

Perception of Females about their Menstrual Hygiene and Environment

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Abstract

The basic amenities of a healthy human life include nutritious food, clean drinking water, shelter, and sanitation facilities. Health and sanitation are concerns for individuals and environment. There is a lack of adequate facilities for sanitation for females, who are considered half of the human population. Menstrual hygiene is one of the concerns and products like sanitary pads and tampons are commonly used by the majority of females in countries like India. Several reports and researchers suggest that due to a lack of awareness of menstrual hygiene, an ample number of sanitary pads are disposed of in an improper manner which leads to poor waste management in the country. Therefore, this research study tries to understand the awareness of menstrual hygiene, products & their alternatives, and waste in females living in urban areas. Convenient sampling was done. 120 females were sent the questionnaire through Google Forms and focus group discussions were done with 30 females to collect the data. Findings suggest that there is a lack of awareness regarding the menstrual hygiene and proper disposal management of sanitary pads which led to harmful effects on sanitation and health. It was also found that females were hesitant to switch to the alternative option of the menstrual cup as there is a lack of awareness, taboo associated with virginity and menstruation, prices and accessibility are also the aspects related to it. It is concluded that some different measures need to be taken towards the awareness and sensitivity of menstrual hygiene and the environment.

Keywords: Menstrual Hygiene, Sanitary pads, Menstrual Cup, Disposal, Environment.

Introduction

Nutritious Food, clean drinking water, Shelter, and sanitation facilities are basic human amenities for a healthy life. Sanitation facilities play an important role in living a healthy and dignified human life. When we count sanitation facilities as basic human life amenities, we somehow forget the important need of larger strata of the world population, which is menstrual hygiene. For women, a safe menstrual hygiene practice is very important to live a healthy life as it decreases the risk of vaginal infection and diseases related to unhygienic conditions. Negation of menstrual hygiene and sanitation facilities creates trouble and challenges for females in every aspect of life from life expectancy to career. Diseases caused by dirty water, lack of sanitation, and hygiene are the fifth biggest killer of females, almost 8,00,000 women die each year from these diseases (WaterAid Global, 2017). On the educational front, nearly 23 million girls drop

out of their school education annually worldwide due to a lack of proper menstrual hygiene management facilities at their respective educational institutes (Spot on, 2014, p.11).

Single-use Sanitary pads, Tampons, and reusable cotton cloth pads are commonly used products as healthy and safe options for menstrual hygiene and from these available options, females in India use single-use sanitary pads. Single-use sanitary pads which are produced on the commercial level hand it is safe for menstrual hygiene during menstruation but on the other hand as it is a one-time-use product it is creating a problem for the environment. In the vicinity of 12,30,00,00,000 sanitary pads are dumped every year into Indian landfills and the material by which these single-use sanitary pads are made consists of 90% plastic which is Non-biodegradable (Down to Earth, 2021).

Indians produce more than 33,00,000 tons of plastic waste every year (Central Pollution Control Board, 2019, p.14) and the waste in tons due to sanitary pads is 1,13,000 tons (Down to Earth, 2021). As mentioned above, a single-use sanitary pad contains 90% plastic of its total weight, so plastic waste produced by sanitary pads would be 1,01,700 tons. So plastic waste generated by sanitary pads is roughly 3% of total plastic waste generated by Indians per year. This 3% seems to be very low but there are two major points of concern, 1. Plastic waste takes hundreds of years to decompose and 2. In India, 62% of young women are using old clothes and rags during their menstruation cycle (National Family Health Survey, 2017, p.82). This means a very small strata of women population are using safe menstrual products and as mentioned earlier single-use sanitary pads are a popular choice among them and the number of females using single-use sanitary pads is increasing (Singh, et al., 2022).

As much as safe menstrual hygiene practice is a matter of concern for women's health, Plastic waste generation is a matter of concern for the earth and environment. A society should not compromise either of one; both these matters of concern should go hand and hand. For this society has to find environment-friendly options for safe menstrual hygiene practices. After sanitary pads tampons and organic sanitary pads are easily available and popular options for menstrual hygiene but there are some environmental and health issues with these products such as:

- a. Both these products are single-use, so not only do they end up in landfills but their plastic packing as well.
- b. Tampons contain plastic as well.

- c. Organic sanitary pads replaced the main key ingredient of conventional single-use plastic such as Superabsorbent polymer and wood mesh but there is still some amount of plastic in it to make it leakproof.
- d. Staphylococcus or Staph is a bacterium that is often found in the human body. During menstruation, it tends to overgrow and release toxins. Studies depict the usage of menstrual products that use superabsorbent polymer in their making could lead these toxins to a lethal condition which is called 'Toxic shock syndrome'. In this condition, people face a sharp drop in blood pressure and sometimes it leads to death.

Single usage and presence of plastic material are two main drawbacks of menstrual hygiene products due to which the environment is affecting, so the world needs an alternative option to practice safe menstrual hygiene which could be use multiple times, efficient and comfortable during menstruation and effective to cut plastic waste.

Menstrual Cup is an emerging option for menstrual hygiene and could be an answer to this plastic waste problem. Menstrual cup is a cup shaped flexible product which is meant for safe menstrual hygiene. It is made out of medical-grade silicon. Though it is made out of silicon or rubber, menstruating females can reuse it multiple times. In comparison to other menstrual hygiene products, the usable time span of a menstrual cup is way high and it can go up to 10 years (Van Eijk et al., 2019). The durability and reusability of menstrual cups make them a better option for a better and green tomorrow. These characteristics of menstrual cups could help to cut down the plastic waste caused by single menstrual hygiene product waste.

Research Questions and Objectives

The research questions of the study are:

1. What are the perceptions of females for using menstrual hygiene products like Menstrual Cup?
2. Are they comfortable in using menstrual cups? How do they see it as an alternative product in comparison of sanitary napkins or tampons for the sustainable environment?

The present study aims to find out possibilities of emergence of menstrual cups as alternative safe menstrual hygiene products with reference to environment.

Methodology

The study is done under descriptive research design and is qualitative in nature. It includes 120 females of the age group of 19-50 years of age from urban and rural areas. The convenient sampling was opted for the selection of the sample. The data collection has been done through open-ended questionnaires which were distributed to the participants through Google Forms. The questionnaire was formulated by the researcher to fulfill the objective of perceptions of females. The participants who responded were 120 and also Focus Group Discussions were organized for the 30 females. This study is done during the month of October to December 2021. The responses of questionnaire were analyzed in the form of percentage and focus group discussion narratives were analyzed thematically.

Findings and Discussion

The data depicts that the majority of participants (84.2%) use sanitary pads and 15.0 % of the participants use Menstrual Cup during the menstruation. Interestingly, it was found that only one participant responded that tampons were used during menstruation. Majority of participants prefer using the sanitary pads as they are more comfortable with it and they are using them during the menstrual cycle. It was observed that they have the exposure of sanitary pads around them and females who are using it told them to use it as per the responses. The study done by researchers like (Meghana and Gomathy, 2021) also found that the majority of females use sanitary pads in India.

Awareness regarding safe disposal of sanitary pads

As the figure depicts that the majority (60%) of participants responded that they are not aware regarding the non-disposal of sanitary pads in the environment. Some of them (35% of female respondents) answered that they know about the effects of not disposing of the sanitary napkin in the proper way as it is unhygienic and also it led to various sanitation concerns in the environment. The females (5.0%) who were in the age range of 40-50 years, mentioned that they were not aware about the menstrual hygiene products and their effect on environment. It was also found that some of them use cloth pads which are not harmful in terms of biodegradability as it is eco-friendly and they are reusing the cloth to save the environment. It is observed that they are mentioning that they are not aware about the effect of non-disposal of sanitary pads on the environment, they are using the eco-friendly products as per the responses.

It was found that proper disposal of used sanitary pads is still inadequate. Most females mentioned that they manage their garbage waste, but due to a lack of menstrual management practices, most women discard their sanitary pads or other menstrual articles in domestic solid waste or garbage bins, which eventually become part of solid waste. The majority of females mentioned that they dispose of sanitary pads by wrapping and throwing them in the dustbin along with other domestic waste.

Methods of Disposal of Sanitary Pads

Participants have been asked, who are using sanitary pads, now or used sanitary pads earlier, how they dispose or used to dispose of their used sanitary pads. On the basis of their feedback, researchers made four categories out of it.

- a. Without any wrap disposed of in the household trash bin.
- b. Wrap in newspaper and dispose of it in the household trash bin.
- c. Wrap in newspaper and then pack in a plastic bag then dispose in the household bin.
- d. Dispose in a trash bin dedicated to Dry waste.

On the question of disposal of sanitary pads 10% of participants said that they dispose of their used sanitary pads with their household waste without any wrap. The percentage of participants who dispose of their used sanitary pad by wrapping it in newspaper and disposing of it in a household bin is 18%. 44% participants mentioned that first they wrap their used sanitary pad in newspaper and then pack it in a plastic bag and then dispose of it with their household waste. Only 6% participants said that they dispose of their used sanitary pad in a separate trash bin which is dedicated for dry waste only.

This data depicts that a large chunk of participants wrapping used sanitary pads first in newspaper and then in plastic bags. So by this process not only the used sanitary pads are ending up in landfills but its wrapping as well which contains plastic bags. Not only sanitary pads are creating plastic waste but this process is adding more plastic waste to the environment.

For a safe and green tomorrow it is pivotal to have awareness in people regarding safe disposal of any kind of waste whether it is degradable or non-degradable. When it comes to waste management, safe and segregated disposal of the waste is the key. In this research participants asked if they dispose of their sanitary pads with dry waste or with household waste. 60% of the participants accepted that they are not aware of environmental harms caused by non-segregation

of used sanitary pads and they dispose of it with household waste. So, it is necessary to create awareness in society about environmental issues caused by sanitary pads.

Awareness Regarding the Sanitary Napkins Affecting Vaginal Health:

The findings suggest that 50% of participants were aware that sanitary pads are affecting their vaginal health as they can cause fungal infections, infections of the reproductive system, and infections of the urinary tract. Some (31.7% of participants) mentioned that it is not necessary that they will affect health as they are the necessities during the menstruation and the remaining 18.3% of participants mentioned that they were not aware about it. Therefore, there is a lack of awareness regarding the sanitary products used by females during menstruation which also affect their health and hygiene.

The participants in the focus group discussion mentioned that they were not comfortable with the product they were using during menstruation as it causes irritation on vaginal skin and inner thigh areas which also lead to inflammation and pain caused by itchiness on skin.

The majority of participants (65.0%) were aware about the menstrual cup and 35.0% of participants were not aware regarding the product. It was noted that most participants (who are below 20 and 45 years of age) are not aware of the menstrual cup. It is similar to the findings of researches like (Van Ejik, et al., 2021) where the respondents were not aware about the menstrual cup.

Familiar with the idea of menstrual cup and consideration to adapt it:

Some (8.3%) of participants were willing to switch on to using the menstrual cup during menstruation. Some (75.0%) of participants were not comfortable using the menstrual cup and 16.7% of participants mentioned that they would gather more information about it as they are not aware about it. The participants who were using it recommended it to use as they said it is more eco-friendly. There were social stigmas related to it as per the responses of females and they have concerns regarding the loss of virginity, leakage, foreign objects inserted in the body, uncomfortableness with the object, lack of knowledge about the product and how to use it during menstruation.

Researchers found that there are four types of responses when participants ask whether they will switch to menstrual cups soon or not.

- a. Familiar with the menstrual cup and will switch to it.
- b. Not familiar with the idea of menstrual cups and will not switch to it.

d. Aware and maybe switch to a menstrual cup.

Percentage of participants who were familiar and will consider it as an option for their menstrual hygiene during their menstruation cycle is only 8.33% and the participants who knew what a menstrual cup is and they were in doubt for choosing it as alternative, were 16.67%. 30% of participants said that they are not aware of the menstrual cup so they will not use it. Participants who said that they are familiar with menstrual cups but will not use it were 20% of the participants.

Tried menstrual cup once but not using now:

During the research, researchers found that 12% of the participants tried to use a menstrual cup initially but after one or two uses they stopped using it. These participants add that

- a. They did not feel comfortable with the process of wearing a menstrual cup because it takes more time and effort as compared to sanitary pads and tampons.
- b. They were not totally aware about the proper process of inserting a menstrual cup in a manner that it could become leak proof so that is why there was leakage problem of menstrual blood.

Thoughts on menstrual cup:

Participants were asked about their opinions regarding menstrual cups, what they think about it. Researchers got various different views on it. These views were open ended, so researchers developed some themes to simplify the views in data form.

Safety- 20% of participants raised their matter of concern that use of menstrual cups could be unsafe and harmful to them and this 20% stratum of sample never use menstrual cups during their menstruation cycle.

Budget-friendly- During this research, researchers found that budget is also a consideration for participants. 16% of participants said that a menstrual cup could be a budget friendly option during menstruation because it could be reused for a very long-time span.

Lack of Accessibility – 20% of participants mentioned that menstrual cups are out of their reach because of its accessibility. This means menstrual cups are not easily available to them as sanitary pads are commonly available in the market.

Lack of popularity – According to 16% of the participants, the concept of menstrual cup is less popular and it needs to be popularized so that they can know more about it.

Ease in use when you are out for long - 16% of the participants accept that menstrual cups are a more convenient option when the user is out from their home for long hours and 2% of the participants count it as a non-convenient option. These are the participants who are using a menstrual cup or used it before.

Fear of foreign objects inside vagina – Researcher discovered that there was a fear or worry among participants when it comes to usage of menstrual cups because for using it the user has to insert it into vagina. 16% of the sample mentioned this fear. According to a few of them “it has to insert like male genitals into the vagina”. This fear could be associated with the social construct of Virginity.

Cut down the price – Few (4%) females responded regarding the price being lesser as compared to now as it is not affordable for everyone.

Awareness about the harmful effect of sanitary pad then switched to menstrual cups – Out of a total sample, 4% of participants mentioned that they switched to menstrual cups after they came to know the harmful effects of sanitary pads on the environment.

As it is observed with this response that awareness regarding the menstrual products would lead to switching on to menstrual cups, it is important to make people aware regarding menstrual cups for a better environment.

For working females - Responses of few participants adhered that participants who were not aware about the menstrual cup perceived it as an object used by working females (preferably who are working in office) during menstruation as per the responses.

Conclusion

This study aimed towards the perception of females regarding the usage of menstrual cups. It was found that the majority of females were using sanitary pads in urban and rural areas which were of single-use leading to harmful effects on the environment. The participants were wrapping the pads with the newspaper and then packing it in polythene and then disposing of it with regular household waste which is causing more plastic waste (non-biodegradable in nature). As it is disposed of with regular waste of the household and not segregated as dry waste will lead to hazardous conditions. It is related to People who live along river banks pour menstrual material into bodies of water, contaminating them. Germs and dangerous organisms thrived in these materials that have menstrual blood. Sanitary pads soaked in the blood of an infected woman/girl may carry hepatitis and HIV viruses, which can survive in the soil for up to six

months and keep their infectivity as also mentioned by (Kaur et al., 2018). Without suitable protection or gear, the clogged drainage containing pads must be manually cleared and cleaned by conservancy employees with their bare hands. Workers are exposed to dangerous chemicals and microorganisms as a result of this. Although incineration is a superior method of disposing of menstrual waste, burning pads emits toxic gases that are hazardous to one's health and the environment.

With this thought, the menstrual cup is considered as an alternative for females and also for the betterment of the environment. As this product is reusable and its life expectancy is around a decade. It offers sustainable, practical, and cost-effective alternatives where sanitation conditions are not good (Kaur et al., 2018). However, there are many challenges regarding the usage of menstrual cups which includes the unawareness, social stigmas, fear of females and accessibility around them. There is a need to take certain steps for the environment and better health and hygiene conditions for females. Seminars and workshops for menstrual cups need to be taken for the students who are studying in the school and higher education institutions, certain advertisements for mainstream media to be shown as they are there for sanitary pads on national televisions, Awareness campaigns and sessions for females can be conducted in rural areas, etc. Certain policies and committees need to be formed to include the various steps for environment friendly products to be used during menstruation to facilitate an adequate environment for health and sanitation to make society a better place.

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