protections.²

A menstrual cup can be a good solution for menstrual hygiene management in economically challenged settings. Made of medical grade silicone, rubber, latex or elastomer, these bell-shaped receptacles collect menstrual flow when inserted into the vaginal canal, and can be emptied and reinserted with a need to boil the cup only at the end of a cycle. Cups have the advantage of reuse, and can potentially last up to 10 years. First introduced in the 1930's, there are now approximately 100 brands available worldwide – marketed as an eco-friendly and cost-saving approach to menstrual care.³

In India, the usage of menstrual cups is comparatively limited. Disposable sanitary pads were the most used sanitary product by non-menstrual cup users.⁴

The sanitary pads that are generally used now, which carry plastic and it takes 600 to 800 years to spoil. Although, this also has lead the way garbage problems and it is also dangerous for the nature as it carry plastic.⁵

Further research is needed to explore what prevents healthcare providers from advocating menstrual cup usage, though their thinking is on the lines that the menstrual cups are the ultimate environment friendly solution to menstruation.

2. Literature survey

Each day millions of girls and women experience menstruation. For consumers purchasing menstrual products, the menstrual cups are a safe and costeffective option. Menstrual education resources are not providing a comprehensive overview of products to support informed choices. The awareness of menstrual cups was low, and that only 30% of websites with educational materials on menarche included information about menstrual cups.⁶

A study conducted in India on knowledge about menstrual cup and its usage among medical students and the result showed that among 400 medical students, 7% of them didn't know what a menstrual cup was! There was no clear picture among students regarding material used in cup manufacture, its emptying time and sterilisation technique.⁷

A cross sectional study was conducted in South Kerala to assess knowledge, attitude and practices regarding menstrual cup among females. The result showed that lack of knowledge (22.6%) and fear of insertion (56.2%) were the major reasons for not trying a menstrual cup.⁸

3. Methodology

Quantitative non experimental research approach was used for the study. Research design used for the present study was descriptive survey design. Probability simple random sampling technique was used. Subjects were selected based on the inclusion and exclusion criteria from different wards, laboratories, and pharmacies of Government Medical College Hospital, Kottayam. The investigator selected nursing officers, lab technicians and pharmacists in the ratio of 2:1:1. 100 nursing officers, 50 lab technicians and 50 pharmacists were selected by lottery method who are working in Government Medical College Hospital, Kottayam.

Inclusion criteria of the present study was female health personnel who are willing to participate in the study and in the age group of 21-45 years. Those who are excluded from the study were unmarried and having gynecologic problems like cancer cervix, vaginal infections, allergic to silicone and latex. Tools and techniques used to collect data in the present study were sociopersonal data sheet, questionnaire to assess level of knowledge and rating scale to assess level of attitude. The informed consent obtained and ensured privacy and confidentiality. Data collection process took about 20-30 minutes. Video was provided after data collection procedure. Data was analyzed using descriptive and inferential statistics.

4. Results

4.1 Socio personal data of female health personnel

The data indicated that 29.5% female health personnel belonged to 31 – 35 years of age and 60.5% were Hindus. 99% of female health personnel were married, 50% belonged to Nursing officers and 25% belonged to pharmacist and lab technician. 56.5% female health personnel received information about menstrual cup from media. Majority (94%) of female health personnel were not using menstrual cup. Majority (58.4%) of female health personnel preferred to use menstrual cup because of convenience. 32.5%, 30.3% and 21.3% of female health personnel were not preferred to use menstrual cup because of inadequate knowledge, reluctant to change from sanitary pad and fear regarding pain, misplacement, leakage and infection respectively.

4.2 Knowledge regarding menstrual cup and its use among female health personnel

Table 1: Frequency distribution and percentage of female health personnel based on knowledge regarding menstrual cup and its use (n=200)

Knowledge regarding menstrual cup	f	%
Good (18 – 26)	40	20
Average (9 -17)	83	41.5
Poor (0-8)	77	38.5

The data presented in table 1 depicts that 41.5% of the female health personnel had average knowledge regarding menstrual cup and its use while 20% had good knowledge and 38.5% had poor knowledge.

4.3 Attitude of female health personnel regarding menstrual cup and its use

Table 2: Frequency distribution and percentage of female health personnel based on attitude regarding menstrual cup and its use, (n = 200)

Attitude	f	%
Favourable (42-60)	79	39.5
Unfavourable (1-41)	121	60.5

Table 2 shows that majority (60.5%) of female health personnel had unfavorable and 39.5% had favorable attitude towards menstrual cup and its use.

4.4 Correlation between knowledge and attitude of female health personnel regarding menstrual cup and its use.

H₀₁: There is no significant correlation between knowledge and attitude on use of menstrual cup among female health personnel

Table 3: Correlation between knowledge and attitude of female health personnel regarding menstrual cup and its use, (n=200)

Variables	r	p
Knowledge	0.35	0.06
Attitude		

Table 3 shows that r value of knowledge and attitude of female health personnel. The obtained r value 0.35 was not significant at 0.05 level. It was inferred that no significant correlation with knowledge and attitude of female health personnel regarding menstrual cup and its use. Hence null hypothesis is not rejected. It means that attitude does not increase with knowledge regarding menstrual cup and its use among female health personnel.

4.5 Association of knowledge and attitude regarding menstrual cup and its use among female health personnel with selected variables

4.5.1 Association of knowledge regarding menstrual cup and its use among female health personnel and selected variables

H₀₂: There is no significant association between knowledge of female health personnel regarding use of menstrual cup and selected variables

Table 4: Frequency distribution and Chi square value of knowledge among female health personnel based on marital status, occupation and source of information, (n = 200)

Sample characteristics	Knowledge			df	χ^2	p
	Good	Average	Poor			
Marital status						
Married	40	83	75	4	3.22	0.19
Divorced	0	0	0			
Widow	0	0	2			
Occupation						
Nursing officer	34	42	24	4	33.95	0.000
Pharmacist	2	25	23			
Lab technician	4	16	30			
Source of information						
Media	30	59	38	8	31.24	0.000

Friends	4	17	21		
Family members	4	3	3		
Others	1	4	1		
Not obtained	1	0	14		

Table 4 shows that the obtained chi square values of occupation and source of information were significant at 0.05 level. That means there was a significant association between knowledge among female health personnel with occupation and source of information and no association between knowledge and marital status.

4.5.2: Association of attitude of female health personnel regarding menstrual cup and its use and selected variables

H₀₃: There is no significant association of attitude among female health personnel regarding menstrual cup and its use with selected variables.

Table 5: Frequency distribution and Chi square value of attitude among female health personnel based on age and religion, (n = 200)

Sample characteristics	Attitude		df	χ^2	p
	Favourable f	Unfavourable f			
Age in years					
21-25	5	27	4	13.77	0.008
26-30	18	20			
31-35	26	33			
36-40	22	20			
41-45	8	21			
Religion					
Hindu	48	73	2	0.21	0.90
Muslim	4	8			
Christian	27	40			

Table 5 shows that chi square values of attitude among female health personnel with respect to age and religion. The obtained chi square value was significant at 0.01 level for age. So there was significant association between attitude of female health personnel with age and no association with religion.

5. Discussion

The present study was conducted to assess the knowledge and attitude regarding menstrual cup and its use among female health personnel in Govt. Medical College Hospital, Kottayam. The study revealed that majority (41.5%) of the female health personnel had average knowledge regarding menstrual cup and its use while 20% had good knowledge and 38.5% had poor knowledge. Another study conducted in India which showed that among 400 medical students, 28(7%) of them did not know what a menstrual cup was. There was no clear picture among students regarding material used in cup manufacture, its emptying time and sterilisation technique. Among 372 students, none of them used a menstrual cup. All the students in the study used sanitary pads.⁷

The present study revealed that majority (60.5%) of female health personnel had unfavorable attitude and 39.5% had favorable attitude towards menstrual cup and its use. The

findings were supported by the findings of a cross-sectional study conducted in a rural tertiary care Hospital in India to assess knowledge, attitude, and practices regarding menstrual cup among reproductive women. The result showed that the main concern about the menstrual cup was found to be fear of leakage (51.7%), followed by discomfort (26.7%).⁹

6. Conclusion

The study concluded that majority (94%) of female health personnel were not using menstrual cup. Among those who were using menstrual cup, majority (58.4%) of female health personnel preferred because of convenience. Among the subjects 32.5%, 30.3% and 21.3% of female health personnel were not preferred to use menstrual cup because of inadequate knowledge, reluctant to change from sanitary pad and fear regarding pain, misplacement, leakage and infection respectively. It also revealed that majority (41.5%) of the female health personnel had average knowledge regarding menstrual cup and its use. Majority (60.5%) of female health personnel had unfavorable attitude and 39.5% had favorable attitude towards menstrual cup and its use.

7. Future Scope

- 1) A similar study can be replicated on larger samples and in different settings.
- 2) A similar study can be replicated on larger samples along with practice of menstrual cups.
- 3) A comparative study can be conducted to assess knowledge and attitude among female health personnel and general population.
- 4) Experimental study can be conducted to assess the effectiveness of educational programme in the practice of menstrual cup.

References

- [1] Babu J, Kumar PJ. Socio-Cultural Dimensions of Menstrual Health among Tribal Communities in Kerala. *Studies in Indian Place Names*. 2020;40(3):3944-56.
- [2] Kakani CR, Bhatt JK. Study of adaptability and efficacy of menstrual cup in managing menstrual health and hygiene. *International Journal of Reproduction and Contraception Obstetrics and Gynecology*. 2017 Jul;6(7):3045-53
- [3] vanEijk AM, Laserson KF, Nyothach E, Oruko K, Omoto J, Mason L, Alexander K, Oduor C, Mohammed A, Eleveld A, Ngere I. Use of menstrual cups among school girls: longitudinal observations nested in a randomised controlled feasibility study in rural western Kenya. *Reproductive health*. 2018 Dec;15(1):1-1.
- [4] Medhi A, Nigam S, Pendharkar O, Hegde A, Borkar R. Menstrual Cups: The Sustainable Future for Women Hygiene in India.
- [5] Gulannavar MS, Manjula GK, Ramesh MN. "Maitri Menstrual Cup Scheme": A Sociological Study. *Journal of Positive School Psychology*. 2022 Sep 15;6(8):10068-70.
- [6] Hennegan J. Inserting informed choice into global menstrual product use and provision. *The Lancet Public Health*. 2019 Aug 1;4(8):e361-2.

- [7] Eti M, Shreya MS, Sailakshmi MPA. Knowledge about menstrual cup and its usage among medical students. *Int J ReprodContraceptObstetGynecol* 2019;8:4966-70.
- [8] SudevanDevan GM, Mohanan G, Ajitha GK, Kavitha H, Majeed I, Nair AN. Knowledge, Attitude and Practices Regarding Menstrual Cup Among Females in an Urban Setting of South Kerala. *Journal of Family & Reproductive Health*. 2022 Dec 1;16(4).
- [9] Meghana S, Gomathy E. Knowledge, attitude, and practices regarding menstrual cup among reproductive women in a rural tertiary care Hospital. *Int J ClinObstetGynaecol*. 2021 Mar 1;5(2):211-4

Author Profile



2022.

Ansalna Rahim studied BSc Nursing from School of Medical Education, Pathanamthitta in 2010-2014 and MSc Nursing in Obstetric and Gynaecological Nursing from Govt. College of Nursing, Kottayam in 2020-



2022.

Sisy Jose working as Associate Professor Govt. College of Nursing, Kottayam. She received BSc and MSc in Nursing from CMC Vellore in 1984-1988 and 1998-2000 respectively. During 2013 she took PhD in

Rehabilitation nursing from MG University, Kottayam. She has 30 yrs of teaching experience.