



**KNOWLEDGE, ATTITUDE AND PRACTICE OF MENSTRUAL CUP AMONG FEMALE RESIDENTS IN A GOVERNMENT MEDICAL COLLEGE OF WESTERN MAHARASHTRA**

**Dr. Aditi A. Gupta\***

Junior Resident, Department Of Community Medicine, Dr. Vaishampayan Memorial Govt. Medical College, Solapur. \*Corresponding Author

**Dr. Sampatti S. Todkar**

Associate Professor, Department Of Community Medicine, Dr. Vaishampayan Memorial Govt. Medical College, Solapur

**ABSTRACT**

**Background:-** Menstrual cups have been available for decades, but their use in India is limited because of popularity of sanitary pads. Menstrual cups are a safe and feasible alternative to the more widely used sanitary napkins. It is more environment friendly as it is reusable. Objective of this study is to assess menstrual cup awareness among the female resident doctors. **Objectives:-** 1. To assess knowledge, attitude and practice of menstrual cup among female residents. 2. To suggest suitable recommendations based on the study findings. **Material And Method :-** A cross sectional study was conducted on all female residents who were willing to give consent. Out of 120 female residents 106 has given the consent. Data was collected through Google forms using pre-tested semi structured questionnaire. Collected data was transferred to Microsoft excel and analyzed. **Result:-** Among 106 female residents, 76(71.6%) are below age 25 years, 100% have heard about menstrual cup out of which 73.6% know how to use it, 86.8% think it is safe to use, 66% were aware of material used to manufacture the cups. Cups was preferred by 45.3%. 88.7% think it is cost effective and ecofriendly. 24.5% had pain after using it. **Conclusion:-** Awareness must be created to educate and promote use of menstrual cup as it is ecofriendly, comfortable and safe to use.

**KEYWORDS :** Menstrual Cup, Knowledge, Attitude

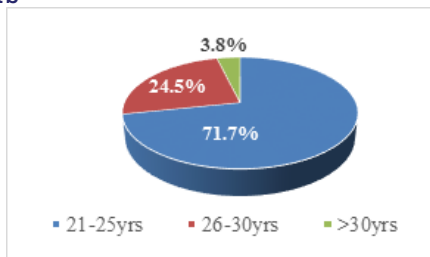
**INTRODUCTION**

According to State of India's Environment 2019 Survey, the Menstrual Hygiene Alliance of India (MHAI) has approximated that there are 336 million menstruating women in India, of which 36 per cent use disposable sanitary napkins – that totals to 121 million women.<sup>1</sup> India has 12.3 billion disposable napkins to take care of every year, majority of which are not biodegradable/compostable. On average, a woman throws about 150 kg of sanitary pad waste every year, which is far away from the eco-friendly practices. Menstrual cups have been available for decades, but their use in India is limited because of the popularity of sanitary pads. Menstrual cups are a safe and feasible alternative to the more widely used sanitary napkins. It is more environment friendly as it is reusable. The aim of this study is to assess menstrual cup awareness and practices among the female resident doctors.

**MATERIAL AND METHOD**

A cross sectional, observational study was conducted in a government medical college of western Maharashtra among female residents from 1<sup>st</sup> November to 30<sup>th</sup> November. Out of 120 female residents 106 had given the consent. Data was collected through Google forms using pre-tested semi structured questionnaire. Collected data was transferred to Microsoft excel and analysed

**RESULTS**



**Figure No. 1:-** Age wise distribution of study participants

Figure No. 1 shows 71.7% participants were of age group 21-25 years. 3.8% participants were above 30 years of age.

**Table – 1 Knowledge regarding menstrual Cup among Study participants (N=106)**

Sr. No.	Knowledge about menstrual cup	yes	%
1.	Heard of menstrual cup	106	100
2.	Menstrual cups are used during menstruation	106	100
3.	Do you know how to use menstrual cup	78	73.6
4.	Can you reuse menstrual cups	100	94.3
5.	Is it safe to use	92	86.8

Table no. 1 shows all the participants had heard about menstrual cup and knew that it is used during menstruation. But only 73.6% participants knew how to use menstrual cup. 94.3% knows that it can be reused while only 86.8% thinks it is safe to use.

**Table - 2 Knowledge Regarding Menstrual Cup Among Study Participants (n= 106)**

Sr. No.	Knowledge of menstrual cup	Response Category	Yes	%
1.	How did you come to know about the usage of menstrual cup	Friends	26	24.5
		Family	10	9.4
		Internet/ Social Media	68	64.1
		School	02	1.8
2.	The material used to make menstrual cup	Latex	14	13.2
		Silicon	70	66
		Plastic	02	1.9
		Natural rubber	02	1.9
		Don't know	18	17
3.	Till how many hours you can wear it?	4-6	26	24.5
		7-9	42	39.6
		10-12	38	35.8
4.	till how much duration can you use it?	1month	6	5.7
		6months	22	20.8
		1year	26	24.5
		5year	36	34
		10years	16	15.1
5.	Sterilization of the cup is done by?	Boiling	60	56.6
		washing with water	0	0
		washing with soap and water	6	5.7
		all of the above	26	24.5

6.	It can be used by	I don't know	14	13.2
		Virgins	20	18.9
		Unmarried	04	3.8
		Married	14	13.2
		All	48	45.8
		Don't know	20	18.9

Table No. 2 shows that 64.1% participants got to know about the usage of menstrual cup via internet and social media. 66% participants knew that the material used to make menstrual cup is medical grade silicon. 35.8% participants knew that it can be wore up to 10-12 hours. Only 15.1% knew that it can be used up to 10 years. 13.2 % participants didn't know about the sterilization method of the cup and 45.8% participants knew that it can be used by virgins, unmarried and married women.

**Table – 3 Attitude Regarding Menstrual Cup Among Study Population (n= 106)**

Sr. No.	Attitude Questions	Yes	%	No	%
1.	Do you prefer using it?	48	45.3	58	54.7
2.	Do you think it is more convenient?	40	37.7	66	62.3
3.	Do you think it is easy to use?	30	28.3	76	71.7
4.	Do you fear using it?	68	64.2	38	35.8
6.	Can it be felt inside	58	54.7	48	45.3
7.	Do you think it is cost effective?	94	88.7	12	11.3
8.	Do you think usage of a menstrual cup will increase the quality of life during periods?	92	86.8	14	13.2
9.	Will you recommend using it	92	86.8	14	13.2

Table no. 3 shows the attitude of the participants towards menstrual cup. 45.3% participants prefer using menstrual cup. 88.7% participants think it is cost effective and 86.8% think that usage of a menstrual cup will increase the quality of life during periods and would recommend using it.

**Table 4 Reasons Of Not Using Menstrual Cup By Study Subjects (n=52)**

Attitude regarding menstrual cup	Yes	%
Reason of not using it:- (n=52)		
Fear of pain and discomfort	30	28.3
Don't feel safe	14	13.3
Difficult to insert	8	7.5
Fear of leakage	12	11.3
Fear of getting stuck	4	3.8
Don't know how to use properly	12	11.3
Afraid of size might hurt as a virgin	4	3.8
Risk of infection	4	3.8
Easier to use pads	4	3.8
Inconvenient to boil	2	1.9
Fear of not able to remove	10	19.2

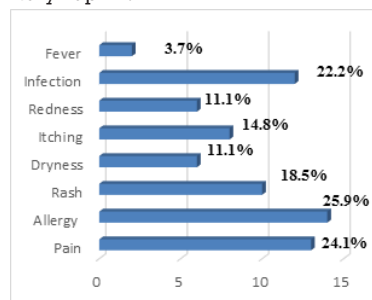
Table no. 4 shows that 28.3% participants don't use menstrual cup because of fear of pain and discomfort. 11.3% participants fear of leakage and don't know how to use it properly while 19.2% fear of not able to remove.

**Table 5 Practice Regarding Menstrual Cup Practice**

Sr. No.	Practice (n=54)	Category	Yes	%
1.	What product were you using before menstrual cup	Sanitary pad	48	88.9
		Tampon	06	11.1
2.	How do you store it?	Airtight Container	26	48.2
		Cloth Bag	22	40.7
		Plastic Bag	06	11.1
		Always	02	3.7
3.	Does it leak?	always	02	3.7

4.	Do you wash it after every use?	No	24	44.4
		Sometimes	28	51.9
		Yes	42	77.8
6.	How frequently do you empty it?	No	04	7.4
		Sometimes	08	14.8
		Once a day	14	25.9
7.	Activities you find to do comfortably while using cup which you were hesitant to do while using regular sanitary napkin	Twice a day	36	66.7
		>3 times a day	04	7.4
		swimming	24	44.4
7.	Activities you find to do comfortably while using cup which you were hesitant to do while using regular sanitary napkin	sports activity	24	44.4
		Sleeping Comfortably at night	34	62.4
		water activity	24	44.4

Table 5 shows that 88.9% of the participants who have used menstrual cup used to use sanitary pads before. 48.2% participants who use the cup store it in airtight container. 44.4% of the participants haven't faced a problem of leakage while using it. 62.4% participants using menstrual cup feel comfortable at night while sleeping. 44.4% participants who use cup find it more comfortable to do swimming, sports and water activity which they were hesitant to do while using regular sanitary napkin.



**Figure 2:-side Effects Of Using Menstrual Cup**

Figure 2 shows the side effects experienced by the study participants while using menstrual cup out of which 24.1% felt pain, 18.5% experienced rashes, 11.1% felt dryness and redness and 22.2% got infection after using it.

**DISCUSSION**

100% female residents heard about menstrual cup out of which 64.1% came to know via internet/ Social Media in my study whereas 79.4% female medical students heard about it in a similar study conducted in private medical college of Tamil Nadu3 and similarly 59.4% knew via social media in a study conducted on female staff of Rama medical college, Hapur4. 86.8% female residents recommended its usage, while 69.7% women recommended in a study conducted at a medical college in South Kerala5. 86.8% female residents of my study think it is safe to use menstrual cup similar to the study conducted in Hapur showing 87.6% positive result on safety while a study conducted in a medical college of bangalore shows that 92.47% medical students think it's a safe device6. 66% residents in my study knows that menstrual cup is made up of silicon whereas 51.8% female medical students of a medical college of Tamil Nadu knows about the material used to make it is silicon.3. 56.6% of study participants have a correct knowledge about sterilization as boiling compared to knowledge of medical students of a Rajarajeshwari medical college in Bangalore which is 28.4% 6.11.3% of users experienced leakage in my study whereas 13.7% have experienced leakage in a similar study conducted on women at a medical college in South Kerala5. 25.9% study participants got allergy as a side effect in my study while 15.7% got allergy in a study conducted at medical college, Hapur.4

## CONCLUSIONS

All the Female residents had heard about the menstrual cup and most of them would want to use but due to lack of more knowledge about the insertion and removal primarily and fear of pain, fear of getting stuck and fear of leakage, they are not using it. When a comparison is done between willingness to use menstrual cup and its actual use, a huge gap is seen. Hence, most importantly increasing the awareness of the use of cups and counselling programs emphasizing on good habits of sanitary hygiene for females by government agencies through health workers should be considered as prime goal. Demonstration and explanation of the process of inserting and removing the menstrual cups should be performed. As Menstrual Cups are More Ecofriendly, Cost-effective, device which gives much more comfort to the users, no rashes as caused by sanitary pads, no worries for water activities, IEC activities are needed to create awareness.

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