Vol. 25(1), 2025, pp.33-54, ISSN: 2072-0394(Print), ISSN: 2663-8886(Online)

From Convenience to Controversy: The Untold Stories of Feminine Hygiene Products

Hina Samreen*
Mathematics and Statistics Department
Institute of Business Management

Dr. Falak Shad Memon
Department of Industrial, Environment and Energy Management
Institute of Business Management

&

Dr. Hira Mujahid
College of Economics and Social Development
Institute of Business Management

Abstract

Absorbent hygiene products are crucial for maintaining personal hygiene, offering convenience and comfort to its users. Despite their essential role in contemporary life, various stigmas and taboos encircle the accessibility, usage, and disposal practices of absorbent products, particularly feminine hygiene products. This research aims to understand a variety of stigmas and taboos that are interwoven in the form of cultural and familial norms and shape user perceptions and practices. This research follows a qualitative research methodology. Semi-structured interviews were analyzed using thematic analysis, focusing on a sample of 18, feminine hygiene product users, aged 13 to 50 years, within the sociocultural context of Karachi, Sindh, Pakistan. The narrative description of users' emotional and behavioural responses to feminine hygiene products helped to develop four key themes. Key findings highlight unescapable cultural and familial norms and social taboos which cloak women's behaviour and practices in secrecy. Understanding these challenges is critical for developing targeted interventions aimed at reducing stigma and improving women's emotional and physical well-being. This research contributes valuable insights to the discourse on menstrual health and hygiene and underscores the need for culturally sensitive approaches to foster women's well-being in similar contexts.

Keywords: Feminine and Absorbent Hygiene Products, women's perceptions and experiences, Personal Hygiene, Societal taboos, women's well-being.

* Author's Note: This paper is part of the doctoral research carried out at the Institute of Business Management (IoBM), under the supervision of Dr. Falak Shad Memon and co-supervision of Dr. Hira Mujahid.

This work is licensed under a Creative Commons Attribution-Non-commercial 4.0 International License.

Introduction

Adolescent girls all over the world familiarize themselves with their first menstrual cycle every day. The menstrual cycle is an indicator of adulthood and fertility. The onset of menstruation is an important chapter in the book of women's reproductive health and symbolizes her journey from girlhood to womanhood (Dutta et al., 2024). Every girl has her own story about how she experienced her first cycle. First periods can be delightful for young girls who grow up in a supportive environment (Betsu et al., 2023a). The girl with sufficient knowledge to manage periods, access to hygienic products, and much-needed guidance from empathetic elders navigate the journey of adulthood with confidence and ease. In contrast to those who experience menstruation in the absence of any advice, the first cycle is more than a nightmare (Mendle et al., 2007). It is traumatic when a young girl sees her menstrual blood for the first time, some even believe they are going to die (Dammery, 2020). Stigmas related to menstruation, cultural norms and limited access to hygienic products define their line of action and restrict females from handling their periods with dignity across the globe (McLaren & Padhee, 2021).

The term menstrual health and hygiene (MHH) introduced by UNICEF in 2005 (World Bank Group, 2022), is closely linked with personal hygiene (Sommer et al., 2015). Menstrual health and hygiene are key to the empowerment and overall well-being of women and adolescent girls (Panda et al., 2024). Safe and hygienic use and disposal of feminine hygiene products (FHPs) is an important yet often overlooked aspect of feminine hygiene practices, with significant health and environmental consequences (Alam, 2024). Cultural practices, societal taboos, and economic factors like affordability play a very crucial role in shaping individuals' choices regarding these products (Betsu et al., 2023b). This research focuses on understanding how human attitude is influenced by cultural norms when comes to the selection and disposal practices of feminine hygiene products.

This research is grounded in the Theory of Planned Behaviour (TPB)**,** which provides a basis for understanding how people's attitudes, social pressures, and their belief in being able to act in a certain way affect their decisions (Yuriev et al., 2020). In this study, cultural norms influence what feminine absorbent products are to use and how to dispose of them. Cultural norms play a significant role in shaping attitudes toward using feminine hygiene products (Hennegan et al., 2020), while societal expectations often dictate disposal practices (Hennegan et al., 2019). Additionally, concepts from environmental economics**,** such as externality theory provide a lens to analyze how unsustainable disposal practices impact shared environmental resources. The theory was developed by Economist Arthur Pigou, who suggests that there are two possible sides of an action, positive and negative that may influence others who are not directly part of the actual action (Dahlman, 1979). This research aims to explore how people's attitude toward disposing of used feminine products is influenced by cultural

norms and environmental awareness. A lack of awareness or lack of proper disposal facilities may lead to ignorance of safe disposal practices if they are not personally affected by their actions (Kaur et al., 2018). Together, these frameworks offer a comprehensive approach to understanding the intersection of personal choices, cultural influences, and environmental responsibility in the context of feminine hygiene products.

Research Objectives

This research aims to understand the perception and experience of women in Karachi, Sindh related to absorbent hygiene products particularly feminine sanitary napkins. This study further investigates the impact of cultural and societal taboos that define their attitude and behaviours while purchasing, using, and disposing of sanitary napkins.

Research Questions

1. What are the perceptions and experiences of women regarding the use of feminine sanitary napkins?
2. How do cultural and social taboos influence menstrual management practices?
3. What challenges do women face in purchasing and using menstrual hygiene products, and how do cultural and societal attitudes influence these experiences?

Significance of the Study

Menstrual health is an important part of women's overall well-being. The current research is significant for various reasons. Poor menstrual hygiene can cause major health problems, including skin irritation, infections, and other disorders. The study investigates how women in Karachi, Sindh, perceive absorbent products while considering their menstrual health and hygiene to avoid potential health risks. Additionally, this study explores the stigmas and taboos related to menstruation (if any) that persist in society and, if so, how various cultural and societal norms shape their usage and disposal practices. Understanding these concerns can help to shape public health policies and initiatives focused on improving menstrual hygiene management and providing better health outcomes for women.

Review of the Literature

Menarche is a sign of the commencement of the reproductive period in a girl’s life. It is a development phase of their life from girlhood to womanhood. Due to various cultural and religious customs prevailing in society adolescent girls, perceive menarche, and menstruation as symbols of embarrassment and shame which causes them to experience negative consequences for their mental and physical health (Rizvi & Ali, 2016). Menstruation is a normal biological phenomenon that every woman of

reproductive age experiences. However, in our society, it is veiled in silence and considered taboo to be openly discussed (Jalan et al., 2020). Menstruation is a thing to be discussed in whispers, handled in secrecy, behind closed doors (Peranovic & Bentley, 2017). There persists a lack of formal communication between the mother and daughter, which hinders the dissemination of proper guidelines related to menstruation hygiene management. Shame and fear related to bitter reactions from mothers always stop young girls from seeking guidance in the early years of Menarche (Alam, 2024). Family customs and cultural barriers taught young girls to remain silent on the topic of menstruation, this is a personal thing and should be hidden from other members of the family (Tiwary, 2018). Intense feelings of impurity and shame associated with the menstruation cycle, and disinclination to accept this as a normal event in a girl's life further exacerbate this situation (Santina et al., 2012). Commonly, menstruating girls and women are forced to follow rules and regulations set by family culture and tradition because they are considered to be impure and dirty (Garg & Anand, 2015). The intense feeling of impurity, coupled with the fear of bringing a curse to the family if they do not follow societal norms and practices, disturbs the overall health of menstruating females (Robinson, 2015).

The stigma associated with menstruation is so strong that the word Menstruation becomes synonymous with shame and sin for menstruating females. In many societies, menstruating female are not allowed to have physical contact with their spouse. They face poor and inadequate menstrual hygiene, social isolation, and humiliation. They are not only restricted from entering the kitchen and temples or attending social and religious get-togethers but also deprived of basic food, clothing, and healthcare facilities (Amatya et al., 2018). They are restricted from participating in religious activities touching holy books, and preparing food due to impurity and unhygienic conditions. This impurity makes the preserved food rotten if the menstruating female touches the food or passes by it. In many cultures, it is a practice to store sour food like pickles hidden from the range of menstruating females to keep the food safe from spoilage (Syed Abdullah, 2022).

Cultural norms and societal stigmas related to menstruation further exacerbate the situation (Mumtaz et al., n.d.) Even modern cultures and societies consider menstruating women to be unclean and dirty (Thomas, 2007) and untouchable (Amatya et al., 2018). Menstruation is still stigmatized as "unclean" or "unsafe" for other people surrounding them, thus a social framework is needed (Syed Abdullah, 2022). To keep the rest of the people safe from contamination a menstruating female carries a set of rules and prohibitions that are much needed to isolate menstruation women from the rest of society (Small, 1999).

These all put the women's mental and physical health and well-being at risk (Malik et al., 2023).In many societies, the social stigma surrounding menstruation has made this normal phenomenon a symbol of embarrassment and shame, resulting in

unhygienic practices (Belayneh et al., 2020). Unhygienic practices often lead to urinary tract infections and various other genital area infections (Jelly et al., 2022). Culture is a vibrant word that shapes the family structure, defines human relationships, and provides guidelines that every individual inherits (Liu et al., 2012). Various cultural beliefs and practices are associated with menstruation in Asia. These attitudes and practices are often reflected in the form of using unhygienic sanitary products, changing eating habits, bathing habits, and limitations on women's social and religious freedom. A literature review study on adolescence (Khan, 2000) found that iron deficiency anemia is a very common health issue among female adolescents. This may be due to the misconception prevailing that teenagers and their mothers should avoid meals that are deemed too hot (eggs, dry fruits, liver, etc.) or too cold (ice cream, dairy products, and greens) (Sood et al., 2020). The availability and acceptance of different menstruation products are subjective to cultural norms. Sanitary product price, comfort, and quality are some of the factors, women consider when choosing sanitary products. Because of custom, reusable cloth pads are preferred in some areas, while disposable products are more prevalent in others (Choi et al., 2021). Family culture often dictates usage and disposal behaviour, which limits women's choices and prevents them from selecting the appropriate product for them(Mohammed & Larsen-Reindorf, 2020).

Research Methodology

This research used the Thematic Analysis Approach to analyze stigmas and taboos related to absorbent hygiene products specifically feminine sanitary napkins and similar products. Thematic analysis is a qualitative research approach that provides the researcher with a deeper insight to explore, analyze, and explain what the data reveals. (Clarke & Braun, 2017). Thematic analysis is considered because this method is more flexible (Byrne, 2022). Thematic analysis can explore the nuanced insights and is capable of explaining cultural norms and societal barriers that influence the choice of disposal of feminine hygiene products, this is closely aligned with the exploratory nature of this research.

This study follows a purposive sampling approach to select participants (Holst et al., 2022). For this study, 18 participants who met the inclusion criteria (Adult females aged between 13 to 50 years, absorbent hygiene product users, and lived in urban settlements of Karachi, Sindh, Pakistan) were targeted. All participants have diverse education and professional backgrounds, including but not limited to academia, healthcare, and the public sector. Following the identification of the intended participants, the next stage was briefing them on the objective and significance of the study. The ethical procedure and confidentiality of their responses are explained and assured to all participants well before their participation. After obtaining their consent to take part in the study, semi-structured interviews that lasted for 15-20 minutes, were done in person. All the interviews were conducted in a private and comfortable

environment to ensure the participant's comfort level while responding to questions. Out of 18 participants, three were agreed for audio recordings. This method helped the participants to share their perceptions and actual experiences regarding feminine hygiene product usage and disposal practices.

The interview questions began with the basic background of the respondents to contextualize their responses. Questions were asked to get a deeper understanding of their personal experience and perceptions about absorbent hygiene products. Participants were further asked about the cultural norms and practices they follow and how these sociocultural norms define their overall behaviour. To develop a deep understanding of menstruating female perceptions, attitudes, observations, and experiences of stigmas and taboos related to menstruation, a narrative approach (Butina, 2015) is used.

The analysis followed a six-step thematic analysis approach proposed by (Clarke & Braun, 2017) that helps to identify patterns from people's perceptions, experiences knowledge, and opinions from the qualitative responses as used by earlier researchers (Byrne, 2022). The six-step procedure is described as follows. The first step is to gain data familiarization by reading and rereading their narratives is done to ensure precision and transparency. This helps to proceed with the next step and generate initial notes to capture ideas and patterns that emerge from their responses. In the next step, data is organized to generate initial codes. A detailed analysis of codes is done to search the meaningful themes as the third step. This was done by understanding the recurring patterns related to cultural norms, barriers, and disposal practices.

The next stage is reviewing themes. A critical review of themes is done to check if the generated themes are meaningful and supported by the data to maintain coherence and consistency. Themes are finally defined and named in the last stage. Adherence to a structured approach ensures a comprehensive and systematic analysis of the qualitative data. This helped to recognize key patterns and themes relevant to the research questions in this study. The study used direct participant quotes to illustrate key points and provide the right context. All the responses were subsequently categorized into relevant themes to systematically analyze the data. The final themes were integrated into the study's findings, supported by representative quotes from participants to enhance credibility. The in-depth analysis of user responses helped to understand Generational perspectives revealing divergent opinions of participants from Generation X and Generation Z users.

Ethical Considerations

All the Participants were briefed that the purpose of the study was purely academic. Participants were assured of confidentiality and anonymity. Consent was obtained for audio recording, and all data were securely stored.

Research Findings and Discussion

Every woman has her perceptions, practices, and experiences related to menstruation and its management. The whole practice reflects their awareness level and learning from family culture and practices. Some common perceptions and patterns are easy to observe. Even in the educated family setup, there is a culture of silence surrounding menstruation, where menstruating females are supposed to remain silent and are naturally trained (Reinhardt & Eitze, 2023) to suppress their emotions and hide physical pain (Betsu et al., 2023a). The following section summarizes the themes that emerged from the data. These themes are not predetermined before data collection. Themes are derived from study findings and included considering their contribution to understanding perception and the menstruation-related restrictions placed on women and girls.

Theme I: Comfort and Hygiene Balance

A feminine absorbent product is supposed to be designed in a way to provide comfort without compromising hygiene. Participants in this study were investigated about their perceptions of feminine absorbent products. In a detailed discussion with the participants, the following subthemes emerged.

Subtheme I: Perceived Wellness

The subtheme "Perceived wellness" captures the perception of convenience, comfort, hygiene, and safety in single-use feminine sanitary products. The word wellness describes not only physical comfort and safety but to refers to overall well-being and health. A considerable number of participants in this study perceived absorbent hygiene products as a source of comfort and convenience. Based on their personal experience, they described conventional sanitary napkins as a hygienic solution to menstrual needs. Referring to their personal experience, only one of the participants, R12 showed dissatisfaction with local sanitary napkins and mentioned her preference for imported sanitary napkins.

> *I prefer to use imported sanitary pads during periods because it is not easy to manage cotton pads or clothes at the workplace. (*33-year-old Statistician)

The reason quoted was the type of skin irritation developed by using the local sanitary napkins. A similar experience of skin rashes is shared by another participant who considers the prolonged use of sanitary napkins as the major reason for skin irritations.

> *I am a working woman; sometimes I do not get time to change the soaked napkin due to field visits. What I experienced beyond a certain time, was a certain type of rash that appeared on my thighs and sensitive areas. (*42-year-old civil servant).

These findings are consistent with the earlier literature. Absorbent hygiene products soiled in human excretions and other body wastes may affect the skin due to close interaction (Arquillos et al., 2007). The healthy dermis of a normal grownup person innately acts as a shield against the human body's wastes. However, extended and frequent exposure to such fluids and wastes may compromise the natural ability of the skin (Aly et al., 1978). Since absorbent hygiene products are put on the skin, they may cause either inflammation of the skin called diaper dermatitis (DD), or incontinence-associated dermatitis (IAD) (Bender et al., 2017).

Subtheme II: Managing Periods in Silence

Along with the convenience and comfort, absorbency and leakage control of sanitary napkins are found to be of great concern. Throughout the conversation, they prioritized absorbency and leakage control over physical comfort, nearly all of the participants referred to avoid unpleasant and embarrassing situations caused by unexpected leakage. Almost all the participants in this study expressed feelings of mental stress and anxiety when discussing menstrual leakage. When addressing different coping strategies to manage periods discreetly and with self-confidence, feelings of psychological discomfort and emotional strain were reported. Preference for a darker colour to wear, frequent visits to the restroom to check leakage, and limited mobility are found to be more common strategies they adopt to manage periods when outside the home. These findings are aligned with the earlier studies on silent management of period pain or dysmenorrhea (Ní Chéileachair et al., 2022) and fear of leakage (Betsu et al., 2023a).

> *I am a working woman, and while looking for an appropriate sanitary product, absorbency, and leakage control are the most important things to consider. (*42-year-old civil servant)

The fear of leakage is more commonly cited by the respondents who were mainly sanitary napkin users. Whereas the respondents using tampons and menstrual cups users were found to be more comfortable and confident. These findings are aligned with the earlier literature (Betsu et al., 2023a).

A young university student considered managing university life a little difficult while menstruating. In the early days of the menstrual cycle, a sense of discomfort and anxiety is experienced that limits their mobility.

> *I usually wear dark colours, usually black and navy blue to avoid being noticed by someone in the class, if accidentally get stained. I always feared getting up in front of my classmates. (*26-year-old University graduate)

Another experience shared by a school girl second the experience shared by the earlier participant.

> *I used to pay a visit to my paternal family during summer vacations. For me, it's always a highlight of the year. Managing periods discreetly, during longer traveling hours is always challenging.* (14-year-old school girl)

> *Managing periods discreetly when you are outside the home is difficult. Fear of leakage and staining clothes, unexpected cramps are always nerve-racking. Being a girl, we are expected to manage this discomfort situation in silence, but it's not always as easy as one might think. (*33-year-old academician)

> *I understand this is a natural process, but the societal views related to periods make me over-conscious when menstruating. Fear of leak and embarrassment if noticed, often subsides the unbearable pain I am going through. (*27-year-old Financial Analyst)

> *We are culturally trained to hide pain, it's easier to bear physical pain than mental stress being judged by the people.* (21-years-old university student)

Subtheme III: Perceived Lack of Safety

Feminine hygiene products provide solutions to menstruating needs. But the conventional sanitary napkins are composed of ingredients that are harmful to both human health and the environment (Soni et al., 2019). A detailed discussion with the participants revealed a reflection of their knowledge and concern about health and environmental hazards related to conventional absorbent products. Expecting that a particular sanitary napkin they are considering safe to use is still one of a buyer's main concerns when purchasing it. One of the participants, when asked about any potential health risks of using conventional sanitary napkins, was of the view,

> *Absorbent hygiene products are composed of plastic; these products are not safe for personal use and the environment.* (46-years-old Academician)

While investigating the key features of the absorbent product they are looking for in addition to convenience and comfort, absorbency and dryness are on the top.

All participants in this study are conventional sanitary product users except for a few who were homemade cloth napkin users. The main reason reported for using cloth napkins is affordability.

> *Absorbent hygiene products are easy to use ready to wear, hygienic, and comfortable, but quite expensive. (*32-year-old college graduate).

Theme II: Secrecy Versus Care for the Environment

Theme II emerged when the participants of this study were investigated about their usage and disposal practices. There are environmental externalities associated with the use of single-use AHPs; one of them is the waste that accumulates when the product is disposed of. Every day, the non-biodegradable waste from single-use feminine sanitary napkins finds its way to open sites, thus resulting in clogging sewer pipes when flushed down carelessly, and/or dumped in landfills (R. et al., 2018). The feminine sanitary napkins when soaked in human blood are a great source of pathogen dissemination (Weisbrod & Van Hoof, 2012) There is always a significant risk that animals will expose human excreta to pests that spread disease when sanitary napkins are disposed of in open areas or landfills (Velasco Perez et al., 2020).

Health and hygiene are not only limited to individual practices of selecting an appropriate absorbent product but are also related to careful disposal behaviour. To promote the culture of responsible disposal there is a need to understand the practices and awareness level of sanitary napkin users. A responsible attitude along with adequate sanitation and waste management facilities help prevent the spread of diseases and pathogens. When investigating their routine practice of disposing of used sanitary napkins, two main reasons appear where secrecy comes with top priority.

*I usually wrap the used pads and dispose of them carefully, often using extra layers of wrapping to ensure they are not visible to anyone else. (*26-year-old University graduate)

Wrapping a used diaper in multiple layers of polythene bags, to avoid visibility to others, especially a male gaze seems as a common practice. One of the participants mentioned that it is obligatory due to family customs that a used napkin must be washed before throwing it in the dustbin.

> *There are no specific guidelines or rules to define disposal practices; it's a common practice in our family to discard used napkins with regular household waste, usually in a plastic bag of a dark colour to avoid visibility.* (24-year-old unemployed)

> *I always try to dispose of used sanitary napkins in the designated bin especially when I am using public toilets, to avoid the spread of disease and germs. It's not safe for cleaning staff and others who are visiting the toilet.* (14-year-old schoolgirl).

This common practice of wrapping used napkins into multiple layers of colour polythene bags is not only because of hiding it from the male gaze but also due to fear of black magic. Various myths are associated with menstruating blood and its link to the concept of black magic. This finding is similar to earlier literature(Dündar & Aksu, 2022). To save the women from the disasters of Black magic (Panjwani et al.,

2023) it is imperative to hide/bury the menstrual pads at night when everyone else is asleep (R. et al., 2018).

One of the participants who experienced multiple miscarriages in the early years of her marriage is of the view that.

> *I vividly remember one of my next-door neighbours advised me not to dispose of my used napkins along with the regular household waste, I never took her seriously, but now I think she might be right.* (47-year-old health professional)

> *I've heard some myths from my grandmother related to improper disposal of sanitary napkins like it causing black magic or infertility, but honestly, I don't believe in those*. (32-year-old college graduate)

> *Strangely, people nowadays believe in those myths, why don't they seek any medical advice for infertility? I am confident that using and disposing of sanitary napkins correctly does not affect my health. If I ever had concerns about fertility, I would talk to a doctor rather than rely on myths.* (26-year-old University graduate)

> *Being a Muslim girl, I believe leaving the soaked napkin exposed to the Namahram is a great sin.*
>
> (24-year-old University graduate)

I am a Muslim woman; my actions must be aligned with the teachings of Islam and a reflection of modern education. These matters must be handled with respect and mindfulness. (42-year-old civil servant)

> *I usually wrap the used pads and dispose of them carefully, often using extra layers of wrapping to ensure they are not seen.* (26-year-old University student)

Depending on societal and cultural norms and taboos surrounding menstruation, and menstruation blood, used sanitary napkins are disposed of in a variety of ways, such as burying, burning, tossing them in the open, and using routine waste disposal systems (Elledge et al., 2018).

Theme III: From Stigma to Normalization: A Generational Perspective

In the course of the discussion about their attitude related to purchasing a feminine product, a diversity of responses is observed and summarized using different subthemes.

Subtheme I: Generational Attitude Towards the Need

Participants were further investigated about their attitude and experience towards purchasing a sanitary napkin. A clear behavioural difference is observed among the sanitary napkin users who belong to different generations. These differences become clearer when analyzed according to the classification of participants in different generations. For participants from Generation Z, purchasing and using sanitary napkins is a regular and accepted part of normal life, unlike Generation X, who still considers buying sanitary napkins publicly a bit awkward and distressing.

> *I don't prefer purchasing them discreetly, as this is not a crime or something to be ashamed of. (*24-year-old unemployed)
>
> *Pads are essential for hygiene, just like toilet paper or soap. We don't hide those when we buy them, so why should periods be any different?* (26-year-old University graduate)
>
> *I don't mind purchasing it from a female or male shopkeeper, as again it is nothing to be discreet or embarrassed about. (*24-year-old unemployed)
>
> *Why purchase discretely, they are easily seen in the form of billboards.* (24-year-old University graduate)
>
> *I simply feel like I am asking for a necessity and nothing shameful, thus I confidently ask for one.* (21-years-old university student)
>
> *Next time I see someone with a discreetly purchasing sanitary napkin in their basket, I'll give them a secret handshake of menstrual solidarity!* (26-years-old university graduate)

Subtheme II: Acknowledging the Awkwardness

A similar behaviour of accepting a sanitary napkin as a normal good is observed from Generation X but with a little feeling of awkwardness which may be due to the family background and cultural practices.

> *I don't understand why watching a sanitary napkin commercial feels a little awkward when a comes on during prime time. For all of us, it becomes a little uncomfortable and we try to switch channels, perhaps due to the family culture of considering menstruation a personal and private matter. But it's good to see menstrual hygiene being talked about openly.* (46-years-old Academician)

> *It's a little awkward to watch a TV commercial in front of other family members, although they use blue colour displaying a soaked napkin instead of red, it's obvious the commercial is about the absorbency of the sanitary napkin. Then why did the commercial aired publicly use blue colour? Perhaps concerning our cultural norms.* (41 -years-old homemaker)

> *It's funny how a sanitary napkin ad can shift the attention of everyone in the room to their phones. Although a little awkward, it's nice to see period talk becoming normal and shouldn't be a taboo!* (26-year-old University graduate)

> *Oh, it's not just me, the sanitary napkin ad makes everyone at the dinner table a little uncomfortable. I think it's a small step towards normalizing period talk*. (32-year-old college graduate)

When discussed in detail, almost all of the participants of the view, that the societal attitude and family culture matters a lot that describes the action of sanitary napkin users.

> *For me, it is a natural process, it's a societal attitude that lets people consider something shameful and therefore many feel the need to discreetly purchase menstrual products.* (14-years-old school girl)

Subtheme III: The Quiet Struggle of Buying Period Products

To evaluate the comfort level of participants when buying the Sanitary napkin for themselves, participants were asked to share their experiences. The following experiences are summarized as follows. Fear of being watched and judged by other people is dominating in their statements.

> *I feel embarrassed while purchasing them (referring to sanitary napkins). I keep my face expressionless or wear a mask and directly ask for the brand, (*32-year-old college graduate)

> *I prefer discreet purchasing; it helps me to avoid embarrassment or awkwardness. (*27-year-old Financial Analyst)

The majority of participants shared their preference for buying from a supermarket where a separate aisle is reserved for feminine products with the

female staff. An expectation of empathy and being considerate from the female staff brings more comfort to them.

> *I prefer to purchase them from a female staff because of being the same gender and being able to understand the situation and reasons for buying them. (*32-year-old college graduate)

There are some other cases where a feeling of shame and embracement is so dominating that they look for someone to buy the product for them.

> *I never purchased feminine napkins for myself. I feel embarrassed, so, I ask my sisters or my husband to buy this for me. (*42-year-old civil servant)

While talking about the emotional distress associated with purchasing a sanitary napkin publicly, R12, added to this story.

> *I am working in a hospital it's not easy at all to go to the pharmacy and stand in a queue for at least half an hour and then take it from male staff in front of many other male patients or their attendants.* (33-year-old statistician)

When probed about their buying preferences for sanitary napkins, purchasing from female staff or supermarkets is mostly preferred by the participants to easily cope with the unwanted attention of judgmental people. The ability to manage our needs in secrecy is

> *Buying it from a larger store is better socially as buying from a smaller shop attains the unwanted attention of judgmental people. The ability to manage my needs away from the unwanted public gaze provides me with a subtle form of mental relaxation. (*24-year University graduate)

When talked about whether they are afraid of being called bold;

> *I have a strong preference for a female staff because people judge you if you purchase it openly and they relate this action with your character and make a perception about you that you are too "Bold" and "Shameless". (33*-year-old statistician)

> *I am little conscious of what people are thinking about me I don't want to be tagged as bold or shameless, so I avoid public discussion on menstruation.* (27-year-old Financial Analyst)

Theme IV: Religious and Cultural Observances

Restrictions on religious activities during menstruation appear to be a common finding.

> *Being Muslim, we are restricted to offering payers, touching the Qur'an, and fasting during menstruation. (*32-year-old health professional)

Participants are investigated about religious or cultural restrictions imposed during their menstrual cycle and shared their experiences as

> *In our culture, menstruating women are often considered impure and are not allowed to participate in religious activities or enter temples. This has made me feel excluded during certain times.* (27-year-old Financial Analyst)

When discussed about the family practices of managing menstruation, a culture of silence is observed. Participants who live in a joint family system are culturally trained to suffer in silence.

> *I live in a joint family system, during Ramadan I regularly wake up with other family members to eat Sehri. There is a separate room in our home for Namaz; after eating Sehri we go to the prayer room to give the false impression that we are praying. It would be inappropriate if someone in the family were to notice my menstrual cycle dates. (*26-year-old University student)

> *I am not allowed to talk about it, I am not allowed to complain about period cramps… it's a shameful thing to disclose to other family members. (*42-year-old civil servant)

> *I am a single child of my parents. In my family, I learned to keep the menstrual product in my personal wardrobe and dry undergarments under the shirt or dupatta. But in my in-laws, I experienced managing menstruation in a completely different way. What I observed, they keep menstrual products in the store, hidden behind the broken items, so no one can see them. Even they hide the washed panties and trousers in the darkest corner of the room.* (41 -years-old homemaker)

Menstruating females are supposed to be Impure" Napak" and not allowed to touch the Holy Quran, Tasbih, and praying mat Elderly women in the family often restrict menstruating females to not to touch Sour food like pickles. They used the term "Parchawa" to describe the curse of menstruating females that spoil sour food.

Conclusion

This study represents a focused piece of research within the broader aspect of doctoral study. This study is aimed at investigating the user perception, usage pattern, disposal practices, and the influence of societal and cultural attitudes related to feminine hygiene products. Using a qualitative research framework, 18 semi-structured interviews with feminine hygiene product users from urban Karachi, were conducted. This study recognizes that Feminine hygiene products are widely considered essential for personal hygiene, yet they are still veiled in secrecy and discomfort.

This stigma manifests in the form of cultural taboos and familial norms that lead to secrecy around the use of feminine hygiene products. Such stigmas not only influence individual behaviours but also affect broader public health outcomes and environmental practices. The thematic analysis revealed four central themes, named "Comfort and Hygiene Balance", "Secrecy versus care for the environment", "From Stigma to Normalization: A Generational Perspective" and "Religious and cultural Observances". Each theme appeared to be enclosed by secrecy as a dominant attribute, demonstrating how social and cultural factors shape user behaviour and hinder open discussions about feminine hygiene products. When the participants discussed the perceived quality of the product, they recognized feminine hygiene products as a source of comfort and hygiene. However, their main concern was the absorbency and leakage control to avoid potential embracement. Acknowledging the care for the environment, when narrated about the disposal behaviour, the main priority of the participants was to dispose of used napkins discreetly to avoid public visibility. Revealing their consideration when purchasing feminine products, a small difference of opinion among the users of different Generations was observed. This study found that participants from Generation Z appeared more confident while discussing menstrual management. Generation G views menstruation as a natural part of life requiring its management as a normal biological function. Unlike Generation X, who considers that Menstruation is a private matter of life and should be handled with secrecy due to prevalent family culture and associated societal norms. Generation X is of the view that they are culturally trained to manage menstruation and hide the associated pain. Participants acknowledged that the fear of being judged by others or called bold is so strong and intense that lets them think that "Other people's opinion about them matters a lot".

The finding of this study highlights the need for increased campaigns for public awareness and educational programs to combat these stigmas. This will further help to promote awareness related to health and environmental challenges with absorbent hygiene products and adopt better hygienic practices. This study is limited to participants of homogenous economic backgrounds to whom the affordability of feminine sanitary napkins is of little concern. Future research may explore

perceptions and taboos related to feminine hygiene products across different socioeconomic groups including lower, middle- and high-income groups to get insight into how the affordability of feminine hygiene products changes their usage and disposal practices. This would help to determine if the findings of this study are consistent across diverse demographics. As this study highlights a difference of opinion in viewing menstruation and related issues among participants of different Generations, future studies may explore the influence of social media or the change in the education system in defining user perceptions and practices.

References

Alam, A. (2024). Feminine Hygiene Products Disposal and its Implications for Climate Change. *Pakistan Journal of Gender Studies*, *24*(1), 1-17.

Aly, R., Shirley, C., Cunico, B., & Maibach, H. I. (1978). Effect of prolonged occlusion on the microbial flora, pH, carbon dioxide, and transepidermal water loss on human skin. *Journal of Investigative Dermatology, 71*(6), 378–381. https://doi.org/10.1111/1523-1747.ep12556778

Amatya, P., Ghimire, S., Callahan, K. E., Baral, B. K., & Poudel, K. C. (2018). Practice and lived experience of menstrual exiles (Chhaupadi) among adolescent girls in far-western Nepal. *PLOS ONE, 13*(12), e0208260. https://doi.org/10.1371/journal.pone.0208260

Arquillos, L., Davies, P., Colbach, H., Lennon, C., Mezaiti, H., Conrads-Wetland, A., Challis, D., Heelis, D., Bodmer, M., Hatzopoulos, I., Pant, R., Riise, E., & Albessard, E. (2007). *EDANA sustainability report 2007-2008: Absorbent hygiene products*. EDANA.

Belayneh, Z., Mareg, M., & Mekuriaw, B. (2020). How menstruation is perceived by adolescent school girls in the Gedeo Zone of Ethiopia? *Obstetrics and Gynecology International, 2020*(4), 1–6. https://doi.org/10.1155/2020/3674243

Bender, J. K., Faergemann, J., & Sköld, M. (2017). Skin health connected to the use of absorbent hygiene products: A review. *Dermatology and Therapy, 7*(3), 319–330. https://doi.org/10.1007/s13555-017-0189-y

Betsu, B. D., Medhanyie, A. A., Gebrehiwet, T. G., & Wall, L. L. (2023a). “Menstruation is a fearful thing”: A qualitative exploration of menstrual

experiences and sources of information about menstruation among adolescent schoolgirls. *International Journal of Women's Health, 15*, 881–892. https://doi.org/10.2147/IJWH.S407455

Betsu, B. D., Medhanyie, A. A., Gebrehiwet, T. G., & Wall, L. L. (2023b). "Menstruation is a fearful thing": A qualitative exploration of menstrual experiences and sources of information about menstruation among adolescent schoolgirls. *International Journal of Women's Health, 15*(1), 881–892. https://doi.org/10.2147/IJWH.S407455

Butina, M. (2015). A narrative approach to qualitative inquiry. *American Society for Clinical Laboratory Science, 28(3), 190–196. https://doi.org/10.29074/ascls.28.3.190*

Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity, 56*(3), 1391–1412. https://doi.org/10.1007/s11135-021-01182-y

Choi, H., Lim, N.-K., Jung, H., Kim, O., & Park, H.-Y. (2021). Use of menstrual sanitary products in women of reproductive age: Korea Nurses' Health Study. *Osong Public Health and Research Perspectives, 12*(1), 20–28. https://doi.org/10.24171/j.phrp.2021.12.1.04

Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology, 12*(3), 297–298. https://doi.org/10.1080/17439760.2016.1262613

Dahlman, C. J. (1979). The problem of externality. *The Journal of Law and Economics, 22*(1), 141–162. https://doi.org/10.1086/466936

Dammery, S. (2020). First Blood: *A cultural study of menarche* (p. 3293805 Bytes). Monash University. https://doi.org/10.26180/5F3C6755524ED

Dündar, T., & Aksu, H. (2022). Cultural beliefs and practices of reproductive women about menstruation. *Journal of Women's Health Nursing (JOWHEN), 8*(2);41-49.

Dutta, A., Chakraborty, A., & Sarkar, O. (2024). Experiences of menstrual restrictions: Freedom lost and never regained. *International Journal of Educational Research Open*, *7*(1), 100347. https://doi.org/10.1016/j.ijedro.2024.100347

Elledge, M. F., Muralidharan, A., Parker, A., Ravndal, K. T., Siddiqui, M., Toolaram, A. P., & Woodward, K. P. (2018). Menstrual hygiene management and waste disposal in low- and middle-income countries—A review of the

literature. *International Journal of Environmental Research and Public Health, 15*(11), 2562. https://doi.org/10.3390/ijerph15112562

Garg, S., & Anand, T. (2015). Menstruation-related myths in India: Strategies for combating it. *Journal of Family Medicine and Primary Care, 4*(2), 184–186. https://doi.org/10.4103/2249-4863.154627

Hennegan, J., Brooks, D. J., Schwab, K. J., & Melendez-Torres, G. J. (2020). Measurement in the study of menstrual health and hygiene: A systematic review and audit. *PLOS ONE*, *15*(6), e0232935. https://doi.org/10.1371/journal.pone.0232935

Hennegan, J., Shannon, A. K., Rubli, J., Schwab, K. J., & Melendez-Torres, G. J. (2019). Women's and girls' experiences of menstruation in low- and middle-income countries: A systematic review and qualitative metasynthesis. *PLOS Medicine*, *16*(5), e1002803. https://doi.org/10.1371/journal.pmed.1002803

Holst, A. S., Jacques-Aviñó, C., Berenguera, A., Pinzón-Sanabria, D., Valls-Llobet, C., Munrós-Feliu, J., Martínez-Bueno, C., López-Jiménez, T., Vicente-Hernández, M. M., & Medina-Perucha, L. (2022). Experiences of menstrual inequity and menstrual health among women and people who menstruate in the Barcelona area (Spain): A qualitative study. *Reproductive Health*, *19*(1), 45. https://doi.org/10.1186/s12978-022-01354-5

Jalan, A., Baweja, H., Bhandari, M., Kahmei, S., & Grover, A. (2020). A Sociological Study of the Stigma and Silences around Menstruation. *Vantage: Journal of Thematic Analysis*, *1*(1), 47–65. https://doi.org/10.52253/vjta.2020.v01i01.06

Jelly, P., Verma, R., Kumawat, R., Choudhary, S., Chadha, L., & Sharma, R. (2022). Occurrence of urinary tract infection and preventive strategies practiced by female students at a tertiary care teaching institution. *Journal of Education and Health Promotion*, *11*(1), 122. https://doi.org/10.4103/jehp.jehp_750_21

Kaur, R., Kaur, K., & Kaur, R. (2018). Menstrual Hygiene, Management, and Waste Disposal: Practices and Challenges Faced by Girls/Women of Developing Countries. *Journal of Environmental and Public Health*, *2018*, 1–9. https://doi.org/10.1155/2018/1730964

Khan, A. (2000). Adolescents and reproductive health in Pakistan: A literature review. *Reproductive Health*. https://doi.org/10.31899/rh2000.1042

Liu, H.-L., Chen, K.-H., & Peng, N.-H. (2012). Cultural Practices Relating to Menarche and Menstruation among Adolescent Girls in Taiwan—

Qualitative Investigation. *Journal of Pediatric and Adolescent Gynecology*, *25*(1), 43–47. https://doi.org/10.1016/j.jpag.2011.08.006

Malik, M., Hashmi, A., Hussain, A., Khan, W., Jahangir, N., Malik, A., & Ansari, N. (2023). Experiences, awareness, perceptions and attitudes of women and girls towards menstrual hygiene management and safe menstrual products in Pakistan. *Frontiers in Public Health*, *11*, 1242169. https://doi.org/10.3389/fpubh.2023.1242169

McLaren, M. A., & Padhee, M. (2021). A sexual and reproductive health rights approach to menstruation. *Gender & Development*, *29*(1), 131–150. https://doi.org/10.1080/13552074.2021.1885218

Mendle, J., Turkheimer, E., & Emery, R. E. (2007). Detrimental psychological outcomes associated with early pubertal timing in adolescent girls. *Developmental Review*, *27*(2), 151–171. https://doi.org/10.1016/j.dr.2006.11.001

Mumtaz, Z., Sommer, M., Bhatti, A., & Patterson, P. (n.d.). *Adolescent Girls Information Needs regarding Menstrual Hygiene Management: The Sindh Experience*.

Ní Chéileachair, F., McGuire, B. E., & Durand, H. (2022). Coping with dysmenorrhea: A qualitative analysis of period pain management among students who menstruate. *BMC Women's Health*, *22*(1), 407. https://doi.org/10.1186/s12905-022-01988-4

Panda, N., Desaraju, S., Panigrahy, R. P., Ghosh, U., Saxena, S., Singh, P., & Panda, B. (2024). Menstrual health and hygiene amongst adolescent girls and women of reproductive age: A study of practices and predictors, Odisha, India. *BMC Women's Health, 24*(1), 144. https://doi.org/10.1186/s12905-024-02894-7

Panjwani, M., Rapolu, Y., Chaudhary, M., Gulati, M., Razdan, K., Dhawan, A., & Sinha, V. R. (2023). Biodegradable sanitary napkins—A sustainable approach towards menstrual and environmental hygiene. *Biomass Conversion and Biorefinery*. https://doi.org/10.1007/s13399-023-04688-7

Peranovic, T., & Bentley, B. (2017). Men and Menstruation: A Qualitative Exploration of Beliefs, Attitudes and Experiences. *Sex Roles*, *77*(1–2), 113–124. https://doi.org/10.1007/s11199-016-0701-3

Reinhardt, A., & Eitze, S. (2023). Breaking the endometriosis silence: A social norm approach to reducing menstrual stigma and policy resistance among young adults. *Psychology & Health*, 1–23. https://doi.org/10.1080/08870446.2023.2277838

Rizvi, N., & Ali, T. S. (2016). *Misconceptions and mismanagement of menstruation among adolescent girls who do not attend school in Pakistan*. *3*(1), 45-62.

Robinson, H. (2015). Chaupadi: The affliction of menses in Nepal. *International Journal of Women's Dermatology*, *1*(4), 193–194. https://doi.org/10.1016/j.ijwd.2015.10.002

Santina, T., Wehbe, N., & Ziade, F. (2012). Exploring dysmenorrhoea and menstrual experiences among Lebanese female adolescents. *Eastern Mediterranean Health Journal*, *18*(8), 857–863. https://doi.org/10.26719/2012.18.8.857

Small, M. F. (1999). A woman's curse? The Sciences, 39(1), 24–29. https://doi.org/10.1002/j.2326-1951.1999.tb03409.x

Sommer, M., Hirsch, J. S., Nathanson, C., & Parker, R. G. (2015). Comfortably, Safely, and Without Shame: Defining Menstrual Hygiene Management as a Public Health Issue. *American Journal of Public Health*, *105*(7), 1302–1311. https://doi.org/10.2105/AJPH.2014.302525

Soni, S., Jha, S., Srivastava, M., & Sornapudi, S. (2019). Working Women's Perspective on Sustainable Practices for Management of Menstruation. *Journal of Community Mobilization and Sustainable Development Vol. 14*(2), 267-270.

Sood, S., Stevens, S., Okumura, M., Ramaiya, A., & Hauer, M. (2020). Everywhere is Nowhere: A Systematic Review of Menstrual Health and Hygiene Management (MHHM) as a Human Right. Research Square**.** https://doi.org/10.21203/rs.2.19997/v1

Syed Abdullah, S. Z. (2022). Menstrual food restrictions and taboos: A qualitative study on rural, resettlement and urban indigenous Temiar of Malaysia. *PLOS ONE*, *17*(12), e0279629. https://doi.org/10.1371/journal.pone.0279629

Thomas, E. M. (2007). *Menstruation discrimination: The menstrual taboo as a rhetorical function of discourse in the national and international advances of women's rights. Contemporary Argumentation & Debate.* Retrieved from https://www.academia.edu/7858541/MENSTRUATION_DISCRIMINATION_THE_MENSTRUAL_TABOO_AS_A_RHETORICAL_FUNCTION_OF_DISCOURSE_IN_THE_NATIONAL_AND_INTERNATIONAL_ADVANCES_OF_WOMEN_S_RIGHTS

Tiwary, D. A. R. (2018). Role of Menstrual Hygiene in Sustainable Development Goals. *International Journal of Health Sciences and Research, 8*(5), 337-387.

Velasco Perez, M., Sotelo Navarro, P. X., Vazquez, A., Valdemar, R., & Hermoso Lopez Araiza, J. (2020). Waste management and environmental impact of absorbent hygiene products: A review. *Waste Management & Research: The Journal of the International Solid Wastes and Public Cleansing Association, ISWA*, *39*(7), 734–747, 734242X20954271. https://doi.org/10.1177/0734242X20954271

Weisbrod, A. V., & Van Hoof, G. (2012). LCA-measured environmental improvements in Pampers® diapers. *The International Journal of Life Cycle Assessment*, *17*(2), 145–153. https://doi.org/10.1007/s11367-011-0343-1

World Bank Group. (2022). Menstrual health and hygiene. World Bank. Retrieved June 7, 2024, from https://www.worldbank.org/en/topic/water/brief/menstrua l-health-and-hygiene

Yuriev, A., Dahmen, M., Paillé, P., Boiral, O., & Guillaumie, L. (2020). Pro-environmental behaviours through the lens of the theory of planned behaviour: A scoping review. *Resources, Conservation and Recycling*, *155*, 104660. https://doi.org/10.1016/j.resconrec.2019.104660

Hina Samreen is an Assistant Professor, Mathematics and Statistics Department, Institute of Business Management

Dr. Falak Shad Memon is an Assistant Professor, Department of Industrial, Environment and Energy Management, Institute of Business Management

Dr. Hira Mujahid, is an Assistant Professor, College of Economics and Social Development, Institute of Business Management