



ORIGINAL ARTICLE

## “An Unchangeable Reason for inequality” A Qualitative Study on Nursing Students’ Experiences and Perceptions of Menstruation and Menstrual Poverty

### “Eşitsizliğin Değişmez Bir Nedeni” Hemşirelik Öğrencilerinin Menstrüasyon Algıları ve Menstrüasyon Yoksulluğu Deneyimleri Üzerine Nitel Bir Çalışma

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#### Abstract

**Objective:** Menstrual poverty is a significant issue in Turkey and worldwide and is influenced by various factors. It is crucial for nursing students to understand how to eliminate gender inequality caused by menstrual poverty. The study aims to explore student nurses’ experiences and perceptions of menstruation and menstrual poverty.

**Method:** The study utilized a phenomenological qualitative method and analyzed the data using descriptive analysis.

**Results:** Based on the data gathered, five primary themes were identified: Thoughts on menstruation, experiences on menstruation, stereotypes about menstruation, management of the menstrual process, and things to be done to improve menstrual poverty.

**Conclusion:** By educating individuals about menstruation, we can enhance their awareness and contribute to the elimination of menstrual poverty. Therefore, it is essential to implement interventions aimed at reducing menstrual poverty.

**Keywords:** Nursing students, menstrual experiences, menstrual health, menstrual poverty

#### Öz

**Amaç:** Menstrüel yoksulluk Türkiye’de ve dünyada önemli bir sorundur ve çeşitli faktörlerden etkilenmektedir. Hemşirelik öğrencilerinin menstrüel yoksulluğun neden olduğu cinsiyet eşitsizliğinin nasıl ortadan kaldırılacağını anlamaları çok önemlidir. Çalışma, öğrenci hemşirelerin menstrüasyon ve menstrüasyon yoksulluğuna ilişkin deneyimlerini ve algılarını araştırmayı amaçlamaktadır.

**Yöntem:** Araştırmada fenomenolojik nitel yöntem kullanılmış ve veriler betimsel analiz kullanılarak analiz edilmiştir.

**Bulgular:** Toplanan verilere dayanarak beş ana tema belirlendi: Menstrüasyon ile ilgili düşünceler menstrüasyon ile ilgili deneyimler, menstrüasyonla ilgili kalıp yargılar, menstrüasyon sürecinin yönetimi ve menstrüel yoksulluğun iyileştirilmesi için yapılması gerekenler.

**Sonuç:** Bireylere menstrüasyon konusunda eğitim vererek farkındalıklarını artırabilir ve menstrüel yoksulluğun ortadan kaldırılmasına katkıda bulunabiliriz. Bu nedenle, menstrüel yoksulluğun azaltılmasına yönelik müdahalelerin uygulanması esastır.

**Anahtar Kelimeler:** Hemşirelik öğrencileri, menstrüasyon deneyimleri, menstrüel sağlık, menstrüel yoksulluk

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## Introduction

Menstruation affects 1.8 billion individuals worldwide and encompasses changes starting from adolescence to menopause (1). Menstrual health, as defined by the Terminology Action Group of the Global Menstrual Collective in 2019, is a comprehensive state of physical, mental, and social well-being beyond the mere absence of disease or infirmity in connection with the menstrual cycle (2). Proper menstrual health practices are essential for women's and adolescent girls' overall well-being and empowerment (3,4). However, worldwide, around 500 million individuals face menstrual poverty due to inadequate facilities and limited access to menstrual products (5).

Menstrual poverty, a term encompassing the lack of access to adequate menstrual products, hygiene facilities, health services related to menstruation, proper waste management, and essential health education, affects millions of women worldwide (6,7). It's not solely about the quantity of pads used but also the quality and accessibility of menstrual products (8). For example, over 80% of women and adolescent girls in Bangladesh resort to inadequate materials like old clothes due to the inability to access hygienic products like pads or tampons (9). Menstrual poverty profoundly affects not only women in low- and middle-income countries but also low-income women in high-income countries (10). In St. Louis, 64% of low-income women struggle to afford menstrual products, leading one-third to use alternatives like rags or toilet paper (11). Poor sanitation in schools and workplaces exacerbates this issue, as seen in Ghana, where approximately 11.5 million women lack proper sanitation and hygiene facilities (12). Access to clean water is also crucial for menstrual hygiene management, as it directly impacts sanitation during menstruation. Thus, deprived women facing challenges in accessing these basic necessities can be considered to be experiencing menstrual poverty.

Women and girls have reported negative impacts on their physical and psychological health, education, employment, and social participation due to menstrual-related experiences (2). Poor hygiene practices, inadequate waste management, and sanitation issues during menstruation can lead to grave health concerns like urinary tract infections (13), skin irritation/rashes, or burning in the pelvic area (2). Women often feel immense pressure due to the taboos, stereotypes, and misconceptions surrounding menstruation, which can lead to shame, fear, anxiety, and depression (6). Moreover, the unavailability of menstrual hygiene products can prevent some women and adolescent girls from attending

school or work, leading to social isolation. A study found that nearly 91% of adolescent girls have difficulty managing menstrual hygiene, leading to 18.4% missing school (2). The lack of knowledge and insufficient policies on menstrual hygiene management exacerbate menstrual poverty (4).

Menstrual health is a fundamental human right and essential for achieving the Sustainable Development Goals by 2030. Improving menstrual hygiene management contributes to Goals 4, 5, and 6 of the United Nations (11). Nurses should promote sustainable development goals, protect women's and adolescent girls' health, and eliminate menstrual poverty's gender inequality (14,15). Understanding the impact of menstrual poverty on nursing students who will become future nurses is crucial. Menstrual poverty is a significant issue in Turkey and worldwide, caused by traditional structures, incorrect beliefs, economic difficulties (16), and poor sanitation (14,17). However, studies on menstrual poverty are limited in the literature, and to the best of our knowledge, no study has been conducted on nursing students' experiences of menstrual poverty. The study aims to explore student nurses' experiences and perceptions of menstruation and menstrual poverty.

## Material and Method

### Study Design and Settings

The study explored student nurses' experiences and perceptions of menstruation and menstrual poverty using phenomenological qualitative research (18). The research team had a doctoral degree in obstetric nursing and experience in gender equality and qualitative research. The study was conducted with nursing faculty students in Ankara, providing an ideal research environment with students from diverse socio-cultural backgrounds.

### Data Collection Tools

"Descriptive characteristics form" and "interview form" were used in the study. The descriptive characteristics form, which the researchers prepared by reviewing the literature (7,19-21), included questions about the age, years of study, income level, and financial difficulties in buying menstrual products.

The interview form, which the researchers created by reviewing the literature (7,19-22), included questions aimed at exploring the participants' perceptions of menstruation and menstrual poverty experiences (Table 1). Three expert opinions were obtained to determine the usability and applicability of the form, and no changes were made to the form after the expert opinions. In addition, pilot interviews are recommended in the literature to increase the confirmability of the research (23). Two participants who met the inclusion criteria were interviewed as part of a pilot study to assess the interview form's applicability. Since the research questions were not changed, the participants in the pilot study were included in the sample.

### Main Points

- Women and girls have reported negative impacts on their physical and psychological health, education, employment, and social participation due to menstrual-related experiences.
- Awareness-raising campaigns are needed to encourage attitude change, and girls should be educated on managing menstruation.
- Nurses should promote sustainable development goals, protect women's and adolescent girls' health, and eliminate menstrual poverty's gender inequality.

## Participants and Data Collection

In this type of study, data collection ends when data saturation is reached and data begin to repeat; commonly, qualitative interviews can be conducted with 5 to 25 people who have experienced the phenomenon (24). This study was based on the data saturation principle, and the interviews were ended after the 20<sup>th</sup> in-depth interviews. The study was completed with 20 nursing students selected using convenience sampling method. Through WhatsApp, the students were recruited to participate in the study by using the flyer that described the purpose and methodology of the study. The following were the inclusion criteria for the study: (a) Being nursing students; and (b) students who volunteered to participate in the research. Students interested in the study provided written informed consent and participated in in-depth interviews. The interviews were conducted on Zoom at a time that was convenient for both the participants and the researcher. In the in-depth individual interviews, the questions in the interview form were directed to the participants by the researcher and audio recordings were taken. The in-depth interviews lasted approximately 30 minutes for each participant.

Data collection during the qualitative application was stopped when no new information or opinions were obtained and all research questions were answered (24).

## Statistical Analysis

Descriptive analysis is a qualitative data analysis that involves summarizing and interpreting the data obtained through various data collection techniques according to predetermined themes. In this type of analysis, the researcher can often include direct quotations to reflect the views of the individuals interviewed or observed strikingly. The aim is to present the findings in a summarized and interpreted form (25). Descriptive analysis was conducted in five stages:

In Phase I, the researcher created a framework for data analysis based on the research questions, the conceptual framework of the research, and the dimensions of the

interviews and observations. Accordingly, the main themes were named "thoughts on menstruation", "experiences on menstruation", "stereotypes about menstruation", "management of the menstrual process" and "things to be done to improve menstrual poverty" (Figure 1).

In Phase II, the interviews recorded on the voice recorder were converted into written text (transcription) by the researchers with the help of the Microsoft Word program on a computer. Researchers read the text several times to prevent the loss of expressions and compared it with the voice recorder. The interviews were coded consecutively from 1 to 20 to conceal the participants' identities. For example, the first participant was named "participant 1" and coded as "P1"; the 20<sup>th</sup> participant was named "participant 20" and coded as "P20" (Table 2).

In Phase III, The researchers organized the data according to their pre-established thematic framework, and subthemes were derived from interview responses (Figure 1).

In Phase IV, the organized data were described and supported with direct quotations.

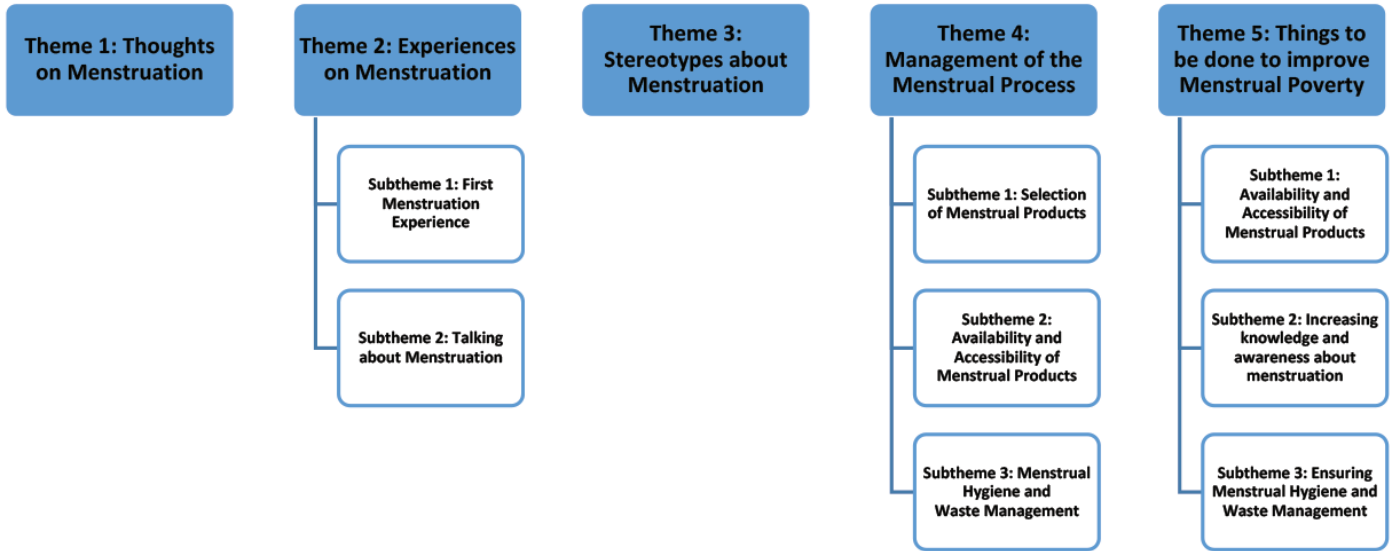
In Phase V, the findings were explained, related, and interpreted.

## Trustworthiness of Findings

In terms of the reliability of the study, the "long-term interaction" and "participant consent" criteria reported by Creswell and Miller (26) were met. In-depth interviews were preferred for long-term interaction, and each participant was interviewed for an average of 30 minutes. The convenience sampling method was used for transferability (applicability), and homogeneity was considered. To ensure the consistency of the research, the same interview form and the exact recording device were used in the interviews, and the same researcher participated in each interview. The investigator (MMK) conducting the interviews was a doctor of philosophy and a research assistant at a university in the department of obstetrics and gynecology nursing. The researchers collaborated and achieved a consensus

**Table 1.**  
**The Interview Form**

What does menstruation mean to you?  
If yes, what are the positive/negative things?  
Could you tell us about your first menstrual experience?  
How did you learn about menstruation?  
Do you think menstruation is taboo (something people don't talk about or are embarrassed to do)?  
How do you think menstruation affects your daily life?  
What are the products/supplies you usually use?  
What do you think about the safety of these products/supplies?  
What happens when you need to change the products/supplies you use?  
What do you think about the prices of menstrual products?  
Does the product's affordability affect your choice of menstrual products/materials? What do you think?  
How do you access menstrual products?  
What do you think needs to change to improve the health of menstruating women?  
If you would like to share something about menstruation, could you share it with me?



**Figure 1.**  
**Themes and Subthemes**

**Table 2.**  
**Descriptive Characteristics of Participants (n=20)**

Participants	Age	School year	Perceived economic situation	Financial difficulties in buying menstrual products	
				Last 12 months	Every month
Participant 1	19	1	Equal	Yes	No
Participant 2	21	2	Less	Yes	Yes
Participant 3	23	4	Less	Yes	No
Participant 4	20	2	Equal	Yes	Yes
Participant 5	19	1	Less	Yes	Yes
Participant 6	22	3	Equal	Yes	No
Participant 7	21	2	Less	Yes	Yes
Participant 8	22	3	Equal	Yes	Yes
Participant 9	24	3	Less	Yes	Yes
Participant 10	22	3	Less	Yes	Yes
Participant 11	20	2	Equal	No	No
Participant 12	23	4	Equal	Yes	Yes
Participant 13	23	4	Equal	Yes	Yes
Participant 14	23	4	Equal	Yes	Yes
Participant 15	19	1	Equal	No	No
Participant 16	21	2	Equal	Yes	Yes
Participant 17	20	1	Equal	No	No
Participant 18	22	3	Equal	Yes	Yes
Participant 19	23	4	Equal	No	No
Participant 20	22	3	Equal	Yes	Yes

on the study's thematic framework. After the interviews, each researcher read the transcriptions independently and identified subthemes. Following the interviews, each researcher individually read the transcriptions and identified subthemes. A pilot study was conducted to verify the interview form's verifiability, and expert opinion was obtained. The data were presented without bias or interpretation and were further supported with direct quotations in the discussion section.

### **Ethical Considerations**

The proposal was approved, and ethical approval was obtained from the Hacettepe University's Ethics Committee (decision number: 16969557-1344, date no: 2022/12-08). Informed written consent was obtained from students willing to participate in the study. This study complied with the principles of the Declaration of Helsinki. In order to maintain confidentiality, the names of the participants were anonymized for this study. This study used the consolidated criteria for reporting qualitative research as a guide (27).

### **Results**

The descriptive characteristics of the 20 participants are summarized in Table 1. After data analysis, eight sub-themes and five main themes were extracted. The sub-themes and main themes are given in Figure 1.

The main themes are as follows: "Thoughts on menstruation", "experiences on menstruation", "stereotypes on menstruation", "management of menstrual process", and "things to be done to improve menstrual poverty".

#### **Theme 1. Thoughts on Menstruation**

This theme focused on the participants' positive and negative thoughts about menstruation. Participants expressed that menstruation is not only a physical event but also has social, cultural, and personal dimensions. Some students associated menstruation with health, fertility, and femininity.

*"I feel like menstruation expresses fertility and femininity.."*  
(Participant 12)

*"It is a natural cycle and an indicator of being healthy.."*  
(Participant 13)

Some participants associated menstruation with pain and discomfort and drew attention to the difficulties women experience during menstruation. Some participants emphasized that menstruation negatively affected them physically, mentally, and socially.

*"I always pray that I will menstruate when I am not busy or at the weekend. The pain affects me a lot. At least I can lie at home and rest.."* (Participant 11)

*"I spend the first or second day of menstruation in bed or sitting, I restrict my movements... I am a social person. I like doing sports, but I avoid doing them."* (Participant 2)

A few participants stated that menstruation is a disadvantageous situation for women and is an unchangeable cause of inequality.

*"Menstruation is a burden on women; I think if we include the psychological effects, it demoralizes them in their work and school life and affects their motivation. Men do not know what it means..."* (Participant 12)

*"Sometimes we talk to girls in a friend environment about how comfortable men are. Men do not have such problems every month; I think this is an unchangeable reason for inequality.."* (Participant 13)

*"We are disadvantaged because we are psychologically and physically affected."* (Participant 10)

#### **Theme 2. Experiences on Menstruation**

This theme consisted of two subthemes: "First menstruation experience" and "talking about menstruation".

##### **Subtheme 1. First Menstruation Experience**

The experience of first menstruation left a deep mark on the lives of many participants. For many participants, the experience was physically and emotionally transformative, accompanied by fear and shame due to lack of information.

*"I was afraid and embarrassed to tell them because no one had ever told me anything about it before. I thought they would react differently when I told my family because it was unusual for me..."* (Participant 2)

*"I was at home. I noticed blood in the toilet. I told my mom. I think I overreacted a bit, but my mom calmed me down. In some schools, there is pad training or something like that. We were never given any. When my mother gave me a pad, I didn't know how to do it. It felt like I would stick the sticky part on my body."* (Participant 6)

The first experiences of the participants with prior knowledge about menstruation were more positive than the others. This information guided me on how to make sense of the process and how to cope with the state of uncertainty and change.

*"...I felt very ready for menstruation because my mother had talked to me before. There will be differences in your body like this. Therefore, I was very comfortable."* (Participant 20)

*"I was surprised at first; I was 13 years old when I suddenly went to the toilet and encountered such a thing. But then I adapted immediately because I knew..."* (Participant 3)



## Subtheme 2. Talking About Menstruation

Individuals' experiences illustrate how society's and family's ideas about menstruation affect participants. Some participants felt sharing such a private topic with their fathers or brothers was rude except in exceptional cases such as illness or emergencies.

*"I do not talk about such a subject with my father or brother except in cases of necessity...if my pain is too much, if I need to go to the hospital, then they know..." (Participant 1)*

*"I can never talk to my father. For him, these topics are shameful...(menstruation). We can talk about it in a mother-daughter relationship. However, it is a shame for him to talk about it in front of someone else. Because my mother says this is a private subject for you." (Participant 6)*

Some participants reported that their families created an environment of utterly open communication about menstruation.

*"I was able to tell most of the people around me, be it my father, my brother... I had to ask my father for a pad once. My brother even makes me hot water bags to relieve my abdominal pain." (Participant 20)*

## Theme 3. Stereotypes About Menstruation

The findings showed that menstruation is still perceived as a taboo subject by society and that factors such as sexual, cultural, and association of menstruation with femininity contribute to this perception.

*"I think menstruation is a taboo subject. I can still see people looking at me strangely when I buy ready-made pads in the market sometimes... If a man is next to me at that moment, he can walk away from me while buying pads." (Participant 1)*

*"Even now, when they buy pads, they put them in a black bag...So, it is still taboo. I think the vagina is where menstrual blood flows...that's why I think they are embarrassed. I mean, they wouldn't be embarrassed if the same blood flowed from the palm of their hand." (Participant 6)*

Some participants stated that the perception of menstruation as a taboo is shaped by society's values, norms, and myths and that individuals learn and internalize this situation through social interaction.

*"I think it is related to culture ... Such things are shameful, and men should not hear it. No matter how normal it is, this is how we saw it from our elders." (Participant 17)*

*"... My mother used to say that I shouldn't talk about it with anyone except her. She said it was a sin. Still, when I talk about this issue with someone, I think that there is a sin somewhere inside me." (Participant 9)*

The participants' statements reveal that the menstrual cycle is equated with being a woman and that society evaluates menstruating women in terms of reaching marriageable age, reproduction, and sexuality.

*"In society, it is thought that before menstruation you are a girl, after menstruation you are a woman, etc. ... Now that you have menstruated, you are of puberty, you are aware of everything, you have grown up, etc. ... My family had a perception that you need to be careful about your actions after menstruation; you are no longer a child." (Participant 5)*

*"I think it is related to the feminine characteristics. People think that a woman who can menstruate can now reproduce, get married, is ready for sexual intercourse, can give birth to children..." (Participant 7)*

## Theme 4. Management of the Menstrual Process

This theme consisted of three subthemes: "Selection of menstrual products", "availability and accessibility of menstruation products", and "menstrual hygiene and waste management".

### Subtheme 1. Selection of Menstrual Products

Participants stated that they commonly use pads during menstruation. The participants preferred pads because they were practical and easily accessible. Some participants needed to learn about menstrual products other than pads and their use.

*"I know about menstrual cups, tampons, washable pads... The menstrual cup does not feel safe, like a prejudice. I don't know how to use it. Tampons don't feel reliable either..." (Participant 5)*

*"I've heard of tampons and menstrual cups, and honestly, I don't know anyone around me who uses them. I see them on the internet or in some videos...I don't have any information on how they are used... I feel like it will bother me. I think the pad would be more comfortable." (Participant 6)*

### Subtheme 2. Availability and Accessibility of Menstruation Products

Many participants reported experiences of improvised product use in unexpected situations when there were no pads in the home or without access to pads. Participants often described these experiences as uncomfortable, ineffective, and lacking comfort.

*"...I wore a napkin when I was unprepared, and once I used a thin towel. It was uncomfortable because the texture was harder than the pad. I was worried if it would leak." (Participant 3)*

*"I used diapers for a while. Our house was very far from the market. It felt bad not being able to reach."*(Participant 14)

The problem of leakage was stated as a situation frequently encountered by the participants. Some of the participants emphasized that the use of cheap products due to economic difficulties causes leakage. Leaks, especially during sleeping hours, negatively affected the participants' perception of personal comfort and hygiene. At the same time, the use of cheap products that could lead to leakage affected the participants' social relationships and daily routines, creating psychological pressure and anxiety.

*"... it affects my sleep pattern... I sleep nervously for fear of leakage. Or if it leaked, I have to get up and clean up. It makes you feel bad..."* (Participant 13)

*"For example, there was a product I didn't like at all; it was leaking; I bought it just because of its price."* (Participant 13)

*"I used a cheap product; it was plastic, irritating, smelly. I felt uncomfortable; I got rashes on my skin. For this reason, it took a long time for it to go away for me. It negatively affected my daily life."* (Participant 20)

The fact that the leaks occurred publicly caused shame among participants.

*"... This situation creates tension. It embarrasses me when an outsider sees my stain and knows that I am menstruating."* (Participant 9)

*"I am terrified that it will come out...it can be shameful because the blood comes out of the genitals..."* (Participant 11)

Some participants said they had to throw away their underwear due to leaks. The routine occurrence of this situation caused financial hardship for some participants.

*"I had to throw underwear away. We are students; after all, it inevitably forces us financially."* (Participant 13)

*"I think I threw away a lot of my underwear. This situation forced me financially. I wash them, but I have to throw them away because they leave stains."* (Participant 20)

### **Subtheme 3. Menstrual Hygiene and Waste Management**

Most participants stated that changing menstrual products occurred in the toilets. Factors such as the hygienic conditions of toilets in public areas, the lack of trash bins to dispose of menstrual waste in these areas, and waiting in long queues due to crowding caused participants to delay changing their products or feel uncomfortable.

*"The schools are also terrible. I don't even want to enter the restroom because it is dirty. I wait until I come home to change my pad."* (Participant 15)

*"Some school toilets have trash, some don't. When it is not available, I cannot change because there is no napkin, no soap, nothing. And when you pick it up, you come in contact with blood."* (Participant 20)

### **Theme 5. Things to be Done to Improve Menstrual Poverty**

This theme consisted of three subthemes: "Availability and accessibility of menstrual products", "increasing knowledge and awareness about menstruation", and "ensuring menstrual hygiene and waste management".

#### **Subtheme 1. Availability and Accessibility of Menstrual Products**

All participants stated that accessibility and affordability of menstrual products are prerequisites for addressing gender inequality. Participants emphasized that menstrual products are a basic necessity for women and that these products should be distributed free of charge.

*"There are people who cannot afford pads, so financial support should be provided... Pad prices should be accessible for everyone. I know people who change pads once a day..."* (Participant 5)

*"Prices should be reduced, and every woman should have access to quality pads. It should be free of charge because this is a basic need."* (Participant 10)

*"The prices are too high, especially for a student to have to buy those packages every month is very sad... just like bread is a basic need, pads are a basic need"* (Participant 16)

#### **Subtheme 2. Increasing Knowledge and Awareness About Menstruation**

Most participants stated that individuals and parents should be educated about menstruation to raise social awareness and break taboos about menstruation. Some participants emphasized that raising men's awareness about menstruation could be an essential step in the fight against gender inequality.

*"The first place where a girl child receives education is her family. Therefore, family education is critical. Training should also be increased in schools..."* (Participant 8)

*"Men should also be trained at a very early age. ... Family training should also be organized..."* (Participant 11)

*"There can be posters and catalogs about menstruation being a normal process so that it is no longer taboo."* (Participant 14)

#### **Subtheme 3. Ensuring Menstrual Hygiene and Waste Management**

Some participants suggested that specific points should be set up in public spaces for easy changing during

menstruation, and separate bins should be set up to collect and manage pad waste.

*"There should be certain points, such as clean, hygienic toilets, pad changing points... women can go and change their pads there." (Participant 9)*

*"I have seen separate trash bins for pads in some places. Special trash bins can be placed in toilets to dispose of pads...." (Participant 13)*

## Discussion

Women's menstrual needs are increasingly recognized as an important problem for their health, education, employment, and well-being (3,21,28). The present study examined nursing students' perceptions and experiences of menstrual poverty.

In this study, participants had negative perceptions of menstruation. Barrington et al. (4) stated that women perceive menstruation as negative because they feel it is inappropriate and uncomfortable. The study emphasized that menstruation is a disadvantageous situation and causes inequality. In the literature, menstrual poverty is also recognized as an issue of gender inequality (3,29). Mason et al. (29) noted that cultural taboos in India around menstruation have worsened gender inequality, by imposing restrictions on menstruating women. The study results show that there is a need for interventions to evaluate the situations that may cause negative menstrual perception and transform this perception into a positive one.

In the present study, the participants' first menstruation experience significantly impacted their lives due to lack of information, shame, and fear. Similar to our study, McMahon et al. (30) stated that shame was the most common emotion that girls described against menstruation. Similar results are also observed in studies conducted in different cultures (4,31,32). Feelings of shame surround the menstrual period and can affect how a young girl sees herself and relates to her body (30). Sommer (28) found that girls who felt shame, guilt, and confusion about menstruation were less likely to talk to their mothers about it due to lack of information. Belayneh and Mekuriaw (33) found that many adolescent girls lack menstrual and hygiene information, often unprepared for menarche, particularly in rural areas. Information and awareness-raising campaigns for girls before menarche are recommended to change the negative perception of menstruation.

Menstruation is a normal physiological process of women of reproductive age. However, it is surrounded by social taboos and supernatural beliefs (33). The study's findings showed that menstruation is still taboo and that social, cultural, and familial attitudes affect the perception of menstruation. In addition, the participants stated that they were afraid of conversations about menstruation. The literature supports our research results (4,28-30,33). McMahon et al.

(30) reported that girls hesitate to discuss menstruation with their parents, teachers, and friends due to cultural and family attitudes. Sommer (28) emphasized that girls worldwide experience menstruation as a social indicator of transition to womanhood. The research results draw attention to raising awareness among society and families about menstruation (28).

In the study, it was stated that some problems were encountered in managing the menstruation process. Participants stated the pad as the most frequently used method; they emphasized that they lacked information about other methods. In the literature, it is emphasized that women lack knowledge about the variety of menstruation products (3,4,29) and accordingly resist the use of products other than commonly used products, such as pads (3). Studies state the acceptability of reusable pads and menstruation cups (29,34). Raising women's awareness about menstruation products and promoting reusable products such as menstrual cups, especially for low-income women, can provide long-term benefits for both the individual and society.

The current study's findings show that quality products are not used for economic reasons, which may affect women's quality of life. Similar to our research findings, the systematic review of Barrington et al. (4) reported that resource limitations increased negative experiences related to menstruation. Excessive exposure to menstrual items is associated with discomfort and friction, as well as leakage and spotting, and may increase feelings of fear and shame in women during this period (2,4,28,30). Evidence suggests that unhygienic materials may increase the risk of genitourinary infection (12,32). In the UK, steps have been taken to tackle period poverty by abolishing the "tampon tax" and providing free products to students. Countries such as Australia and Canada have also abolished the tampon tax. However, in Turkey, menstruating women pay an 18% value-added tax (VAT) on menstrual products as menstruation products are not considered basic needs. To ensure comparability, we can state that the tax rate on condoms is 8% VAT (35). The research results are expected to guide the country's politicians and activists to increase the affordability of menstrual products, especially for vulnerable groups.

The study found issues with menstrual hygiene and waste management. Menstrual product change was delayed due to reasons like lack of hygiene, overcrowding of standard toilets, and inadequate disposal facilities for menstrual waste. Elledge et al. (36) highlighted that menstrual waste is often ignored in communal toilet design, leading to inappropriate disposal in low and middle-income countries. The study results demonstrate the need for toilet facilities designed to comply with menstrual hygiene practices and to encourage the safe use and disposal of used products.

In this study, participants suggested strategies to reduce menstrual poverty. The most striking suggestions are that



menstrual products should be accessible and affordable, education about menstruation should be increased, and awareness should be raised. Regulations should be made in public spaces for menstrual hygiene and waste management. Our research results contribute to the literature's recommendations for reducing menstrual poverty (3,32). Similarly, Boyers et al. (3) emphasized that women's better access to menstrual products may positively impact them. Dasgupta and Sarkar (32) emphasized the importance of encouraging all mothers to talk to their daughters about menstruation well before menarche. Findings from the study revealed the need for investments at the policy level, including information, education, and sensitization, to achieve a successful outcome in reducing menstrual poverty (32).

### Study Limitations

This study was conducted with women studying in the nursing department of a university, and the results should not be generalized to all women. The convenience sampling method was used in the study. This may have prevented participants with different socio-economic and cultural backgrounds from participating in the study.

### Conclusion

The research found that menstruation is still seen as taboo due to social and cultural factors, leading to negative perceptions and related myths. Women face issues with affordability and waste management of menstrual products. To tackle this, steps must be taken to make these products accessible to all, especially those with financial hardship. Awareness-raising campaigns are needed to encourage attitude change, and girls should be educated on managing menstruation. Longitudinal studies are recommended, particularly among disadvantaged groups.

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