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Female university students' metaphorical perceptions of menstruation

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ABSTRACT

Aims: This study aims to describe the metaphorical perceptions of university students towards menstruation through metaphors and was conducted with metaphor analysis technique based on phenomenological method.

Methods: This research has been conducted with metaphor analysis technique based on phenomenological methods. Data included 169 university students who agreed to participate in the study. The data of the study was collected between March-April 2024 with a questionnaire form prepared by the researchers. In the first part of the questionnaire, questions about socio-demographic characteristics were included, and in the second part, the sentence "Menstruation is like, because." was included to determine the metaphors developed by the students about menstruation.

Results: Students produced a total of 164 valid metaphors related to the concept of menstruation. The metaphors revealing the students' perceptions of the concept of menstruation were grouped under 5 categories: "terrible pain and suffering", "emotional and spiritual change", "a natural part of life", "renewal and purification", and "feeling of discomfort and fatigue". In the study, it was determined that the category in which the most metaphors were generated was "terrible pain and suffering".

Conclusion: In the study, university students provided metaphors containing both positive and negative concepts related to menstruation. It is important to provide health education within primary health care and as a course in elementary, high school, and university settings to improve negative perceptions about menstruation.

Keywords: Menstruation, university students, metaphor, perception

INTRODUCTION

Menarche, which is accepted as the beginning of the reproductive age in women, and menstruation, which means periodic shedding of the endometrium, is a natural process specific to women and continues throughout the reproductive age (Can, 2016). However, beyond its medical definition as a natural event related to the female body, menstrual period is a term loaded with many different cultural and religious meanings (Venkatesan & Peter, 2020).

Menstruation is a complex and multi-faceted phenomenon that differs from woman to woman, where physical and emotional changes can be experienced differently in each cycle, and is an experience that is difficult to think outside of pregnancy and childbirth due to the dominance of scientific discourse that associates it with reproduction (Agnew & Sandretto; Hennegan et al., 2021; Malefyt & McCabe, 2016). Menstruation influences some women's perceptions of their bodies, and some women see menstruation as a missed opportunity for motherhood (Hennegan et al., 2021). Studies have described women's experiences during menstruation as not exciting or enjoyable, their feelings and struggles during this period not being understood by men, and women feeling sad, lonely, moody, unattractive, and more sensitive to what people say (Malefyt & McCabe 2016; Hennegan et al., 2021).

Different societies have defined menstruation, which is a biological phenomenon specific to women and whose meaning, and experience is influenced by cultural structure, as emotional changes as well as physical changes such as fatigue, cramps, bloating, abdominal pain, lower back pain and chest pain (Malefyt & McCabe, 2016). Women describe this process as "period", "curse", "red moon", "rag", "visitor", "that time again", "wreckage", "failed production" and "waste product", "what my mother forgot to teach me", "shame and stress", "ritually unclean", "dirty", "improper", "cleaning the abdomen for future pregnancies", "smelly", "disgusting" (Altıntaş et al., 2021; Abdel-Raheem 2024; DeMaria et al., 2020; Hennegan et al., 2019; Vora, 2020). Metaphors, which are used to describe one thing with another, are concepts that are used to provide better understandings of certain concepts, are very present in our daily lives, vary from culture to culture, and are neither completely objective nor absolutely true (Parın, 2017).

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Metaphors have been described as indispensable parts of our lives. Because many concepts in daily life are abstract or unclear in people's experiences, they need to understand them through other concepts, and this need leads to metaphorical definitions (Parın, 2017). In a study, Paula Knight, author of the memoir "the facts of life", describes herself during her menstrual period with the metaphor of a "werewolf", while depicting the physical and cultural anxieties experienced by menstruating women, it is also emphasized that an understanding of menstruation filled with silence, shame and stigma has persisted for centuries (Venkestan & Peter; 2020).

It is important to develop effective lifelong education programs by health professionals to inform and empower women, as menstruation experiences are virtually unchanging across generations, cultures, and the lifespan. These programs should include information about menarche expectations, menstruation management, and methods to reduce myths and stigmas about menstruation (DeMaria et al., 2020). In a qualitative study examining the knowledge, attitudes, behaviors and menstruation experiences of 70 women between the ages of 19-78, it was stated that inadequate education about menstruation in the family and at school led to difficult menstruation experiences in women, and that women's and girls' perceptions and experiences have been negatively affected because women and girls see menstruation as a "private" and taboo subject that cannot be discussed openly, although they have learned about the menstrual period (DeMaria et al., 2020). In a systematic scoping review of 44 school-based studies investigating the knowledge and experiences of girls aged 10-14 years from 12 low- and middle-income countries on puberty and menstruation, it has been determined that girls have insufficient knowledge about menstruation, first menstruation plays a triggering role in learning about menstruation, have negative feelings about menarche and menstruation, and are not adequately prepared for puberty and menstruation (Coast et al., 2019).

Knowledge and behavior acquired at a young age can affect individuals for life. Therefore, appropriate education at these ages is important in preventing health-related problems (Torondel et al., 2018). Nurses have responsibilities related to the protection and maintenance of reproductive health of young people within the scope of preventive health services due to their roles as both educators and counsellors. Firstly, nurses should have information about what young people know about this issue and how they behave. Afterwards, they should prepare a training plan according to their needs and evaluate the effectiveness of the training. Based on these ideas, the aim of this study is to understand the perceptions of female university students towards menstruation and how they define menstruation through metaphors. Determining the knowledge and perceptions of adolescents about menstruation will be guiding and important for the health education to be provided in this direction.

Metaphors can be used in everyday life without requiring a great deal of mental activity and largely determine how we go about our lives. Therefore, it is important to understand the metaphors created by female students about menstruation to reveal their feelings and thoughts that they were not aware of before. Although there are studies in the literature to determine women's perception of menstruation, qualitative studies evaluating the thoughts of female university students about the concept of menstruation are limited (Abdel-Raheem, 2024; Altıntaş et al., 2021; Barrington et al., 2021; DeMaria et al., 2020; Hennegan et al., 2019; Rubinsky et al., 2020; Vancauwenbergh & Franco, 2023; Yılmaz & Şahin, 2019). Therefore, the research has been conducted to understand how female university students view menstruation and how they define menstruation through metaphors.

METHODS

Ethics

Before conducting the research, ethics committee approval was obtained from the Aksaray University Human Researches Ethics Committee (Date: 28.02.2024, Decision No: 2024/01-10). Moreover, written informed consent has been obtained from the students who agreed to participate in the study, and the principles of the Declaration of Helsinki have been adhered to throughout the study.

Study Design

This research has been conducted with metaphor analysis technique based on phenomenological methods. "Metaphor analysis" is a technique based on the phenomenological research method within qualitative research methods. Metaphor analysis is a research technique used to learn abstract concepts that are difficult to understand by making analogies with known concepts (Merriam, 2013). By using easy-to-understand sentences, it offers a different perspective and approach to the target audience. In other words, metaphors are an effective method in revealing individuals' perceptions, problem solving and creating mental models (Yıldırım & Şimşek, 2016).

Participants

The population consisted of 700 university students staying in a female student dormitory in a city in Central Anatolia region of Turkiye. The sample initially consisted of 169 students who agreed to participate in the study. This study used the purposive random sampling method, which allows for the purposeful classification of systematically and randomly selected case studies in line with the purpose of the study (Marshall & Rossman, 2016). The data of 1 student who gave incomplete answers to the survey questions, 1 student who stated that she did not know the subject and 3 students who could not generate metaphors were not included in the study. Thus, the research has been completed with 164 students. Students were informed that their participation was entirely voluntary. Throughout the data collection process, the researchers ensured neutrality by avoiding any influence on the students and neither confirming nor denying their statements.

The inclusion criteria for this study were as follows: being enrolled in a university program and volunteering to participate. Students who did not produce appropriate metaphors were not in class when the data were collected and were absent were excluded from the study.

Data Collection

The data of the study has been collected with metaphors, which is a frequently used data collection method for describing and understanding experiences and perceptions. The aim of data collection with metaphors is to obtain in-depth information about how individuals perceive events through the metaphors obtained through interviews and the meanings attributed to metaphors (Yıldırım & Şimşek, 2016).

The data of the study was collected between March-April 2024 with a questionnaire form prepared by the researchers. While the first part of the form included demographic questions such as age, the department of study and class, the second part included the sentence "menstruation is like ....., because ....." to determine the metaphors developed by the students about menstruation. The students have been asked to compare menstruation to something else (entity, living being, object, etc.) and briefly state the reason for this comparison. These handwritten writings of the students have been used as the main data source in this study. Filling out the form took approximately 15 minutes. Before starting the research, the researcher informed the participating students about the purpose of the research and the questions to be asked during data collection. The study data were collected in the classroom through face-to-face interviews conducted by a female academic researcher from the Department of Nursing, who holds a PhD in Women's Health Nursing and specializes in women's health research (**Figure**).

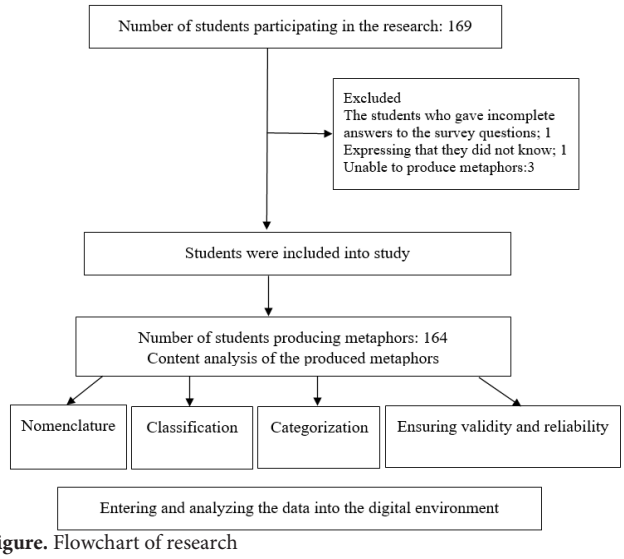

Figure. Flowchart of research

Statistical Analysis

Content analysis has been used in the evaluation of the metaphors generated by the students regarding the concept of menstruation. Content analysis is based on bringing together similar data within the framework of determined themes and concepts and interpreting them in an understandable way (Yıldırım & Şimşek, 2016; Suter, 2012). It is performed in five steps (Moser, 2000; Saban, 2009). These steps are nomenclature, classification, categorization, ensuring validity and reliability, and digitalization of the data. At the nomenclature stage, the metaphors created by the students have been listed. In the classification stage, the similarities and differences of the metaphors have been evaluated and ranked. In the categorization stage, five different categories have been formed according to the metaphor list and grouping classification. The metaphors and categories obtained in the validity-reliability stage have been presented to two experts to match each metaphor with a category, and the matchings of the researchers and experts have been compared. After determining the number of agreement and disagreements in the comparisons, reliability has been calculated using Miles and Huberman's (1994) formula reliability=(agreement)/(agreement+disagreement). The concordance has been determined as 89%. Furthermore, two lecturers were consulted to ensure that the metaphors given under different categories represented a conceptual category. Cohen's Kappa coefficient reflecting the concordance between the coders has been calculated and evaluated. Accordingly, the agreement rate in this study has been found to be 0.91, which indicates a good level of concordance. As a result, four experts evaluated the validity and reliability of the study. The majority has been taken as a basis where there is a difference between the researchers and experts. In the last stage, all data was digitized. The metaphors that have emerged as a result of the research have been categorized by considering their common features and analogical aspects. In the analysis of demographic data of students, frequency, percentage, mean and standard deviation have been calculated using IBM SPSS Statistics 24.0.

RESULTS

The findings section is presented in two chapters. The first chapter includes the descriptive characteristics of the students. In the second chapter, the conceptual categories based on the metaphors have been presented supported by sample expressions.

Descriptive Characteristics of Students

The average age of the students participating in the study has been determined as 20.96±1.58. Demographic characteristics of 164 students who participated in the study are given in **Table 1**.

Table 1. Socio-demographic characteristics of female students

Descriptive characteristics		Frequency	%
Mean age: 20.96, SD: 1.58 (min: 18, max: 25)	18 years	11	6.7
	19 years	20	12.2
	20 years	29	17.8
	21 years	45	27.4
	22 years	35	21.3
	23 years	14	8.5
	24 years	7	4.3
	25 years	3	1.8
Department studied in	Health-related department	86	52.4
	Department other than health	78	47.6
Age at first menstruation Mean: 13.30 SD: 1.56 (min: 10, max: 17)	10 years	4	2.4
	11 years	13	7.9
	12 years	36	22.0
	13 years	42	25.6
	14 years	36	22.0
	15 years	16	9.8
	16 years	12	7.3
	17 years	5	3.0
Regular menstruation	Yes	122	74.4
	No	42	25.6
Experiencing menstrual pain	Yes	138	84.1
	No	26	15.9
Problems experienced before or during menstruation (n: 721)*	Tension, nervousness	131	18.2
	Cramping pains in the lower abdomen	126	17.5
	Feeling of bloating	111	15.4
	Fatigue	101	14.0
	Chest pain	76	10.5
	Food cravings	75	10.4
	Headache	48	6.7
	Vomiting	38	5.3
	Back-lumbar pain	9	1.2
	Leg pain	6	0.8
Total		164	100

*More than one option was marked, percentages are based on 721 answers

Metaphors Generated by Students Related to the Perception of "Menstruation"

The metaphors generated by the students about the concept of menstruation and the categories formed from these metaphors are given in the table. The students have generated a total of 88 valid metaphors related to the concept of menstruation. Students have generated metaphors both as words (ordeal, break, miracle, death, breathing etc.) and as word groups (dying from pain, emotional explosion, being paralyzed etc.). Some of the metaphors generated by the students have been used in different meanings. Therefore, the same metaphors have been evaluated in more than one category. In the findings obtained, the metaphors revealing the students' perceptions of the concept of menstruation have been analyzed in terms of their common characteristics and grouped into 5 categories. These categories are terrible pain and suffering; emotional and spiritual change; a natural part of life; renewal and purification; feeling of discomfort and fatigue. Then, direct quotations from the metaphors generated by the students have been reported (Table 2). Quotations from the students are indicated with the letter "S" and the survey order.

Category 1. Terrible pain and suffering: The prominent characteristic of the metaphors in this category is that menstruation is extremely painful. Sample metaphor expressions related to this category are given below:

"Menstruation is like dying from pain because I am in so much pain that I cannot move." (S2)

"It is similar to having one side torn apart, because the pain comes repeatedly, and it is intense in one area." (S12)

"It is like giving birth, because I am in intense pain." (S30)

"It is a strange, disgusting and bad feeling because I can feel my blood coming out of my body and it is a disgusting feeling, the pain is unbearable." (S47)

"Being sick, because when I have my period, I cannot get out of bed without taking 2 painkillers during the day." (S57)

"It is like being tortured, because I cannot move, and I cannot continue my life because I have to take a break from my life, and I feel like I will faint from the pain at any moment." (S71)

"Having a heart attack, because every part of your body hurts." (S84)

"It is feeling on edge, not only is it painful, but it is also disturbing." (S94)

"It is as if the whole world has collapsed around me, I am in so much pain, and I feel awful and exhausted." (S111)

"It's death, because I feel like dying. I have a lot of pain." (S117)

"It is to die while I am alive, because I cannot stand still or stand up because of the pain." (S145)

"It is cruelty because it is a difficult, painful and complex process." (S159)

Category 2. Emotional and spiritual change: The prominent feature of the metaphors in this category is that menstruation causes mental problems. Sample metaphor expressions in this category are given below:

"It is like depression, I cannot enjoy what I do." (S19)

"It is eating unnecessary food, I usually feel bloated, I feel restless." (S49)

"It is the pips in tangerines, annoying you when you are happy." (S102)

"My period is a boring tradition, I'm tired of it, but I get it even if I do not want to." (S132)

"It is to use a term of endearment in the middle of an argument, even though it is frustrating, it feels good." (S136)

"It is cruelty, it ruins your day every moment." (S156)

Category 3. A natural part of life: In this category, students see the concept of menstruation as something that is normal and should be experienced. Sample metaphor expressions in this category are given below:

"It is a kind of indicator it shows that we are healthy." (S11)

"It is like a gifted treat because it is supposed happen for us, our health and womanhood." (S61)

"It is the removal of material and spiritual diseases; menstruation is the most natural thing for women." (S101)

Table 2. Distribution of metaphors developed by female students for the concept of menstruation according to categories

Category	Metaphors	Frequency	%
Terrible pain and suffering	Pain, dying of pain, undergoing surgery, terrible, being stabbed (2), having one side torn off, having a stone dropped from a kidney, loss of life, ordeal (3), labor pain (3), giving birth without giving birth, giving birth (7), giving birth but never giving birth, to be beaten, to have one's flesh torn from one's fingernails, to be tortured (2), to be paralyzed, something strange, disgusting, something that makes you feel bad, to work hard for days on end, not a good thing, to be sick (4), to be ruined every month, worse than dying, needle prick, disgusting (2), torture (11), heart attack (2), abdominal pain (3), stab wound in the abdomen, stabbed in the groin, broken bone (2), feeling on the edge, bad (2), bad pain, cramp, fainting with cramps, the whole world collapsed on me at that moment, death (11), thief who stole a day from our life, a painful process (2), dying while alive, tyranny, cruelty (10)	93	56.7
Emotional and spiritual change	Having a chocolate crisis, depression (2), emotional outburst, emotionally confused person, emotional, emotional discharge, a different era, eating unnecessary food, suffering (3), seeds in a watermelon, bad, pips in a tangerine, bomb with the pin pulled, disturbance, boring tradition, acne, cause of stress, committed a crime, using a term of endearment in the middle of an argument, poisoning, persecution (2)	25	15.2
A natural part of life	Being a family, some kind of indicator, giving birth, something unique, proof that you are really a woman, gift treat, urinating, part of human life, feeling that you are a woman, feeling healthy, letting go of material and spiritual illnesses, a break, miracle, breathing, normal (4), being healthy (3), being reborn	22	13.4
Renewal and purification	Purification, holiday, refresh, cleanse (4), cleansing of the body, life, renewal (3)	12	7.3
Feeling discomfort and fatigue	Severe flu, having an operation, being paralysed (2), having flu (2), weakness, being sick (2), unhappiness, problem, persecution	12	7.3
Total		164	100

"It is a miracle, a place for the formation of a baby." (S104)

"It is like breathing, because it is as natural as that." (S106)

"It is being healthy, a biological necessity." (S129)

Category 4. Renewal and purification: The prominent feature of the metaphors in this category is that menstruation creates renewal. Sample metaphor expressions in this category are given below:

"It is purification, we get rid of the dirt inside us." (S7)

"It is to be cleaned because I remove the dirty blood from my body." (S141)

"It is life, it constantly cleans itself." (S144)

"It is renewal, the ovaries renew themselves every month, it is a miraculous innovation." (S148)

Category 5. Feeling of discomfort and fatigue: The prominent feature of the metaphors in this category is that menstruation causes discomfort. Sample metaphor expressions in this category are given below:

"It is like severe flu, because I feel very weak and tired." (S3)

"It is to be sick I feel weak." (S60)

"It is being unhappy. Gets very tiring during my daily life." (S105)

"It is cruel because I get tired." (S155)

DISCUSSION

This study revealed university students' perceptions of the concept of "menstruation" through metaphors and grouped them under conceptual categories and discussed them in the light of the existing literature. Among 169 university students participating in the study, 164 students generated metaphors about the concept of "menstruation" and the metaphors generated have been grouped into five conceptual categories. When the metaphors generated by the students have been analyzed, it has been determined that 130 of the metaphors have negative themes and 34 of them have positive themes. It is seen that similar to the findings of the study, different meta-analyses and qualitative meta synthesis studies in the literature, in which metaphors related to menstruation are evaluated, negative meanings and experiences related to menstruation are contained the most (Abdel-Raheem, 2024; Barrington et al., 2021; Fernández-Martínez et al., 2020; Hennegan et al., 2019).

The concept of menstruation has been defined as an experience with physiological and psychological dimensions affected by cultural differences across generations (DeMaria et al., 2020). Factors influencing this experience include religion, community and age-old beliefs, taboos about menstruation, and perceptions of the cleanliness, safety, and privacy of the physical environment (Hennegan et al., 2021). The category in which the most metaphors have been generated in the study is the category of "terrible pain and suffering". The main theme of the metaphors in this category is the feeling of physical and emotional pain caused by severe pain and cramps that occur with menstruation. Menstrual pain, defined as "dysmenorrhea", which significantly affects daily life, is a common problem during menstruation and affects both young and adult women (Fernández-Martínez et al., 2022). According to the findings of a cross-sectional study with a sample of 42.879 women, which determined menstrual symptoms and their effects on quality of life and daily activities; the most common discomfort during the menstrual period was determined to be menstrual pain (85%), psychological complaints (77%) and fatigue (71%). It has also been observed that 38% of women cannot perform all their normal daily activities due to menstrual disorders, and many women do not initially consult a doctor when they experience menstrual symptoms (Schoep et al., 2019). Parallel to the main theme of the metaphors generated by young girls, in a qualitative study conducted with nursing students (n=33), it has been reported that the students perceived menstruation as "a discomfort or disease", that they experienced severe and intense pain especially in the first few days of menstruation, and that they described this feeling as a terrible thing, a kind of "living hell" experienced with a sense of doom. Some students in the study stated that they saw themselves as "sick" during this period due to the perspective arising from sociocultural traditions (Fernández-Martínez et al., 2020). In a qualitative study investigating the attitudes of 70 women aged 18-78 towards menstruation, women most frequently described menstruation as "worrying" due to cramps and low energy and described the discomfort and especially the experience of pain during this period as a real and difficult experience that affects their lifestyle and health (DeMaria et al., 2020). In a study conducted with university students, it has been reported that severe pain due to menstruation causes absenteeism from university, loss of concentration in classes, and a negative effect on sports and social activities (Orhan et al., 2018).

The second category of the study is "emotional and spiritual change". In this category, menstruation has been conceptualized as a situation of stress that causes emotional and psychological changes. In parallel with the metaphors generated in this study, in a qualitative study, nursing students described menstruation as limiting, affecting the way they dress and relate to others, and as body and mood changes that make them feel less attractive (Fernández-Martínez et al., 2020). In a similar study, it was reported that women felt sad, lonely, moody, unattractive and more sensitive to what people said during their menstrual period (Malefyt & McCabe, 2016). Existing qualitative and quantitative studies have revealed that poor menstruation experience negatively affects young girls' and women's physical and psychological health, educational achievement and social interactions, that many girls have many misconceptions about physiological changes during menstrual periods, that they learn most of this information from their mothers, television, friends and teachers, and that these beliefs often affect the emotional state, mindset, lifestyle and health of both girls and women (Aktürk & Erci, 2023; Hennegan et al., 2019).

The third category of the study is "a natural part of life", which includes metaphors containing positive themes about menstruation and includes metaphors such as "being healthy", "a normal part of women's life", "a kind of gift". Similarly, 12 metaphors about menstruation being a process of "renewal and purification" formed the fourth category. These two categories consist of positive metaphors for menstruation. Similar to this view of young girls who consider menstruation as a positive emotional experience, it has been reported in the literature that menstruation has different meanings for each woman, and in a qualitative study (n=27) conducted with girls and women of different age groups; it has been

reported that menstruation is seen as a part of maturation, having a baby and life, and it has been determined that the change in physical and mental state during this period is perceived as a natural part of the menstrual experience (Hasson, 2016; Malefyt & McCabe, 2016). Women's positive emotional responses to menstruation are pride in being a woman, an indicator of adulthood, a process they experience every month that allows them to relax, and a sign that they are not pregnant (Barrington et al., 2021; Rubinsky et al., 2020). In contrast to the dominant negative view of menstruation, some women perceive this process as a self-cleansing and purification process that provides a physical power to feel calm and balanced (Malefyt & McCabe, 2016; Mondragon & Txertudi, 2019). A widespread view, accepted by some women, that menstruation is a "fact of life" and a pain they have to live with, along with menstrual pain, supports the findings of our study (Serrahima & Martínez, 2023).

Individuals use metaphors to describe abstract or complex phenomena with more concrete or experienced phenomena (Ektem & Aytekin, 2020). In this study, some of the university students have defined menstruation in the category of "feeling of discomfort and fatigue" with metaphors including different themes. Sociocultural norms such as negative experiences related to the first menstruation, making menstruation feel like a shameful situation that should be experienced in secret, and considering menstruation as dirty can trigger the feeling of discomfort during this period (Coast et al., 2019; Rubinsky et al., 2020). There is a strong interaction between attitudes towards the concept of menstruation and linguistic expressions towards menstruation, which in many languages, including English, contain mostly negative metaphorical expressions such as "curse", "trouble", "wrong time of the month" and "bad time". Consequently, expressions of menstruation used in a negative sense in society may reinforce women's negative feelings and perceptions about menstruation (Sveen, 2016; Vancauwenbergh & Franco, 2023).

Menstruation, which is a symbol of reproductive age and a physiological process, is perceived and experienced differently in every society depending on social and cultural characteristics (Altıntaş et al., 2021). Understanding the stereotypes associated with menstruation and knowing how this concept is socially and emotionally handled will provide a valuable resource for creating health education materials that will provide a positive understanding of menstruation and develop a positive perspective. It is the first study in Turkiye to metaphorically describe female university students' perspectives and perceptions of menstruation in different departments. According to the findings obtained from this study, it is predicted that the perception of menstruation determined by metaphors will contribute to other studies as literature.

In this study, it is seen that the meanings that young girls attribute to the concept of menstruation have physiological, social and psychological aspects. With this, in which the metaphorical perceptions of female university students towards menstruation were evaluated, it has been determined that the metaphors generated by the students mostly contain negative themes. Due to the different economic, social and cultural structure in Turkiye, girls' transition to menstruation can be seen as a negative phenomenon that should be hidden both within the family and in society. Accordingly, it is not expected for girls to act naturally and share about their menstrual period. Women raised in this way experience their menstrual periods in secrecy until menopause, and even if their work and quality of life are affected due to severe pain, they have to keep it secret (Nüket et al. 2023). However, metaphors with positive themes have been generated in which menstruation is interpreted as a normal part of women's life, a process of renewal and purification. Negative perceptions about menstruation are factors that can be improved as a result of health education. It is important to provide information to reduce negative perspectives on menstruation by using narratives that focus on women's menstrual experiences, including not only the management and treatment of menstruation and menstrual pain, but also an assessment that focuses on the needs of women with a biocultural approach (DeMaria et al. 2020).

Limitations

Although qualitative research designs provide participants with the opportunity to share their own perspectives and perceptions, the data obtained based on students' verbal expressions, as in this study, may be affected by their sociodemographic characteristics, myths, sociocultural and religious factors. Therefore, the results of the study cannot be generalized to the population.

The research has been conducted to understand how female students studying at university view menstruation and how they define menstruation through metaphors. This study provides one of the first pieces of evidence investigating the metaphorical perceptions of university students towards menstruation through metaphors in Turkiye.

CONCLUSION

We conducted our study with female university students, and approximately half of the students were studying in departments that provide education in the field of health, while the other half were the educated segment of the society, even if they were not in the field of health. This situation ensures that even though they are exposed to social and gender taboos, their perceptions of menstruation are different from the general society, and they think consciously and modernly about menstruation. There are girls and women in society at different levels of education and in different age groups. Therefore, there seems to be a need for more qualitative research to determine the perspectives and perceptions of women of different generations towards menstruation. Menstrual period is a term loaded with many different cultural and religious meanings. Different societies have defined menstruation, which is a biological phenomenon specific to women, whose meaning and experience are affected by cultural structure, as emotional changes as well as physical changes. It is important for health professionals to develop effective lifelong education programs to inform and empower women, as menstruation experiences are virtually unchanging across generations, cultures, and the lifespan. Metaphors can be used in everyday life without requiring a great deal of mental activity and largely determine how we go about our lives. Therefore, it is important to understand the metaphors created by female students about menstruation to reveal their feelings and thoughts that they were not aware of before.

ETHICAL DECLARATIONS

Ethics Committee Approval

The study was carried out with the permission of the Aksaray University Human Researches Ethics Committee (Date: 28.02.2024, Decision No: 2024/01-10).

Informed Consent

All university students signed an open and informed consent form.

Referee Evaluation Process

Externally peer-reviewed.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

Financial Disclosure

The authors declared that this study has received no financial support.

Author Contributions

All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

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