

# Menstrual Hygiene Product and their Uses, A Detailed Survey Study

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## Abstract

Menstrual hygiene is a crucial yet often overlooked aspect of women's health, particularly in developing regions. This study, titled “Menstrual Hygiene Products and Their Uses: A Detailed Survey Study,” aimed to assess awareness, accessibility, and preferences regarding menstrual hygiene products among women in Wardha, Bhadrawati, and Wani. A questionnaire-based survey was conducted among 100 female participants to evaluate their knowledge, usage patterns, and concerns related to menstrual hygiene management (MHM).

The findings revealed that while commercial sanitary pads were the most commonly used menstrual product due to their accessibility, awareness regarding sustainable alternatives like biodegradable pads and menstrual cups was limited. A significant number of participants lacked prior knowledge about menstruation before their first period, emphasizing the need for early education and awareness programs. Health risks associated with conventional sanitary products, including exposure to harmful chemicals, were not widely recognized, highlighting the necessity of promoting safer menstrual products.

This study underscores the importance of menstrual health education, accessibility to hygienic products, and the need to encourage the adoption of sustainable alternatives. Addressing these factors can lead to improved health outcomes and environmental benefits while ensuring dignity and well-being for menstruating individuals.

**Keyword:** Menstrual hygiene, Biodegradable pads, Menstrual cup, Periods.

## 1. Introduction:

Menstruation, also known as a period, is vaginal bleeding that happens as part of a woman's monthly cycle. Periods is a taboo topic. Unclean or embarrassing.

1. Stigmatization - causing insecurity and low self esteem
2. drop in school attendance
3. unavailability of hygiene products increased vaginal infection.

Why menstrual hygiene is important?

1. Urinary tract infection
2. Reproductive tract infection
3. Cervical cancer
4. Toxic shock syndrome.

In today's world, women's cleanliness and hygiene are extremely essential, and they must be taken care

off. Women are always afraid or hesitant to buy napkins from places other than their homes, such as supermarkets, pharmacies and other markets, even pads are sold as wrapped in newspapers or black plastics. Menstruation may be a normal a part of life. However, it has been ignored in all markets, as well as at the individual level, for decades. The menstrual discharge can be absorbed by the sanitary napkins. Menstrual manuals for women and teenage girls during menarche and menopause must include a sanitary napkin. The functional requirement of a female hygiene product is to absorb and retain the menstrual fluid in order that back tracking of fluid does not happen and at the equivalent time it should be odor free. Feminine hygiene causes serious problems to the women if not managed proper. Companies that make commercial sanitary products must make products with less chemical and plastic material. Pads made out of fibers such as bamboo, banana, water hyacinth and sea sponge all should be encouraged for developing new products with no side effects. The management of menstruation is a public health issue, since the cumulative duration of menstruation represents eight years of a woman's life with approximately 6,000 sanitary pads used during this time. Menstrual hygiene products can be classified into two categories: internal hygienic protections for insertion into the vagina, including menstrual tampons, menstrual cups, and menstrual sponges. Menstrual tampons are single-use, while menstrual cups and sponges are reusable. The second category concerns external sanitary protection: disposable or washable sanitary pads, panty liners, and menstrual panties. The choice and use of the type of sanitary protection depends on multiple factors specific to each woman (e.g., menstrual flow, duration of menstrual period, and personal preferences) as well as geographic origins, cultural and socioeconomic influences, education, and information. Women's expectations have therefore changed, and there is an increased demand for transparency regarding the composition and potential health risks of menstrual hygiene products. Moreover, in the current climate of environmental awareness, they want alternatives to conventional menstrual hygiene products. The landscape of hygienic protection is changing.

Menarche is an important biological milestone in a woman's life as it marks the onset of the reproductive phase of her life. A person aged 10–19 years is considered as an adolescent. (1)

It is recognized as a special period in a girl's life cycle which requires special attention.

During this period, physical, psychological, and biological development of the child occurs. Menstruation is regulated by hormones, in this process, endometrium, lining of uterus, gradually thickens and sheds of and causes bleeding that normally last for 3–5 days and occasionally up to 7 days (2). The menstrual flow varies from female to female and may be more or less at the beginning of menses or may change throughout the cycle Menstruation is a natural process but it is still a taboo in Indian society as it is considered unclean and dirty (3).

### 1.1 The Menstrual Cycle:

The menstrual cycle is a term to describe the sequence of events that occur in your body as it prepares for the possibility of pregnancy each month. Your menstrual cycle is the time from the first day of your menstrual period until the first day of your next menstrual period. Every person's cycle is slightly different, but the process is the same. The average length of a menstrual cycle is 28 days.

However, a cycle can range in length from 21 days to about 35 days and still be normal. The days between periods is your menstrual cycle length. The average menstrual cycle lasts 28 days. However, cycles lasting as little as 21 days or as long as 35 days can be normal. Most people have their period (bleed) for between three and seven days. A period is normal if it's anywhere between three to seven days. While on the shorter end of the range, some people have a menstrual period for three days. This is totally ok.

**1.1.1 Menstrual Phase (Day 1-5):**

The uterine lining sheds, causing bleeding. Hormone levels (oestrogen and progesterone) are low.

**1.1.2 Follicular Phase (Day 1-13):**

The pituitary gland releases FSH, stimulating follicles in the ovaries. Oestrogen rises, thickening the uterine lining.

**1.1.3 Ovulation Phase (Day 14):**

A surge in LH causes the release of a mature egg from the ovary into the fallopian tube.

**1.1.4 Luteal Phase (Day 15-28):**

The empty follicle forms the corpus luteum, which secretes progesterone to maintain the uterine lining. If fertilization doesn't occur, hormone levels drop, triggering the next period.

**1.2 Importance of Menstrual Hygiene:**

The solution to avoiding many minor to major diseases, such as urinary tract infections, reproductive tract infections, poor odour, etc, for maintaining good menstrual hygiene.(8)

**1.3 Obstacles and Government Scheme:**

A study conducted in India found that the main obstacles to their usage are their expensive cost, lack of education, and shortage of disposal options. Adolescent girls were the target audience for the Government of India's Menstrual Hygiene Scheme (MHS) in order for them to be well informed about menstrual hygiene. (8)

**1.4 Types of Product and their Uses During Menstruation:**

1. The desire for sanitary protection materials is determined by factors such as affordability in the regional market place, cultural approval, financial situation, and personal taste.
2. The selection of absorbents differs between women and girls in rural and urban areas. Washable fabric pads are the most popular absorbents in rural regions, whereas artificial sanitary pads are chosen by women in metropolitan areas.
3. A large variety of synthetic fiber rayon sanitary products, both deodorized and nondeodorized are currently on sale. (4)

The following discusses the many menstruation solutions that women and girls consume:

**1.4.1 Reusable and Washable Cloth Pads.**

1. Since these cloth pads are reusable, they are affordable, readily accessible, and environmentally beneficial.
2. However, in order to prevent harm, they need to be cleaned well and dried in sunlight.
3. Overall, they could be a sustainable sanitary choice. (4)

**1.4.2 Commercial Sanitary Pads.**

1. These are costly in comparison to cotton pads, nonreusable and not very environmentally pleasant.
2. These are readily accessible in numerous shops, pharmacies or internet.
3. They may include chemicals since the cotton utilized to make them is not entirely natural.
4. Other types of pads include water hyacinth pads, bamboo pads, and banana fibre pads, among others. (4)

**1.4.3 Tampons.**

1. They're the kind of adsorbent that shields from the inside.

2. They resemble a soft cotton plug that is placed within the uterus to catch the menstrual fluid as it exits the system.
3. They have high costs and aren't very environment friendly because they are difficult for earth to decompose. (4)

#### 1.4.4 Menstrual Cups.

1. As a substitute to tampons and sanitary pads, products may be an innovative product for impoverished women and girls. They resemble cones as well as are created of medical-grade silicone material, which makes it easy to fold and place the vessel inside the genital area to collect blood during menstruation.
2. It depends on the volume of cycles of menstruation it may be used for at least 6–12 hours, meaning they want to be taken off and changed less often.
3. They're eco-friendly & recyclable. (4)

## 2. Methodology:

### Study design and population:

This study was a questionnaire based survey. The questionnaire was distributed to 100 females who agreed to participate in the study. The outcomes of this study were to evaluate the knowledge, awareness & use of different menstrual hygiene product among females.

### Study procedure:

Data were collected using a questionnaire to obtain information from female population to know their awareness & knowledge on menstrual hygiene product and it's utilization. The data were collected through face-to-face interactions with females.

**Location of study: Wardha, Bhadrawati, Wani.**

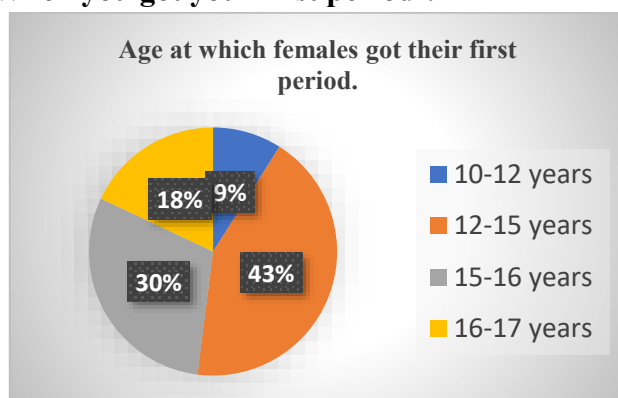
### Study population:

We were studied about 100 females in locality (Wardha, Wani, Bhadrawati).

## 3. Result:

The survey results were displayed in Figures 1-25 , with the questions posed and the corresponding responses presented as figures.

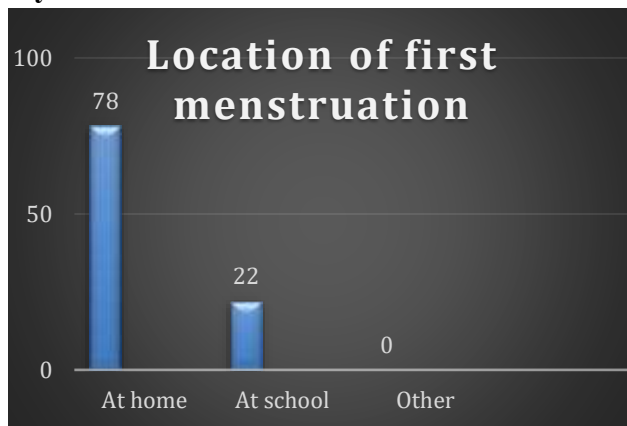
### 1) When you got your first period ?



43% of females got their first period at the age of 12-15 years, 30% at 15-16 years, 18% at 16-17 years, and only 9% at 10-12 years.

**Figure 1:- Age at which females got their first period .**

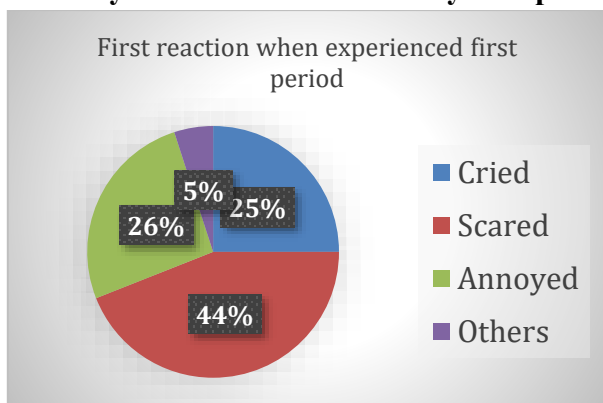
## 2) Where your first menstruation occurred?



78% of females experienced their first menstruation at home, while 22% experienced it at school.

**Figure 2:- Location of first menstruation.**

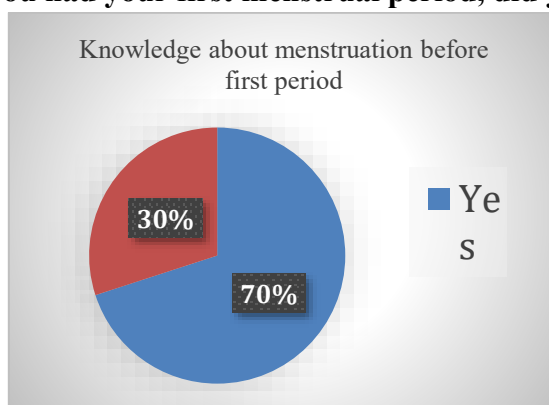
## 3) What was your first reaction when you experienced your first menstruation ?



44% of females got scared when they experienced first period, 26% females felt annoyed, 25% females cried & 5% female experienced other reactions.

**Figure 3:- First reaction when experienced first period.**

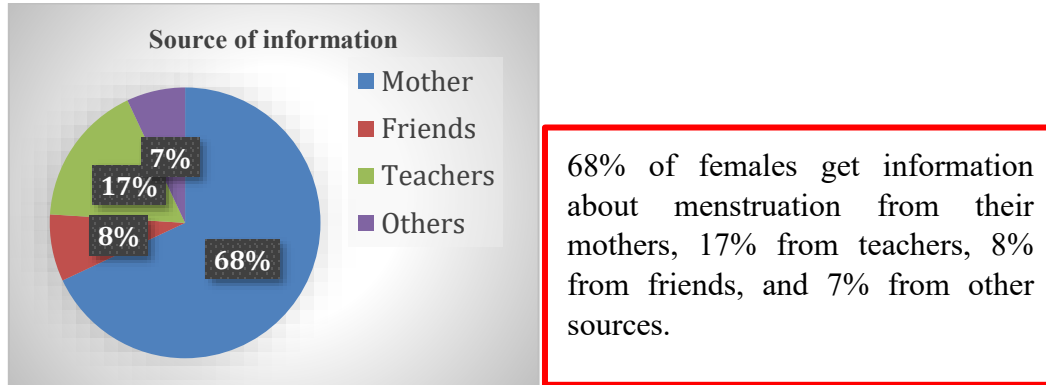
## 4) Before you had your first menstrual period, did you know about menstruation ?



70% of females had knowledge about menstruation before their menarche, while 30% had no idea about it.

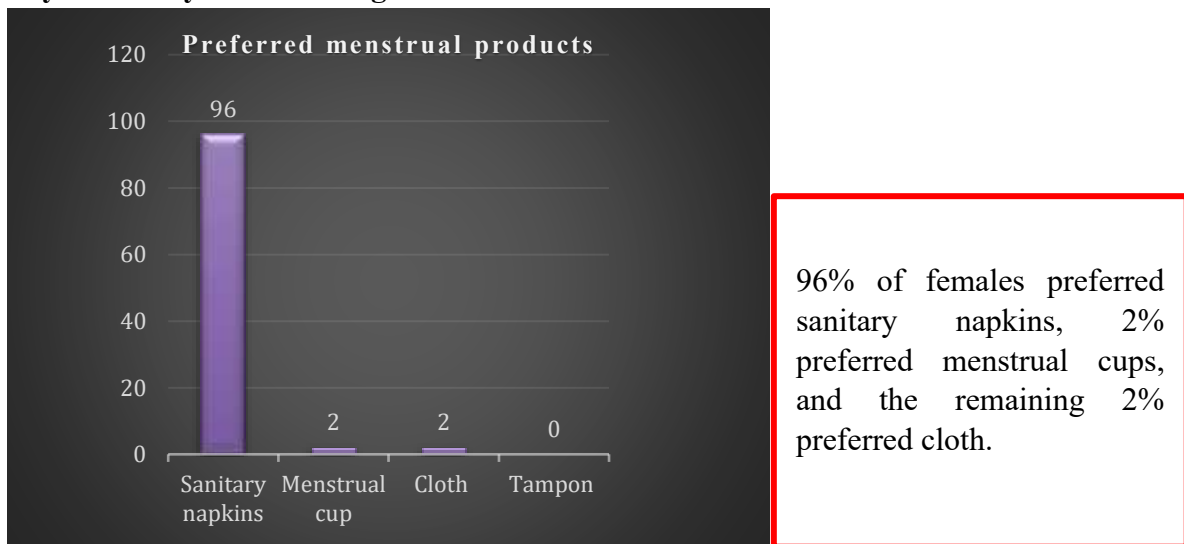
**Figure 4:- Knowledge about menstruation before first period.**

## 5) Where did you get the information about menstruation?



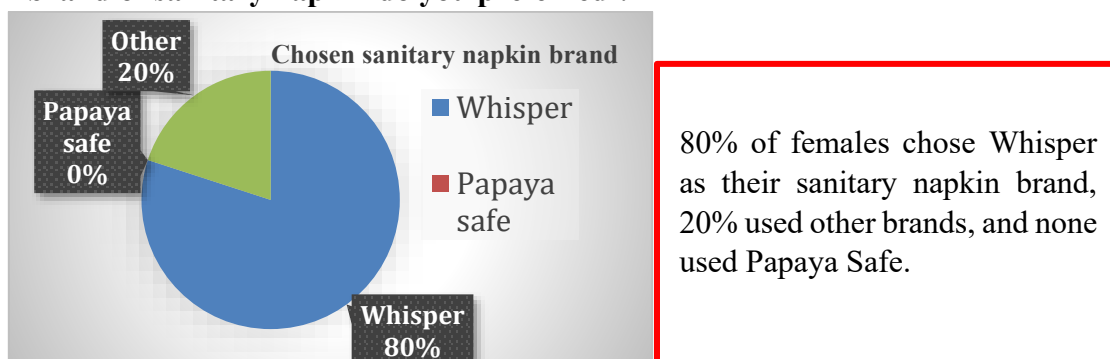
**Figure 5:- Source of information.**

## 6) Mainly what do you use during menstruation?



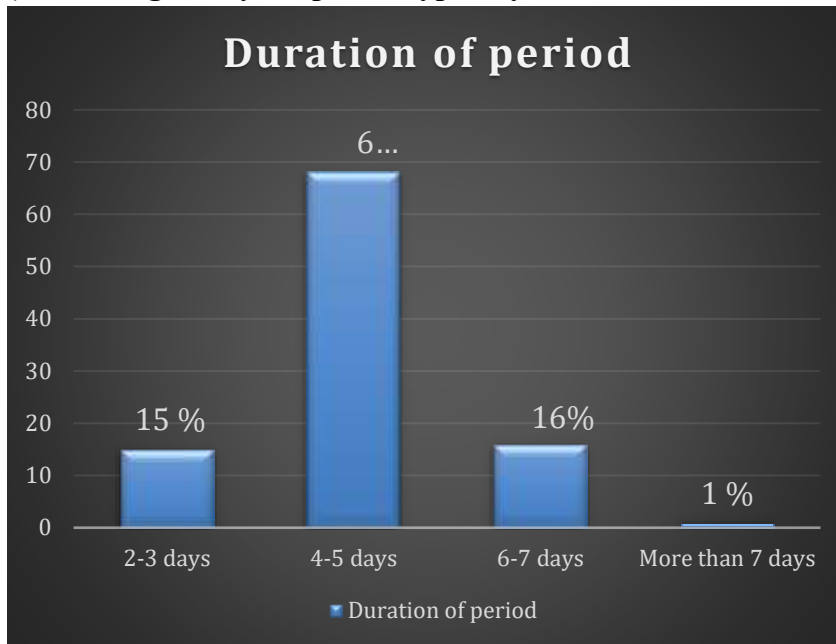
**Figure 6:- Preferred menstrual products.**

## 7) Which brand of sanitary napkin do you preferred ?



**Figure 7:- Chosen sanitary napkin brand.**

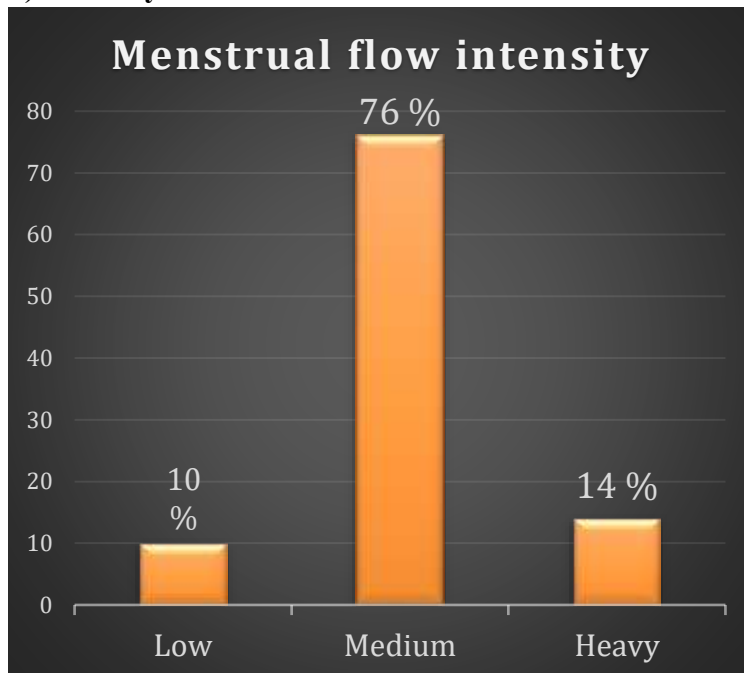
## 8) How long does your period typically last?



68% of females have periods that last for 4-5 days, 16% for 6-7 days, 15% for 2-3 days, and only 1% have periods lasting more than 7 days.

**Figure 8:- Duration of period.**

## 9) How is your menstrual flow?

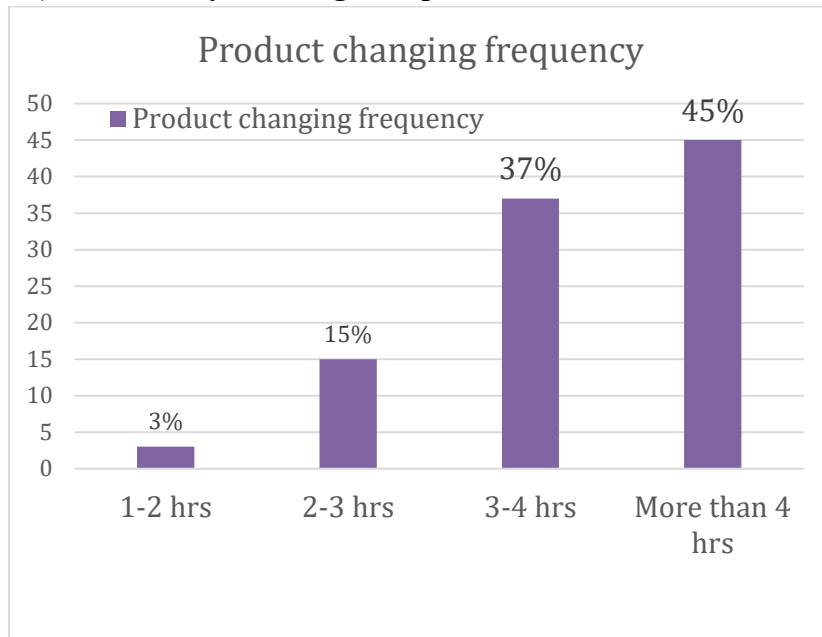


According to our research, the majority of females (76%) prefer medium-level absorbency napkins for daily use, while: 14% opt for heavy-flow napkins, 10% choose low-level absorbency napkins. This data indicates that medium-level absorbency napkins are the most popular choice among females for everyday use.

**Figure 9:- Menstrual flow intensity.**



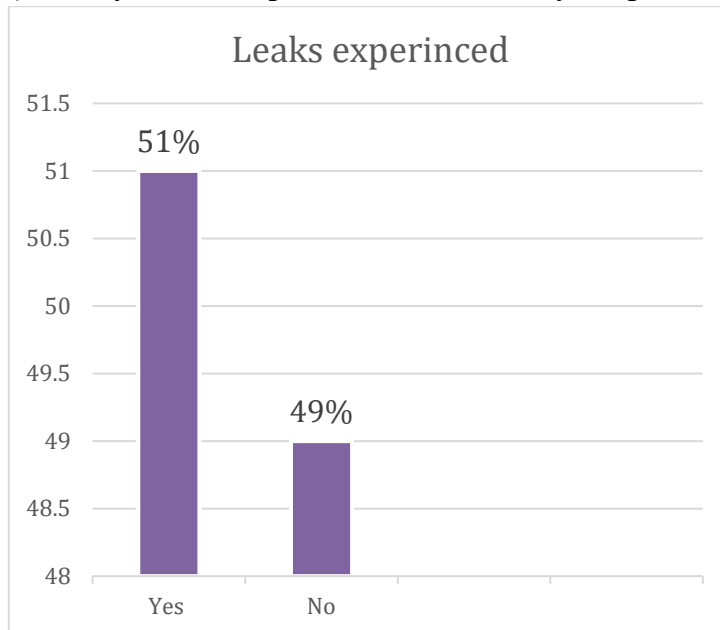
## 10) How often you change the product?



Among females, 45% change their sanitary napkin after more than 4 hours, while 37% change after 3-4 hours, 15% after 2-3 hours, and 3% within 1-2 hours.

**Figure 10:- Product changing frequency.**

## 11) Have you ever experienced leaks with your product ?

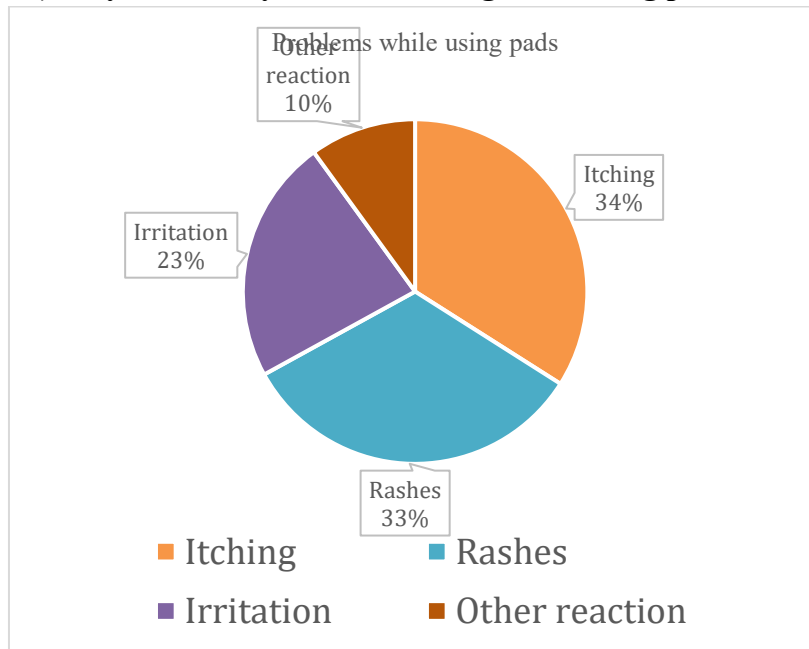


According to our research, 51% of females report experiencing leaks with their current sanitary napkin product, whereas 49% do not.

**Figure 11:- Leaks experinced.**



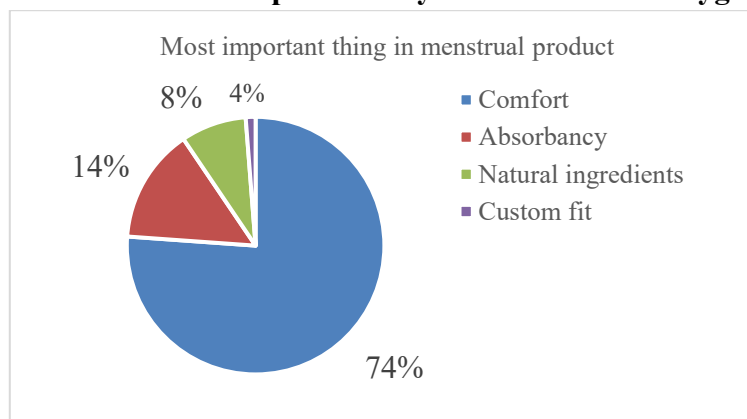
12) Do you face any of the following while using pads?



34% of females experience itching, 33% rashes, 23% irritation, and 10% other reactions from sanitary pads.

Figure 12:- Problems while using pads.

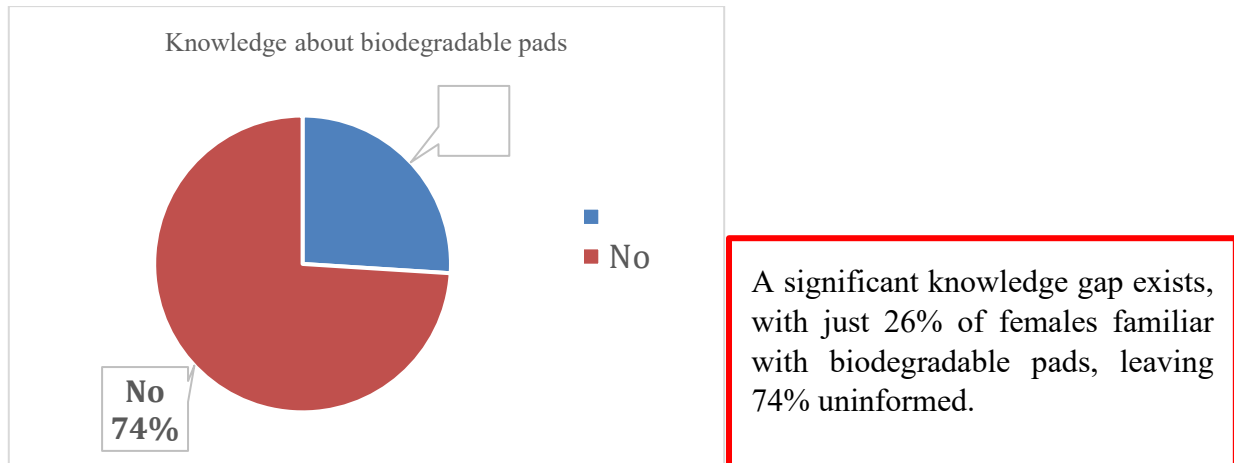
13) What is the most important to you in a menstrual hygiene product?



When choosing menstrual hygiene products, 74% of females prioritize comfort, followed by 14% who value absorbency, 8% who prefer natural ingredients, and 4% who desire a custom fit.

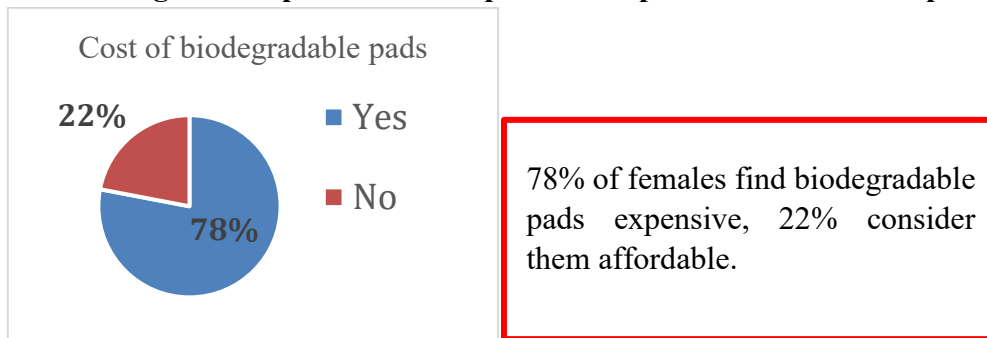
Figure 13:- Most important thing in menstrual product.

14) Do you know about biodegradable pads ?



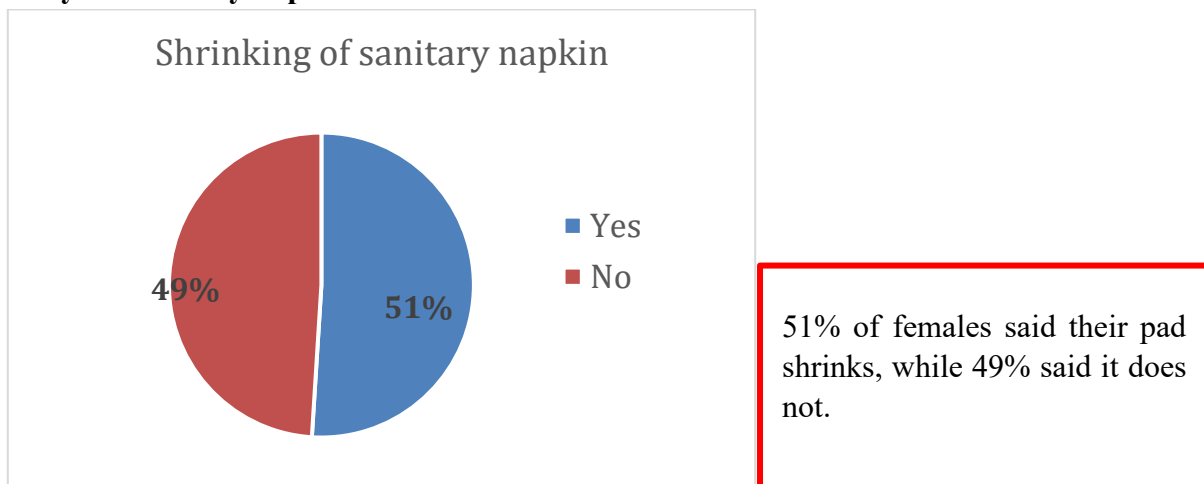
**Figure 14:- Knowledge about biodegradable pads.**

**15) Do you think bio-degradable pads/ rashfree pads are expensive than normal pads?**



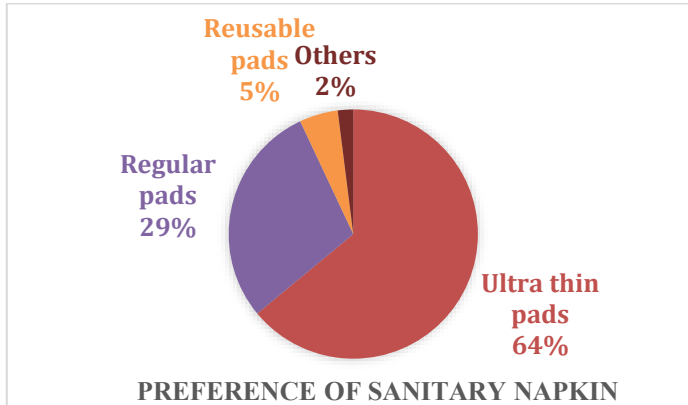
**Figure 15:- Cost of biodegradable pads.**

**16) Does your sanitary napkin shrinks ?**



**Figure 16:- Shrinking of sanitary napkin.**

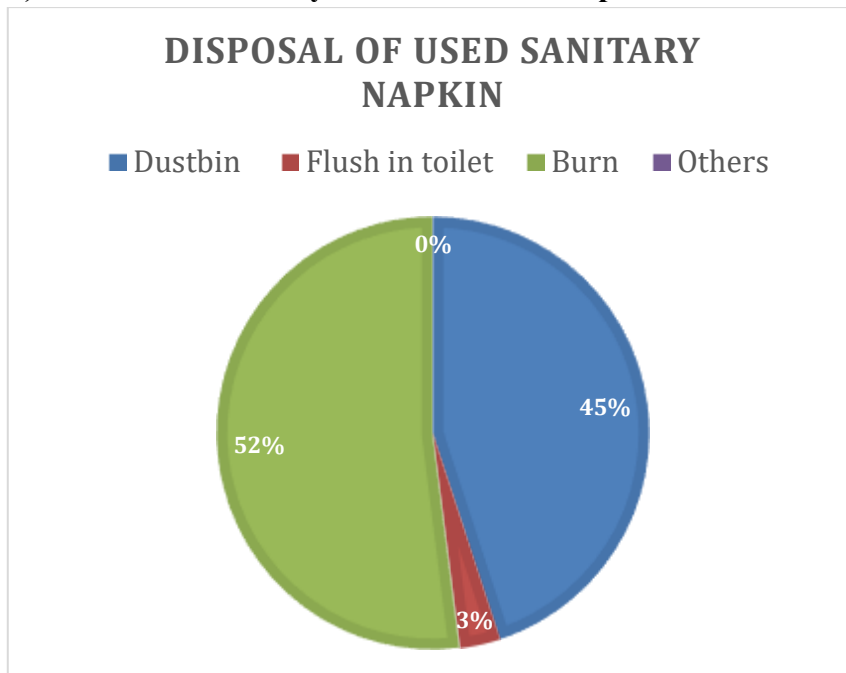
## 17) What kind of sanitary napkin do you prefer during menstrual cycle?



When it comes to pad preferences, 64% of females opt for ultra-thin pads, followed by regular pads (29%), reusable pads (5%), and other pads (2%).

Figure 17:- Preference of sanitary napkin.

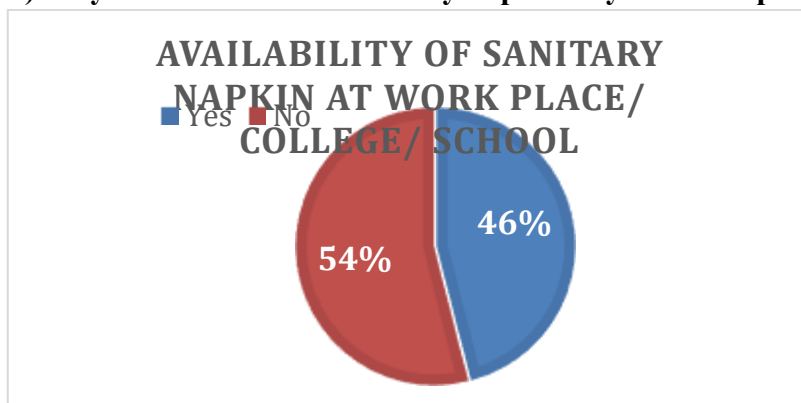
## 18) What is method do you follow for the disposal of used sanitary napkin?



52% of females dispose of their pads by burning them, 45% throw them in the dustbin, 3% flush them in the toilet, and 0% use other disposal methods.

Figure 18:- Disposal of used sanitary napkin.

## 19) Do you have access to sanitary napkin at your work place/college/ school ?



54% of females mentioned that sanitary napkins were available at their workplace, college, or school, whereas 46% mentioned they lacked such access.

Figure 19:- Access of sanitary napkin.

20) Are you aware about chemicals used in pads to make them super absorbable and odourless?

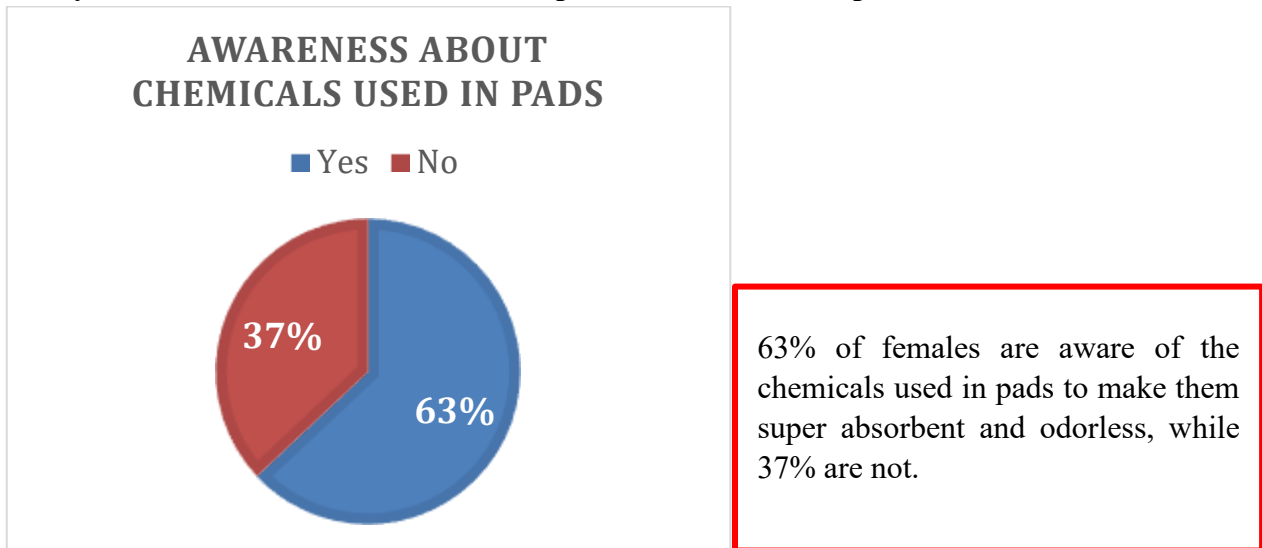


Figure 20:- Awareness about chemicals used in pads.

21) Do you know about the chemical used in pads and can cause cervical cancer?

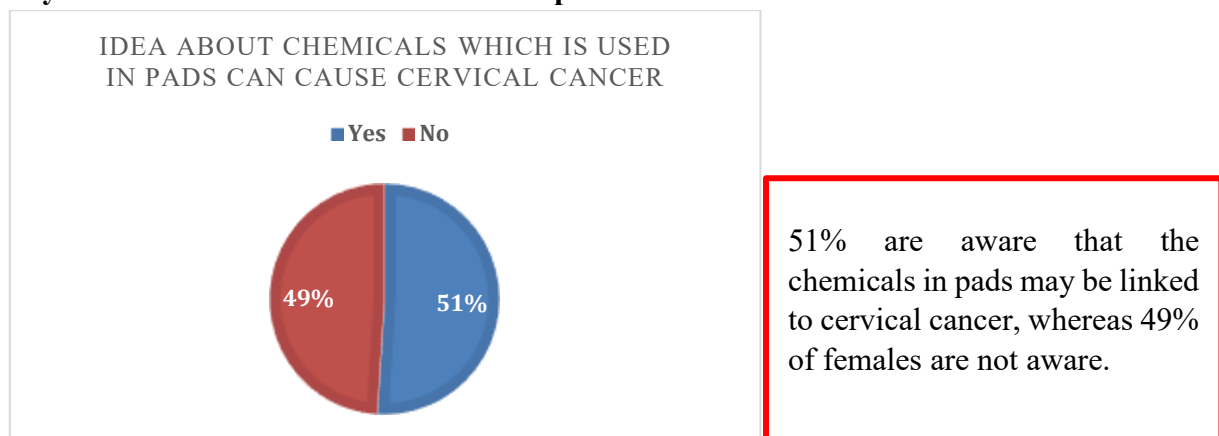


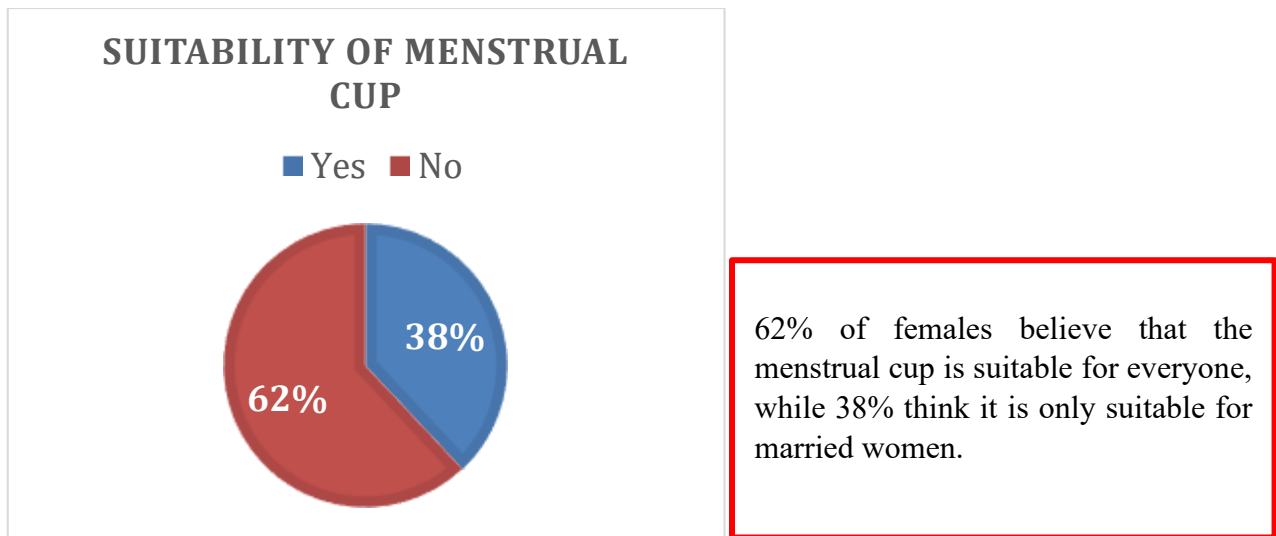
Figure 21:- Idea about chemicals which is used in pads can cause cancer.

22) Have you ever used menstrual cup?



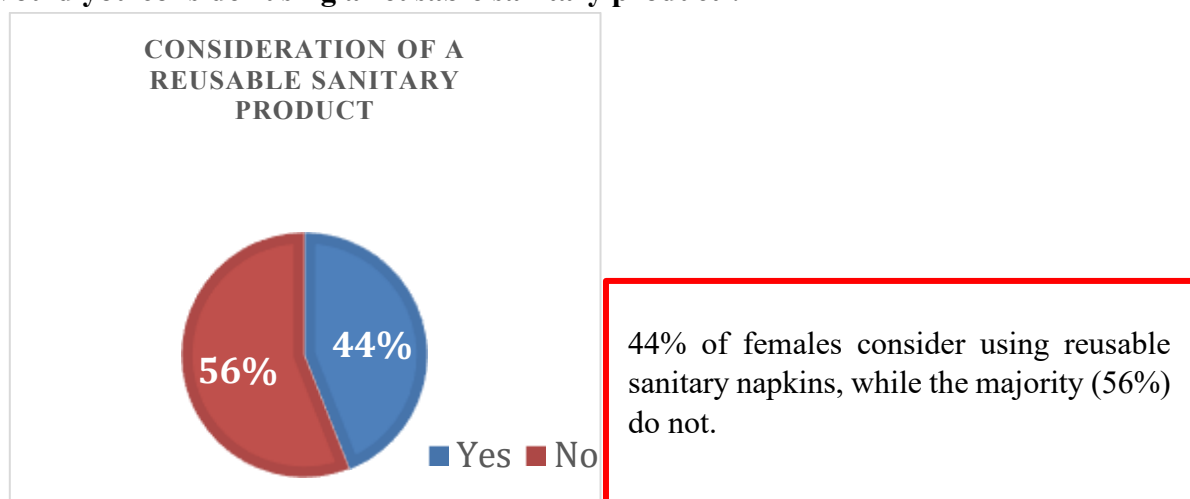
Figure 22:- Usage of menstrual cup.

23) Do you think menstrual cups is only suitable for married women?



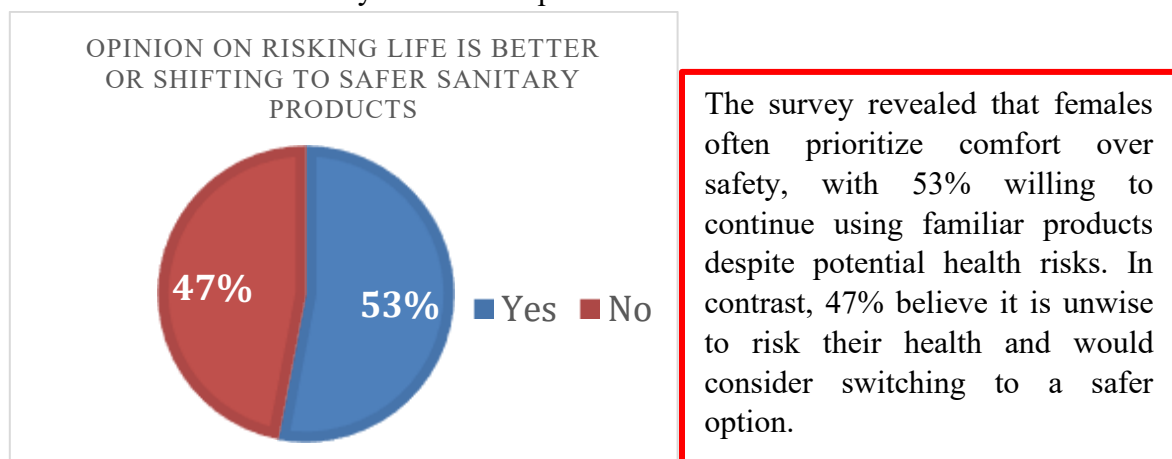
**Figure 23:- Suitability of menstrual cup.**

## 24) Would you consider using a reusable sanitary product ?



**Figure 24:- Consideration of a reusable sanitary product.**

## 25) Do you think risking your life by using such products is good than choosing new hygiene products that have been introduced currently for better experience and comfort?



**Figure 25:- Opinion on risking life is better or shifting to safer sanitary products.**

#### **4. Discussion:**

The results revealed that a large number of females are not well informed about the new menstrual hygiene products introduced into the market. Most females prioritize comfort over safety, unaware that many products now offer both comfort and safety.

In the current study we found that females don't even know about 'rash free pads', 'biodegradable pads' which is made up of natural ingredients and they are harmless. Females are choosing for the traditional pads their mothers, friends told them or they see in advertisements but, some brands like 'Papaya safe', 'Nua', 'Carmesi', sells pads which are rash free, eco-friendly & harmless. Nowadays, it became very important to introduce females with such pads and save them from using pads full of chemicals & harmful substances.

#### **5. Conclusion:**

Observations are given below:

1. females in our locality, where survey is performed, it is concluded that they are unaware about some menstrual hygiene products, such as tampons, menstrual cups & rash free pads. Currently menstrual disc is also hyped in market, which isn't known by many of women's.
2. Most of the females have an assumption that good quality pads are more expensive than regular pads which they use like pads from brands Whisper, Sofy and it is actually true that they are costly, but females don't understand that, these pads are chemical free so it will cost more & if females started investing on menstrual cups, it is reusable it can be used for more than 2 years, it provides comfort rest of the day it needs to change after 12 hours. Females need to understand safety is most important than comfort.
3. Lack of information about brands which sell good quality pads, because currently these pads are only available online they aren't retailed in shops and pharmacies generally.
4. Pads like ultra thin, ultra soft pads these are recommended by mother's to their daughter's because most mother's are using these pads for such a long time & they trust these brands that they are comfortable for their daughters for office, colleges & schools. If mother has an idea about new products, new brands for its better absorbency, safety along with comfort they will surely suggest their daughters to use these products during their menstruation.

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