



“A Qualitative Study – “This is Why Women reject to use a Menstrual Cup – Experiences of Non-Users”

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KEYWORDS

Menstrual cup (MC), Conventional Methods (CM), Reproductive age group women.

ABSTRACT:

Introduction: A sustainable product for managing menstrual hygiene is the need of the hour, instead of the availability of various reusable methods like a menstrual cup, its acceptance rate is quite low in reproductive age group women.

Objectives: To explore the barriers to adopting a menstrual cup.

Methods: We conducted a transformative mixed method study it was nested on previous studies where the cognizance level of a menstrual cup was found less, acceptability and performance of menstrual cup users was higher compared to conventional method users and the available studies were not sufficient to conclude. The study further thrived to find out the barriers to using a menstrual cup. The sampling technique was Purposive homogenous sampling. The participants were the reproductive age group of women between (15-49). The inclusion criteria were the women with regular menstrual flow (28 days cycle) who were using conventional methods (Sanitary Pads or Cloth) with no intention to become pregnant during the time of data collection. The study was conducted in two institutes in Jodhpur. The study recruited 28 participants from both the centres. Eight In-depth and 4 focused group discussions were conducted with the participants. The interviews were recorded digitally in Hindi and translated into English language. The transcripts were prepared and uploaded in MAXQDA software. Thematic analysis was used to find out the factors for not using a menstrual cup.

Results: The barriers were related to perceived physical, and mental fear, and lack of support from society, family, professionals, and government.

Conclusions: If women are given adequate training, knowledge, and follow-up about the use of a menstrual cup will enable them to use this device easily.

1.Introduction

Preventive measures for health care are paramount to adopting a sustainable and healthy alternative for menstrual Hygiene management. Menstrual hygiene management is an inevitable part of any woman's life. The number of cervical cancer patients is increasing due to the unhygienic menstrual practices.[1] The chemicals present in sanitary pads are harmful carcinogens enabling the threat to have a probability of certain diseases. Women unaware of the threat caused by conventional methods are widely adopting non-sustainable, non-environment-friendly, and unhygienic methods.[2]

Sanitary pads are made up of plastic materials and embedded with chemicals like BPA and BPS can complicate embryonic development. The plasticizers can lead to organ damage. The absorbent cellulose gel used in the pads can cause cervical cancer, and the dioxin present in the pads can cause ovarian

cancer. Loaded with chemicals, toxins, synthetic material, and plastic sanitary products are not only harmful to the normal vaginal flora but to the environment also.[3]

The cotton pads contain furan a dangerous chemical, pesticides, and herbicides that can harm when they contact the bloodstream, and these chemicals are linked to thyroid malfunction, infertility, and other health problems.[4] Furthermore, these chemicals are linked to thyroid malfunction, infertility, and other health problems like urinary tract infections.[5] Not only this it is also proved that dioxin may cause skin discoloration and liver-related complications. A female may accumulate all these chemicals through the sanitary pads in her body. The long-term effect of the use of such methods can cause issues like a damaged immune system, obesity, pelvic inflammatory disease, hormone imbalance, and so on.



According to research studies, short-term exposure to dioxin can cause skin darkening and altered liver function. Accumulation of these chemicals in the body can cause serious health issues like hormone dysfunction, immune system damage, diabetes, pelvic inflammatory disease ovarian cancer, infertility, birth defects scented pads irritate, and bacterial and yeast infections.[6]

A fundamental need for women is to understand their bodies and monthly menstrual cycles, equipping women to knowledgeably make health choices regarding their health needs.[7] Though menstrual health is one of the important aspects of women's healthcare, this topic is one of the least discussed in India. This aspect of women's health has a significant impact on overall quality of life.

The use of sanitary pads and washing the genital area are essential practices for maintaining menstrual hygiene. If a woman is unable to manage her menstruation cycle hygienically it can lead to various reproductive tract infections. Unhygienic menstrual practices can affect the health of girls and women, increasing the risk of reproductive tract infection.[8] Some studies state that although sanitary pads are available to use, menstrual hygiene management is not up to the standards.[9]

Yet, issues related to menstruation and its practices are still unclear due to taboos and socio-cultural restrictions resulting in them drying the used cloth in their rooms or a corner or underneath their usual clothes.[10] There are a plethora of myths about menstruation for instance if a woman who is menstruating touches food it will turn bad, restrictions about touching a man and the menstruating woman should not go outside because she may be caught by bad spirits.[11]

Most women manage their menses with cloth or pads; however, these are not sustainable solutions. We must try to find some better alternatives that help in the long run to menstruators and the environment. The present study is nested on the previous studies to explore the factors for the cognizance and acceptance of a menstrual cup in comparison to conventional methods.[12–14] The main aim of the study is to explore the factors for not choosing a menstrual cup for managing menstrual hygiene.

According to an article published in 1962, the advantage of the menstrual cup was explained however still the menstrual cup has not come in the streamline. Though other studies are recommending that women are accepting the cup the actual number of women who are using the cup is very subtle.[15–17]

2.Objectives

The objective of the study is to explore the barriers in adopting and using a menstrual cup for menstrual hygiene management.

3.Methods

Study Design and Settings

We used a transformative mixed method research design as the study is nested in previous studies this study

further thrived to find out the barriers to using a menstrual cup in India. The study was conducted in two institutes at Jodhpur [Dr. S.N. Medical College and Nursing College). Even though the study was conducted in a small city in India as a miniature, the study thrives to expand in other cities in India to find out the barriers to adopting a menstrual cup.

Sampling and Study Participants

The participants were the reproductive age group [15-49] women. The inclusion criteria were the women with regular menstrual flow (28 days cycle) who were using conventional methods (Sanitary Pads or Cloth) with no intention to become pregnant during the time of the study data collection. The sampling technique was purposive homogenous sampling. The study recruited 28 participants till the point of data saturation from both centres. Participants were selected purposefully based on age, marital status, area of living, and used menstrual method. The participants were approached face to face. Sixteen participants were unmarried 12 were married, 18 were from urban areas and 10 were from rural side. The mean age of the participants was 24 years. About 98% graduated and 2% had senior secondary, no participants were without any formal education. We approached 40 women however 12 left due to their unavailability at the time of the interview.

Data Collection Procedure

A total of 8 In-depth interviews (IDIs) and 4 focused group discussions (FGDs) were conducted. In each FGD one group was of 5 participants (FGD-1, married urban, FGD-2, married rural, FGD-3, unmarried urban, FGD-4, unmarried rural). The IDIs and FGDs were conducted during March – April 2023. Five participants participated in each FGD; 6 participants were taken for the IDIs. We conducted 2 IDIs additionally to saturate the FGDs. The number of FGDs and IDIs was based on data saturation. We used an Interview schedule guide for IDIs and FGDs. The tool was converted into Hindi and was pretested. All the interviews and FGDs were conducted by the first author. The interview guide has six open-ended questions. (Table 1)

The FGDs were conducted at the lecture hall of the institutions. During the interviews, no other person was present except the participants and the facilitator. No repeat interviews were conducted. Notes and Memos



were taken throughout the interviews. When we did not receive any new information that considered the point of data saturation and till that point the FGDs were continued. The average time taken in the FGDs was between 40 to 50 Min. and for IDIs, it was 25 minutes.

Data Management and Analysis

The interviews were conducted in Hindi language and recorded digitally. The digital data was translated into English language and transcripts were prepared. Thematic analysis was used to transcript the data in MAXQDA software. The transcripts were repeatedly read to construct the themes. The author coded and summarized the data using thematic analysis. The researcher discussed the study results with 5 married and 5 unmarried conventional method users to know whether they agreed with our interpretation.

Ethical Considerations

Ethical approval was obtained from the Institutional Ethical Committee of Dr. SN Medical College and Nursing College (No. SNMC/IEC/2023/1453-1454: GCON/JO/2022/209 dated 21 December 2022). The participants informed consent was taken and they were given a code number to maintain confidentiality. The interviews were audio-recorded and results were published with prior consent. They were explained about the aims and objectives of the study and had the liberty to leave the study at any stage.

4.Results

The results of the study showed that in all the IDIs and FGDs various opinions were given about the barriers to using a menstrual cup.

Main Theme: Perceived Physical and mental barriers.

Category: Perceived fear of a menstrual cup

- **Anxiety**
- **Apprehension**
- **Painful experience**

Fear of getting the MC stuck in the vagina

Most of the participants explained that the procedure to use a menstrual cup seems difficult even insertion seemed easy to them but almost all reported that they are afraid of the removal process.

“What will we do if it doesn't come outside, it will be very embarrassing to even seek any help from anyone, if it gets stuck inside (All laughing)” (FGD-1, married urban, CM users)

“I do not want to put anything inside my body and I think it will be very painful. It is not easy to use.” (IDI, 40 years, married urban, CM user)

“What if it gets stuck inside while using or what if it gets spilled on the dress while taking it out.” (IDI 25-year, unmarried, urban CM user)

1.1.1 Fear of losing virginity

There were some prevailing beliefs among the participants that unmarried women should not use such devices as they would face problems after their marriage and the use of cups will lead to harm their reputation.

“As I have heard the cup can be used only by those who are in a relationship.....and I am a virginand I think I will face difficulties after using this like....uncomfortable and all...I want to use a menstrual cup but I feel discomfort about how to use it and how to insert it”.(IDI, 19-year, unmarried, urban CM user)

Inability to insert the menstrual cup

Most of the participants were skeptical about the use of the cup. They were not sure whether they will be able to use this or not as the user has to insert the cup in the vagina so most of them were apprehensive before the use.

“I want to use it but I am afraid to use the Menstrual cup first time, I was afraid to death, I think it will be uncomfortable.” (IDI, 24-year, unmarried urban, CM user)

The participants were not clear about the use and they were curious to know how to use a cup. Their main difficulty was how to insert and remove the cup from the body. The first-time use was difficult for most of the women but the second time, they were comfortable using it. However, a few of them reported that they tried to use the cup but could not use it properly.

“I tried before twice but was not able to insert it correctly.” Maybe in the future, I'll use it but as of now I still have many queries that need to be resolved.” (IDI 19-year, unmarried, urban CM user)

Complicated process to follow

Some of the participants were so afraid that the cup may injure their bodies and it would not be suitable for them. This resulted in their lack of motivation to even try an MC.

“Due to my thinking...I think it's a difficult procedure...and afraid of using ...I am having a lot of questions regarding like how can we keep anything inside, is it comfortable and many more. Never used it before, and the mother doesn't approve. Hands get dirty while removing it. I don't know whether inserting such a thing inside will be safe or not. It will cause harm in the internal part i.e. Vagina, Hymen, etc., Irritation. May be painful to insert!!!” (IDI 22-year, unmarried, rural CM user)

“It seems enticing to us but we don't know how to use it exactly, maybe if someone teaches us, we can use it or if we get any assistance from health set up otherwise it seems a very complicated process” (FGD-2, married rural, CM users)



"Because I don't wear this so I don't have fear of irritation and infection plus why to opt for such a complex method when an easy way of sanitary pads is available." (IDI, 25-year, unmarried, urban CM user)

Most participants were afraid of the cup's removal and insertion, some women think that it might injure the internal organs, women have not used it before and thus, question whether it is safe or not, and some think of it as a social taboo. Women were afraid that it might lead to leakage or bleeding, they also thought it was a difficult procedure. Some women also have the fear of inserting something in their body.

"I feel it's difficult to insert and remove it and even after the care... I have never used it but I think it will be painful. I think a pad is the only best option for me. Because it's costly. I am worried about its use, leakage, and safety." (IDI 22-year, unmarried, rural CM user)

Main Theme: Perceived social barriers.

➤Categories: Lack of support from society

➤Family & Others

Community's Approval

The main reason for not accepting and using a menstrual cup was that the women and girls were not able to get approval from some higher authority it also shows that still women in our society want approval from somebody but cannot use and make the decision to use the cup on their own. Most of the participants stated that their community would not approve of using the menstrual cup as this is an unusual method and nobody in their society approve of using the cup.

"In our society girls don't use such methods before marriage and if anyone will know they will judge the character of the girl, so we don't think it's a wise decision to use the cup." (FGD-4, unmarried rural, CM users)

Lack of parent's approval

Most of the participants especially the unmarried girls informed that their parents will not allow them to use the cup.

"Our family especially mothers will never approve using this, we know that overall, it will be cheaper than the sanitary pads but there are so many reasons we cannot tell you" (FGD-3, unmarried urban, CM users)

Lack of husband's/boyfriend's approval

Most of the CM users said that their family especially mothers will never permit to use this, whereas the married women said that they need to get permission from their husbands. The sanitary pad that can be easily used by unmarried women was also a reason for no interest in using a menstrual cup.

"I have to ask my husband if he will agree then only, I can use." (IDI, 25-year unmarried urban CM user)

Lack of any professional help and follow-up

Most of the participants stated that there should be some awareness program for explaining the proper menstrual hygiene and there should be more involvement of the support system of health care professionals to explain the practices in a better way.

Main theme - Perceived Personal barriers

➤Lack of knowledge about the menstrual cup

➤Lack of self-confidence

➤Benefits of conventional methods

➤Indecisiveness

1.1.2Never heard about a menstrual cup

Most of the participants were not even aware of a sustainable alternative. Though they knew all the problems of sanitary problems, the participants stated that they didn't know much about the cup and thus could not use it.

"It's very important to maintain menstrual hygiene. Whatever brands you use, you have to change your pads frequently preferentially every 6 hrs. or earlier if you have more bleed. I would like to share my experience that if use a pad then change the pad from time to time maintain personal hygiene and dispose of it in the proper way like dispose. It is more important than any other hygiene... To protect you and your partner from infection. and to save your married life. I have never heard about a cup and why nobody promotes it, not the government, not the media that means something is dangerous with it." (IDI, 36-year, married, urban, CM user)

Many participants wanted to use a menstrual cup but were skeptical about its use. They were waiting for some validation or some recommendation to finally make up their mind to use. They informed problems with the conventional methods although were uncertain of MC's use.

"I don't understand that should use it or not, I cannot decide and there is no reason for not using it but I don't have the guts to use it." (IDI, 19-year, unmarried, urban, CM users)

Lack of knowledge about own body (the vaginal canal will be widened)

Some participants were asking the question that where the cup will be placed inside the body and as it is worn inside the vagina it will increase its size.

Altered urination and defecation while inside the body

Some participants thought that by wearing a cup they could not go for a nature's call and in each restroom use they would remove the cup which would be inconvenient.

The high initial cost of menstrual cups.

According to the nonusers, this device was quite costly in the first place as the researcher did not provide the cup to everyone for free. Women wanted to use this for their acquaintances but the cost was not affordable, though it was a one-time investment.

"It is quite costly, and not available in the market. I'm confused about it. It is time-consuming to insert for the beginners." (FGD-3, unmarried urban CM user)

"All methods have their pros and cons. Without proper hygiene any method can get us infection, so it's better to choose the



method which we can afford in a proper hygienic manner." (FGD-1, married urban, CM user)

"I want to use it but it is very costly and I don't have this much money altogether, that's why I use cotton clothes, the pads given by the Government for free, are good for nothing. I don't use that." (IDI, 20 years, married, rural CM user)

Satisfied with the conventional methods

One of the reasons participants were not interested in MC is earlier they were using cloth and then they switched to sanitary pads it was a great relief for them as they didn't have to wash and dry the sanitary pads, unlike cloths. Most of the participants were already satisfied with their past method be it a cloth or sanitary pad

"We usually wear a cotton chuniri and we always use that for periods and it's very soft and we don't reuse it.....just use and throw it so don't think that we need to use a cup." (FGD-2, married, Rural CM users)

"I'm satisfied with tampon use for heavy flow, and sanitary pad for scanty flow. In Indian culture many types of taboos about menstrual hygiene, so my opinion is providing health education and maintaining personal hygiene to not only females but also their families. To resolve misconception about the menstrual cycle." (IDI, 22-year, unmarried rural CM user)

Near menopause

Some participants suggested that they are near menopause so now they should learn a new process when they are already satisfied with pads.

Some participants aged 35 or more said that they would soon have menopause so why invest in such an expensive device? They have been using pads only and they said that if they had known this earlier, they would have used them, but now they

"It is my personal choice; I am already in my menopausal stage and am skeptical about changing the comfortable practice of sanitary pads to something new." (IDI, 40-year married, urban CM user)

Young Age

Some of the participants stated that they wanted to use a menstrual cup but at this age, their mothers will not allow them to use it.

"I will definitely use a cup but right now I am too young to use a cup I will use this in the future." (IDI, 19-year unmarried, urban CM user)

Main theme - Perceived Surrounding barriers

➤Less support from professionals

➤Less Governmental Support

Not recommended by the Doctors

Many participants explained that when they asked their Doctors, they said not to use a menstrual cup as it can cause

infection. The participants said that the Doctors are not recommending the women to use the cup as the insertion process if not done with proper disinfection method may lead to infection.

"Doctors say not use in young age if you have any infection then use this cup otherwise use a sanitary pad." (IDI, 25-year, unmarried, urban CM users)

The use of MC needed some assistance for one or two cycles. Most participants said that they would use but they must know somebody who was already using it. This will give them the confidence to use it.

"Never used and have questions like is it safe and secure. I feel good using a pad and do not want to replace it with another method. I have seen many celebrities advertising and read about it to get to know further but I still have my doubts and am not ready to discuss it with any gynecologist, unless I know someone who uses it." (IDI, 20-year, married, rural CM user)

No Marketing of menstrual cup

Many respondents suggested that they want to use a cup but it is not easily available in the market. Some said that the pads are only available in urban areas in rural areas where women cannot even afford to get a pad, they can use a menstrual cup. According to the participants, sanitary pads are more convenient to purchase and use than other methods according to participants pads are more hygienic and prevent infections.

"Pads are easily available in the market but their use is uncomfortable, and irritating around the perineal area. Pads are easy to use and hygienic also. With pads, there is no fear of leakage. The Pad is best for women." (FGD-3, unmarried, Urban CM user)

The participants wanted to use a menstrual cup as most of them stated that they had problems using sanitary pads, the participants stated that the cup is not easily available in the market and they had never heard of it earlier in their life, which makes it difficult to use whereas pads are easily available.

"This cup is not easily available in the market. It is an unapproachable device. In rural areas women are not even using pads how they will use the menstrual cup." (FGD-4 unmarried, rural CM user)

No policy given by the Government officials

Most of the participants suggested that the use of any method needs proper training and guidelines to be learned. The participants also informed that the use of sanitary pads or cloth is quite easy to understand they do not require any training, whereas the cup insertion and removal needs special follow-up. Participants also suggested that there should be some programs for improving the awareness and skills for different methods.

"I think we should try some other method than sanitary pads. I think, the menstrual cup should be promoted as much as possible, as till now most of the girls out there are still scared



of using it due to rumors of losing their virginity, and having a lot of pain. Proper guidance should be given for its use! I feel there should be a better way for the disposal of sanitary pads." (IDI, 19-year unmarried urban, CM user)

"I think social awareness is necessary for menstrual hygiene and early prognosis of gynecological & obstetrics problems. Resolving queries and misconceptions about menstrual bleeding and disease." (IDI, 34 years, married, rural CM user)

5. Discussion

The women were assessed for their preferred reasons for not using a menstrual cup for menstrual hygiene management through semi-structured in-depth and focused group interviews to further explore the factors for opting for a particular menstrual method. The thematic analysis showed that women were afraid of using a menstrual cup due to a varied reason. The themes were made on the basis of their physical, mental, personal, surrounding barriers. Most of the participants showed their interest to use although stress, anxiety, initial cost, complexity of the user manual, lack of confidence, lack of understanding of user manual, lack of self-confidence, lack of knowledge, fear of loss of virginity, fear of get stuck the cup inside, fear of increased size of vaginal canal, lack of family support (For married Husband and for unmarried - Mothers), social support, Government support and apprehensiveness due to the use. (Table 2)

The results of the study revealed that in India women are in a transitional phase where they have to choose between new versus old methods. They are growing towards an advanced age in the world of equality and feminism yet are attached to unhealthy menstrual practices due to various barriers. It can be daunting for an unmarried woman to use a menstrual cup in our country however the married women were also anxious to use it. In the last decade most girls and women have been using a cloth and switching from a cloth to a sanitary pad is considered a positive change by the Government, however, product life cycle and the burden on the environment are areas of concern. Owing to the absence of support from the family, society, and the government they are not able to decide to use a menstrual cup. Conventional methods create a dire impact, such as the environmental burden of disposal of sanitary pads, and physical, and mental discomfort however girls and women are still trying to find out the best way to manage their menses.

The study suggested that though women are aware of the shortcomings of the conventional methods they have to go far away. The other research studies are in contrast to the present study studies as most studies mention the reasons women are adopting the MC yet do not mention the reasons why women are not interested in using an MC. If women are provided with training on how to use a menstrual cup with a proper follow-up, they can easily adapt to rash free, cash free, trash free and mess free solution for menstrual hygiene. If all the organizations work collaboratively and the government start to distribute the cup on a subsidized price the women will be more ready to switch to a sustainable and eco-friendly method.

Table 1 Focus Group Discussion Guide.

1.1. Can you describe your menstrual hygiene practice?

Probe: Types of menstrual products including tampons, tissue paper, differences in various methods, type of product, method of using, challenges while using, satisfaction with the method, reasons for dissatisfaction or satisfaction.

2. 2. Please tell me about your past experiences while using a particular menstrual product.

Probe: different types of sanitary products. pad, cloth, menstrual cup, tampon, any other device, the number or frequency of particular method, purchasing habit, social issue, financial issue

3. 3. How much do you know about different menstrual products?

Probe: Types of menstrual products including biodegradable and non-biodegradable products, difference between reusable and nonerasable products.

4. 4. What do you know about a menstrual cup?

Probe: first-time use, parents support, family support, husband support, experience after trying, overall experience while using a cup.

5. 5. Would you explain the reasons you do not want to use a menstrual cup?

Probe. Any motivation or demotivation, Anxiety, lack of confidence, fear of insertion, removal, virginity, support from parents, husband, cost, support from any NGO, society.

6. 6. Would you explain how you feel about using or switching to a new method?

Probe. confidence in using a menstrual cup in the future, any thought of the benefits of using a cup or in using a cup, fear to use, experiences with the past method, recommend others, friends, families, experiences after use, comparison



with the last method (Pad/cloth) in terms of physical and mental comfort, cost and environment, confidence while using.

Table 2- Theme, Categories, And Subcategories to Show Perceived Barriers – To adopt a Menstrual Cup.

Theme	Category	Subcategory
Perceived Physical and Mental Barriers	Fear Anxiety Apprehension Painful experience	<ul style="list-style-type: none"> • Fear of getting stuck in the vagina • Fear of losing virginity • Inability to insert the menstrual cup • Complicated process to follow
Perceived Social Barriers	Lack of support from society, family & others	<ul style="list-style-type: none"> • Community approval. • Lack of Parent's approval • Lack of husband/boyfriend's approval • Lack of any professional help and follow-up
Perceived Personal Barriers	Lack of knowledge about the menstrual cup Lack of self-confidence Lack of Money Benefits of conventional methods for oneself Indecisiveness	<ul style="list-style-type: none"> • Never heard about a menstrual cup • Lack of knowledge about own body (the vaginal canal will be widened) • Altered urination and defecation while inside the body • The high initial cost of menstrual cups. • Satisfied with the conventional methods • Near menopause. • Young Age
Perceived surrounding Barriers	Less support from the professionals Not supported by the Government	<ul style="list-style-type: none"> • Not recommended by the Doctors • No Marketing of menstrual cup • No policy given by the Government officials • Unavailability of proper training to use a menstrual cup

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