

## Perspectives of Women with Overweight and Obesity on Physical Activity: A Qualitative Study

Merve SIKLAROGLU <sup>1</sup>, Ayla TUZCU INCE <sup>2</sup>

### ABSTRACT

**Aim:** The rates of obesity and physical inactivity are relatively high among women in Türkiye, increasing the need for physical activity programs. This study aimed to provide information for physical activity programs by gaining an in-depth understanding of the perspectives on physical activity of women with overweight and obesity.

**Material and Methods:** The research was based on a qualitative case study design and was conducted between June and July 2022 in Antalya, Türkiye. It used the purposive sampling and snowball sampling methods and included 20 women who were overweight or obese. Data were collected face-to-face using the individual in-depth interview method. This study used the qualitative data analysis method, and all data documentation, organization, and theming were performed using the Nvivo-10 software package.

**Results:** The participants' mean age was  $43.30 \pm 10.22$  years, and their mean body mass index was  $35.57 \pm 4.63$  kg/m<sup>2</sup>. Five major themes emerged: being healthy, types of physical activity, encouragement, unsatisfactory experiences, and preferences to increase physical activity.

**Conclusion:** All participants stated that protection and maintenance of health encouraged them to do physical activities. Most participants preferred walking and exercising at home as physical activity. Pain and tiredness, neglect, cultural aspects, and environmental restrictions were unsatisfactory physical activity experiences. It is believed that providing education on the negative experiences and demands of women with overweight and obesity regarding physical activity in primary health care services and encouraging them to do different types of physical activity is important for public health.

**Keywords:** Exercise; women; qualitative research; obesity.

### Fazla Kilolu ve Obez Kadınların Fiziksel Aktiviteye İlişkin Görüşleri: Nitel Bir Çalışma

#### ÖZ

**Amaç:** Türkiye'de kadınlarda obezite ve yetersiz fiziksel aktivite oranı oldukça yüksek olup girişimsel programlara gereksinim artmıştır. Bu çalışma, aşırı kilolu ve obeziteli kadınların fiziksel aktivite hakkında görüşlerini derinlemesine anlayarak fiziksel aktivite programlarına bilgi sağlamayı amaçladı.

**Gereç ve Yöntemler:** Nitel bir durum çalışması tasarımına dayandırılmış olan araştırma, Haziran ve Temmuz 2022 tarihleri arasında Antalya, Türkiye'de gerçekleştirildi. Amaçlı örnekleme ve kartopu örnekleme yöntemlerinin kullanıldığı çalışmaya fazla kilolu veya obezitesi olan 20 kadın dahil edildi. Veriler bireysel derinlemesine görüşme yöntemi kullanılarak yüz yüze toplandı. Bu çalışmada nitel veri analizi yöntemi kullanılmış ve tüm veri dokümantasyonu, organizasyonu ve temaları Nvivo-10 yazılım paketi kullanılarak gerçekleştirildi.

**Bulgular:** Katılımcıların yaş ortalaması  $43,30 \pm 10,22$  olup, beden kitle indeksi ortalamaları  $35,57 \pm 4,63$  kg/m<sup>2</sup>'dir. Çalışmada beş ana tema ortaya çıktı: sağlıklı olmak, fiziksel aktivite tipleri, teşvik, memnuniyetsiz deneyimler ve fiziksel aktiviteyi artırmak için talepler.

**Sonuç:** Katılımcıların tamamı fiziksel aktivite yapmalarında teşvik gerekçesi olarak sağlığın korunması ve sürdürülmesini belirtmiştir. Çoğu katılımcı fiziksel aktivite olarak yürüyüş ve evde egzersiz yapmayı tercih etmektedir. Ağrı ve yorgunluk hissetme, ihmal, kültürel faktörler ve çevresel kısıtlamalar gibi faktörler fiziksel aktivite için memnun edici olmayan deneyimlerdendir. Birinci basamak sağlık hizmetlerinde, fazla kilolu ve obez kadınların fiziksel aktiviteye ilişkin olumsuz deneyimleri ve talepleri göz önünde bulundurularak eğitim yapılmasının ve farklı fiziksel aktivite türlerine teşvik edilmesinin toplum sağlığı için önemli olduğu düşünülmektedir.

**Anahtar kelimeler:** Egzersiz; kadın; nitel araştırma; obezite.

1 Akdeniz University, Faculty of Nursing, Department of Public Health Nursing, Antalya, Türkiye.  
2 Akdeniz University, Faculty of Nursing, Department of Public Health Nursing, Antalya, Türkiye.

Sorumlu Yazar / Corresponding Author: Ayla TUZCU İNCE, e-mail: atuzcu@akdeniz.edu.tr  
Geliş Tarihi / Received: 11.03.2024, Kabul Tarihi / Accepted: 19.01.2025



## INTRODUCTION

The prevalence of obesity is increasing rapidly worldwide (1). The WHO reports that 39% of adults are overweight (body mass index [BMI] = 25.0-29.9 kg/m<sup>2</sup>), and 13% are obese (BMI  $\geq$  30 kg/m<sup>2</sup>) (1). Obesity is an established risk factor for type-2 diabetes, cancers, and cardiovascular diseases, which place a considerable disease burden on many low- and high-income countries (2). It is necessary to maintain a healthy weight or prevent individuals with overweight from gaining more weight to reduce the risk of obesity-related health problems (3). It has been reported that individuals with obesity have a lower risk of death than sedentary individuals with a healthy BMI, regardless of their etiology. In addition, regular physical activity (PA) can reduce weight gain and the risk of weight cycling after weight loss (1,4). Many clinical studies examined the effects of PA on obesity (5–7). Individuals with obesity should do  $\geq$  30 minutes of moderate-intensity aerobic PA five days a week or  $\geq$  20 minutes of vigorous-intensity aerobic PA three days a week (8).

Reducing the prevalence of obesity and physical inactivity, two major health problems, is very difficult worldwide. Studies have shown that more than half of individuals with obesity are not sufficiently active (8,9). Individuals with overweight or obesity often have physical, social, and psychological barriers to performing the recommended level of PA (10). A study conducted on physically inactive women in USA determined that a lack of social (family and friends) support and workload, tiredness, or stress due to working conditions were obstacles to PA behavior (11). A study on South Asian women determined that role expectations, lack of time, and environmental factors prevented them from doing PA (12). A study on Saudi women with obesity determined that they could not allocate time for PA due to role expectations and lack of social support (13). A study conducted in the USA stated that women with overweight or obesity needed to be provided with a social environment where they could come together with more physically active individuals to increase their participation in PAs (14).

Türkiye ranks first in Europe in terms of adults with overweight (66.8%) and obesity (32.1%) (15). The rate of physical inactivity among Turkish women is 36% (16). In the literature, it has been determined that the rate of low physical activity is higher in women than in men (9,10,16). The participation of women with overweight or obesity in regular PA can help attenuate increased health risks and costs. The perspectives of women with overweight or obesity on PA should be described in detail, and their needs and barriers should be determined to supply the planned or implemented intervention programs for PA with information. Studies have been conducted in different countries to determine the views of overweight and obese women on physical activity, but no study on this subject has been found in our country (11-13). This study aimed to provide information for physical activity programs by gaining an in-depth understanding of the perspectives on physical activity of women with overweight and obesity aged 30-64 years in Türkiye.

## MATERIAL AND METHODS

### Study Design

A qualitative case study design was used in this study (17). The case study is a method in which a single case or phenomenon is examined in depth longitudinally, data is collected systematically, and the occurrences in the real environment are investigated (18,19). This research is reported according to the Standards for Reporting Qualitative Research (SRQR) guidelines (20).

### Sample and Participants

The study was conducted at No. 17 Dt. Selahattin Topcu Family Health Center (FHC) in Antalya, Türkiye. The study was conducted in only one FHC. This FHC, where the study was conducted, was chosen because it has a heterogeneous structure in terms of socio-demographic and socio-cultural aspects. In this study, the homogeneous sampling technique, one of the purposeful sampling methods, was used (18). The study's sample 20 comprised women who presented to the FHC in June-July 2022, were aged 30-64 years the age group with the highest rate of overweight and obesity in Türkiye (16). Twenty women participated in the study are the number of participants reached theoretical saturation in data collection. In this study, reaching theoretical saturation was achieved by not hearing anything new while continuing to interview the participants and by repeating the data. Women who had no disability preventing participation in PAs, had no self-reported psychiatric disorders, could speak and understand Turkish, and volunteered to participate in this study were included.

### Data Collection

Data were collected through individual interviews conducted between June and July 2022 using a descriptive information form prepared by the researchers following a literature review and an individual interview guide prepared based on the researchers' prior knowledge and observations about the field of study. Both researchers have taken courses on qualitative research, and the corresponding author has publications on qualitative research.

The descriptive information form comprised 12 questions about age, marital status, family type, life expectancy in the city of residence, education, employment and income status, BMI, perceived health status, chronic diseases and smoking. Two researchers with publications in qualitative research were consulted about the semi-structured interview form comprising seven main open-ended questions supplementary questions. The interview questions are presented in Table 1. The understandability of the research questions was evaluated by applying them to two overweight and obese women who were not included in the study. After the pilot application, the necessary adjustments were made, and the questionnaire was finalized.

In-depth, face-to-face individual interviews were conducted in the FHC in an environment free of noise and interruptions. After both researchers (Siklaroğlu and Tuzcu Ince) introduced themselves to the participants, the second researcher explained the study's purpose in detail and obtained their written consent. During the interviews, participants were given sufficient time to freely express

their feelings and opinions, and thorough communication was established. The first researcher made observations during the interviews and recorded them on a voice recorder. Each interview lasted 50 minutes on average.

**Table 1.** Interview guide

Question 1. What does PA mean to you?
Question 2. Does anyone in your family do regular PA (walking, swimming, exercising at home, etc.)? If so, who are they?
Question 3. Is there any PA you are currently doing? Can you describe them?
Question 4. What are the factors that encourage/encourage you do PA? Why?
Question 5. Are there any restrictions preventing you from doing PA? If yes, what are they?
Question 6. Do you think PA is affecting your health? How?
Question 7. What should be done to increase the PA behavior of women in the community? How?

PA: Physical Activity.

**Data Analysis**

Mean ± standard deviation (SD), frequency and percentage were used to define the data on the descriptive characteristics of participants. Creswell’s qualitative data analysis steps were followed for analysis (21). First, all interviews were transcribed into a Microsoft Office Word document. Demographic data, transcriptions, and field notes were entered into the NVivo-10 software for data organization and thematic analysis. The researchers read the transcripts several times to obtain a general idea of all the data. Codes were assigned to selected texts related to the study topic (called “nodes” in NVivo). Data expressing common concepts were assigned to the most appropriate nodes. The process continued until no new data could be added to the nodes, and subcategories were created. Then, general themes covering these subcategories were created. Finally, a report of the findings was produced (21).

It has been stated that credibility, transferability, confirmability, and dependability criteria should be sought for rigor in qualitative research (22). Credibility refers to the extent to which the interpretation of the data represents participants’ experiences. The data and identified themes/sub-themes were discussed with the co-authors to check whether they represented participants’ experiences. Transferability refers to the extent to which the study’s results can be applied to other settings or groups and the number of informants (22). When selecting the sample, the sampling criteria were first determined. Then, a purposive sampling method based on volunteerism was used to obtain the participants’ opinions and experiences to achieve transferability. We attempted to provide diversity regarding participants’ demographic characteristics to ensure data diversity. Confirmability refers to the extent to which the study’s findings are free from bias (22). The coding was conducted independently by two researchers. The intercoder scoring agreement was calculated (Kappa coefficient = 0.83), showing a very good level (23,24). Coding disagreements were resolved through discussion until a complete agreement was reached. The NVivo-10

software, which has an open audit trail, was used for dependability.

**Ethics Committee Approval**

Before commencement, the approval of the Akdeniz University Faculty of Medicine Clinical Research Ethics Committee (no: 70904504/284; date: 04/20/2022) and the official permission of the Akdeniz Provincial Health Directorate were obtained for this study. Participants were given verbal and written information about the study’s purpose, data collection methods, and confidentiality in accordance with the Declaration of Helsinki. All study documents were coded to ensure participant confidentiality (e.g., Participant 1: P1).

**RESULTS**

**Participants’ Characteristics**

The mean age of all participants in this study was 43.30 ± 10.22 years (min = 30, max = 64). In addition, 85.0% were married, 55.0% were unemployed, and 50.0% had less income than their expenses. The participants’ mean BMI was 35.57 ± 4.63 kg/m<sup>2</sup>. In addition, 50.0% perceived their general health status as good, 55.0% did not have a chronic disease, and 70.0% did not smoke (Table 2).

**Table 2.** Descriptive characteristics (n=20)

Variables	n	(%)
Age (Mean ± SD)	43.30 ± 10.22	
BMI (Mean ± SD)	35.57 ± 4.63	
Marital status	Single	3 (15.0)
	Married/with partner	17 (85.0)
Family type	Nuclear family	15 (75.0)
	Extended family	5 (25.0)
Life expectancy in Antalya	Under 10 years	3 (15.0)
	10 years and above	17 (85.0)
Education status	Primary school and below	9 (45.0)
	Middle school and high school	5 (25.0)
	Associate degree and above	6 (30.0)
Employment status	Yes	9 (45.0)
	No	11 (55.0)
Income status	Income less than expense	10 (50.0)
	Income equals expense	7 (35.0)
	Income more than expenses	3 (15.0)
Perceived health status	Very good	1 (5.0)
	Good	10 (50.0)
	Middle	5 (25.0)
Presence of chronic diseases	Poor	4 (20.0)
	Yes	9 (45.0)
Smoking	No	11 (55.0)
	Yes	6 (30.0)
	No	14 (70.0)

BMI: Body Mass Index; SD: Standard Deviation

**Perspectives of Women with Overweight and Obesity on Physical Activity**

This study presents the views of overweight or obese women regarding PA with 5 main themes and 37 sub-themes (Table 3).

**Table 3.** Main themes and sub-themes (n=20)

Main themes	Sub-themes
Being healthy	Moving
	Losing weight
	Resting
Types of PA	Walking
	Exercising at home
	Vigorous exercises
	Swimming
Encouragement	Exercising in the park
	Health protection and maintenance
	Encouragement by family and relatives
	Encouragement by neighbors and friends
	Self-confidence and happiness
	Sharing responsibilities in the family
	Encouragement by health workers
	The effect of open spaces
	Better physical appearance
	Unsatisfactory experiences
Neglect	
Cultural factors	
Lack of encouragement by family and environment	
Reluctance	
Environmental safety	
Climate	
Problems related to sports fields	
Health problems	
Being overweight	
Preferences to increase PA	Increase the number of parks
	Sports areas and make sports centers free of charge or cheap
	Improving the environment of sports fields
	PA follow-up and education in FHCs
	Announcing sports events
	Peer support should be increased
	Reduce women’s household tasks and workload
	Having a place in sports areas to engage children
	Rewarding those who do PA
	Doing PA in places where women gather
Increasing scientific research on PA to promote it	

FHC: Family Health Center; PA: Physical Activity

**Theme 1: Being Healthy**

This theme covers the sub-themes of moving, losing weight, and resting. Most participants stated that PA meant

moving. One woman said, “PA means general movement of the body to me” (P10, age 39, undergraduate). Three participants defined PA as losing weight. One woman said, “To me, PA means losing weight to be healthy” (P1, age 42, associate degree). Only one participant said she thought PA rested the body: “PA is something that relaxes people... Resting the body by moving... It is because people do not rest only when they sit” (P7, age 31, high school).

**Theme 2: Types of physical activity**

Under this theme, participants’ current regular PAs were determined to be walking, exercising at home, vigorous exercises, swimming, and exercising in the park. Most participants said they went for a walk in different places, such as neighborhoods, parks, beaches, and mountains. For example, one woman said, “My husband and I often go walking along the beach” (P5, age 57, primary school). Fourteen participants stated they exercised at home, such as aerobics, weight-lifting, treadmill workouts, stationary bike workouts, Pilate’s band exercises, and following exercise videos. One woman said, “I do stationary bike workouts at home. I try to do physical movements on the bike to strengthen my legs. I pedal on the bike by tying sandbags weighing 1-1.5 kg to my feet” (P18, age 64, primary school). About half of the participants stated they did vigorous exercises such as Pilates, Zumba, dancing, step movements, volleyball, and running. For example, one woman said, “We video call and do Zumba, salsa, and step movements with my friends” (P13, age 30, high school). Seven participants said they went swimming in the sea: “I go swimming in the afternoon on Thursdays and Sundays. I swim for two or three hours and come back” (P8, age 42, high school). A quarter of the participants stated they did PAs with sports equipment in the park. One participant said, “I use the sports equipment in the park. I am satisfied with them very much” (P19, age 37, primary school).

**Theme 3: Encouragement**

The sub-themes identified under this theme included health protection and maintenance, encouragement by family and relatives, encouragement by neighbors and friends, self-confidence, and happiness, sharing responsibilities in the family, encouragement by health workers, the effect of open spaces, and better physical appearance. All participants emphasized that health protection and maintenance were incentives for doing PA. Participants listed the effects of PA as losing weight, exercising muscles, preventing diseases, and reducing pain. For example, one participant said, “Movement preserves muscle structure. When your muscles are strong, you have no restriction of movement. You can do exercises more comfortably when you have no restrictions on movement. You lose weight. When you exercise, you will not have cardiovascular problems” (P11, age 39, undergraduate).

Almost all participants stated that their family/relatives and neighbors/friends influenced their decision to do PA. Two women’s statements were as follows: “My daughter and son told me to go for a walk, attend sports programs, and never to mind the housework” (P12, age 58, literate); “I go walking with my friends and use sports equipment. They encourage me to do PA” (P19, age 37, primary school).

Most participants said that doing PA gave them self-confidence and happiness. One participant said, “Happiness hormones are released while doing PA. If I am engaged in doing exercise that I love, I like doing PA” (P10, age 39, undergraduate). Nine participants emphasized that sharing the care of children and elderly individuals at home and the household chores impacted their decision to do PA. One participant said, “When my husband comes home, he takes care of the children. When he takes care of the children, I can go for a walk for an hour” (P15, age 36, undergraduate).

One-fourth of the participants emphasized that healthcare professionals affected their decision to do PA. “Even my doctor’s guidance helped me start doing PA” (P14, age 39, primary school). Three participants stated that open space affected doing PA: “Environments with flowers, insects, and trees increase engagement in walking” (P7, age 31, high school). Some participants emphasized the effect of doing PA on looking fit: “When people look at me, I can make them say my physical appearance is nice. I’m trying to make people say that” (P8, age 42, high school).

#### Theme 4: Unsatisfactory Experiences

The sub-themes identified under this theme were experiencing pain and tiredness, neglect, cultural factors, lack of encouragement by family and environment, reluctance, environmental safety, climate, problems related to sports fields, health problems, and being overweight. Almost all participants mentioned that they felt pain and tiredness while doing PA. For example, one participant said, “When I walk, I immediately start to get tired. My knees hurt” (P13, age 30, high school). It was determined that sixteen participants neglected themselves and postponed doing PA due to housework, job-related work, and caring for children or elderly individuals. One woman said, “I am busy preparing meals for the children and doing the laundry and dishes. Indeed, my children are older, but motherhood never ends. My husband is like a child, and as if there are three children at home, including him. When I try to help them and meet their needs, I cannot do PA” (P17, age 43, primary school).

Most participants stated that cultural factors, such as embarrassment, social pressure, and religious beliefs, negatively affected them doing PA. One woman said, “We live in a Muslim country. There is a need for environments where conservative women can exercise comfortably. We cannot do exercise comfortably in open spaces; it is as if everyone is looking at us” (P4, age 40, graduate). Eleven participants stated that their families and circles did not encourage them to do PA. One participant said, “If anyone around me encouraged me to go walking and do PA, and if there was such a person, I would be heartened. But there are no such people around me” (P16, age 44, undergraduate). About half of the participants stated they felt reluctant to do PA: “I promise myself that I will start doing PA with determination and I will succeed, but I lose motivation very quickly, and my desire to do PA is lost” (P10, age 39, undergraduate).

Nearly half of the participants stated that the low level of environmental safety negatively affected them doing PA. Participants emphasized dogs in parks and individuals consuming alcohol there and in neighborhoods as environmental safety issues. One participant said, “How safe can it be when young people come to the park with a

beer in hand? When they bring the dogs and take off their leashes, the dogs fight with each other” (P11, age 39, undergraduate). Seven participants stated that climate affected doing PA: “Antalya city is extremely hot in summer; people do not want to do anything because of the heat. Excessive humidity also feels uncomfortable” (P15, age 36, undergraduate). A quarter of the participants mentioned problems related to the sports fields under the unsatisfactory experiences theme. In this theme, participants emphasized their discomfort with the common use of sports equipment in the parks and the stuffy indoor sports areas. One participant said, “There was a place opened by the municipality for PA. I went there, but it was very stuffy. I did not go there again” (P12, age 58, literate). Four participants stated that their health problems negatively affected them doing PA. One participant said, “Before my health deteriorated, I was very active. I did everything” (P6, age 54, primary school). Only three participants stated that being overweight negatively affected them doing PA: “Being overweight prevents me from doing PA. Weight challenges you” (P9, age 31, middle school).

#### Theme 5: Preferences to Increase PA

Participants emphasized their preferences to increase PA under this theme. Most participants stated that it was necessary to increase the number of parks and sports areas and make sports centers free of charge or cheap. One participant said, “For example, there should be gyms in every neighborhood. There should be gyms close to our homes” (P9, age 31, middle school). Another participant said, “Gyms may be free of charge, or they may charge a small fee” (P17, age 43, primary school).

More than half of the participants stated that improving the environment of sports fields could increase PA. One participant said, “There must be large areas, not small spaces. People should not get stuck in one place. If this is provided, women can do PA comfortably. There must be a certain quota. If there is no quota, there will be a crowd of people; women will not attend. People should come here in groups, and two hours should be given to each group” (P19, age 37, primary school).

Nearly half of the participants emphasized that PA follow-up and education in FHCs would positively affect increasing it. A participant said, “Women should be questioned and informed about PA once a year in FHCs” (P16, age 44, undergraduate). Four participants stated that announcing sports events was important to increase PA in society. One participant said, “Municipalities and neighborhood headmen should announce sports events. Posters should be distributed in the neighborhoods, people should be informed, and announcements should be made in the districts. I am sure it would be incredibly effective if sports events were announced several days a week” (P8, age 42, high school).

Four participants stated that peer support should be increased. One participant said, “For example, if someone in a friend environment encourages doing PA, others will follow it. The activity is planned, and PA is done together. Then maybe, women’s PA may gradually increase” (P20, age 33, high school). Only three participants mentioned their preference to reduce women’s household tasks and workload to increase PA. One participant said, “The working time of women can be shortened. They work not

only at work but also at home” (P4, age 40, graduate). Few participants discussed topics such as having a place in sports areas to engage children, rewarding those who do PA, doing PA in places where women gather, and increasing scientific research on PA to promote it.

## DISCUSSION

This study described and explained the perspectives on PA of adult women with overweight and obesity living in Türkiye’s Western Mediterranean region. Its results, discussed based on the literature, can provide a good guide for Türkiye and similar countries with low PA rates.

The study’s participants described PA as moving, losing weight, and resting to be healthy, consistent with the results of two published studies (25,26). Similarly, in a qualitative study, the importance of PA for health was explained as improving the body, increasing energy, reducing stress, and developing mentally and emotionally (27).

This study’s participants mostly preferred walking, exercising at home, exercising vigorously, and swimming. In a study conducted in the USA, women stated that their PAs were doing housework, walking, dancing, and doing Tai Chi, respectively (27). Similarly, another study indicated that women went running, dancing, and swimming and did weight lifting, housework, and Zumba as PA (25). In a study conducted in India, women said they did outdoor activities or treadmill workouts, jogging, yoga, cycling, dancing, swimming, and housework (12). Our participants preferred walking more because they had less awareness about other activities, and Antalya’s climate was suitable for walking, especially in the spring and winter. Despite the advantage of swimming in Antalya’s city center, women preferred swimming less, possibly due to cultural factors and not knowing how to swim.

This study’s participants emphasized the positive effect of PA on health and self-confidence and that the encouragement of their relatives and the recommendation of health personnel positively affected them doing PA. Consistent with this study, another study found that social interaction with individuals doing PA was a facilitating factor in doing it (26). Two studies conducted in Sweden and England stated that family support facilitated PA and that social interaction with the immediate environment was a strong motivating factor (28,29). Another study indicated that religious beliefs, family, and group environments encouraged women with overweight or obesity to do PA (27). A study on women in the UK found that PA improved physical and mental state and promoted doing PA (30). A quantitative study on women in Türkiye determined that being a member of health/fitness clubs encouraged doing PA (31).

In this study, most women’s unsatisfactory experiences with PA were pain and tiredness, neglect, and cultural factors. Consistent with this study, another study found that participants’ health problems, feeling tired, weather conditions, and the absence of a friend who did PA prevented them from doing PA (27). In a study conducted in Spain, diseases, economic difficulties, cultural factors, lack of social support, and lack of environmental security were barriers to doing PA (32). A study on Korean American women stated that tiredness, pain, and illness were barriers to doing PA (11). A study conducted in Saudi

Arabia showed that women with obesity could not do PA due to cultural reasons and the inability to lose weight effectively (13). A study in China stated that unsuitable weather conditions, housework, and health problems prevented PA (26). A quantitative study conducted in Türkiye reported that paid sports facilities and their low number and cultural and sex-related factors negatively affected women’s PAs (31). Cultural factors negatively affect women’s PAs in Türkiye and should not be ignored. In this study, most participants stated that increasing the number of parks and sports areas, making them free or cheap, and encouraging PA behavior in FHCs to promote PA was necessary. One study stated that rewarding those who did PA, increasing group programs in gyms, providing electronic devices for individuals to monitor their PA levels, creating a health calendar, and sports trainers’ knowledge, understanding, and caring would positively affect increasing PA (27). A study conducted in England determined that free sports facilities increased participation in PA (33). Another study emphasized that preparing fun and motivating PA programs accompanied by expert trainers was important to promote PA (28). While weather conditions are suitable in Türkiye, there are insufficient open areas for walking and PA activities, especially in big cities. In this study, the participants’ recommendations to increase the number of parks and sports areas were based on this problem.

This study had strengths. The data meet strict criteria for accuracy and validity. The content of the data is valid because all participants spoke freely during the interviews and explained their views and experiences comprehensively. In addition, this study is the first qualitative study about physical activity with overweight and obese women. The limitation of the study is that it was conducted with overweight and obese women in a specific region of Türkiye. Therefore, the study findings cannot be generalized to Türkiye. Further studies are needed to assess the physical activity behaviors of overweight and obese women in other provinces of Türkiye.

## CONCLUSION

In conclusion, this study’s findings are significant to help better understand the perspectives of middle-aged adult women regarding PA in detail. Our study determined that women with overweight and obesity mostly preferred walking outside and exercising at home. Women mostly emphasized that PA should be done for health, and that parks and sports areas should be increased for PA. They also stated that pain during physical activity, cultural factors and inadequate environmental safety negatively affect PA. These women, who are at high risk for chronic diseases, need to increase their current PA level and undertake different types of exercise in addition to walking to reduce their BMI. Women’s knowledge and awareness of PA types can be enhanced by different training methods (e.g., mobile, web-based, or virtual reality training) and social media. The number of afforested walking areas, which are most preferred by women in Türkiye, should be increased. Local administrations should implement free/low-paid PA programs (e.g., Plates, yoga, or swimming) run by athletes or physiotherapists and increase sports areas that consider cultural values.

Ensuring that women, who have a fundamental role in forming healthy societies, undertake sufficient PA and have a normal BMI will contribute to developing healthy societies and reducing health costs.

**Acknowledgments:** The authors thank all the participants.

**Authors's Contributions:** Idea/Concept: M.Ş., A.T.İ.; Design: M.Ş., A.T.İ.; Data Collection and/or Processing: M.Ş., A.T.İ.; Analysis and/or Interpretation: M.Ş., A.T.İ.; Literature Review: M.Ş., A.T.İ.; Writing the Article: M.Ş., A.T.İ.; Critical Review: A.T.İ.

## REFERENCES

1. Prevalence of overweight and obesity among adults. World Health Organization [Internet]. [Updated: 2024; Cited: 2022 May 10]. Available from: [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-overweight-among-adults-bmi--25-\(age-standardized-estimate\)-\(-\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-overweight-among-adults-bmi--25-(age-standardized-estimate)-(-)).
2. Overweight and obesity causes and risk factors. National Heart Lung and Blood Institute [Internet]. [Updated: 2022 March 24; Cited: 2023 April 14]. Available from: <https://www.nhlbi.nih.gov/health/overweight-and-obesity/causes>.
3. Benefits of physical activity. Centers for Disease Control and Prevention [Internet]. [Updated: 2023 August 1; Cited 2022 March 27]. Available from: <https://www.cdc.gov/physicalactivity/basics/pa-health/index.htm>.
4. Schutz D, Busetto L, Dicker D, Farpour-Lambert N, Pryke R, Toplak H, et al. European practical and patient-centred guidelines for adult obesity management in primary care. *Obes Facts*. 2019; 12: 40-66.
5. Castro EA, Carrac EV, Cupeiro R, López-Plaza B, Teixeira PJ, González-Lamuño D, et al. The effects of the type of exercise and physical activity on eating behavior and body composition in overweight and obese subjects. *Nutrients*. 2020; 12(2): 557.
6. Rodriguez J, Neyrinck AM, Kerckhoven M Van, Gianfrancesco MA, Renguet E, Bertrand L, et al. Physical activity enhances the improvement of body mass index and metabolism by inulin: A multicenter randomized placebo-controlled trial performed in obese individuals. *BMC Med*. 2022; 20(1): 110.
7. Kotarsky CJ, Johnson NR, Mahoney SJ, Mitchell SL, Schimek RL, Stastny SN, et al. Time-restricted eating and concurrent exercise training reduces fat mass and increases lean mass in overweight and obese adults. *Physiol Rep*. 2021; 9(10): e14868.
8. Churilla JR, Johnson TM, Richardson MR, Williams BD, Rariden BS, Boltz AJ. Mode of physical activity participation by body mass index: 2015 behavioural risk factor surveillance system. *Res Sports Med*. 2018; 26(2): 147-57.
9. Bastin A, Romain AJ, Marleau J, Baillot A. Health behaviours, intentions and barriers to change among obesity classes I, II and III. *Clin Obes*. 2019; 9(1): e12287.
10. Haskell W, Lee I, Pate R, Powell K, Blair S, Franklin B, et al. Physical activity and public health: Updated recommendation for adults from the American College of Sports Medicine and the American Heart Association. *Med Sci Sport Exerc*. 2007; 39(8): 1423-34.
11. Choi JW, Cho J, Shin NM, Tsoh J. Exploring barriers to and facilitators of physical activity among Korean American women. *West J Nurs Res*. 2021; 43(9): 817-27.
12. Daniel M, Abendroth M, Erlen JA. Barriers and motives to PA in South Asian Indian immigrant women. *West J Nurs Res*. 2018; 40(9): 1339-56.
13. Alissa NA. Cultural challenges to weight management: A qualitative study of Saudi women's experiences. *J Community Health Nurs*. 2022; 39(1): 12-24.
14. Choi JW, Fukuoka Y. Does having a buddy help women with young children increase physical activity? Lessons learned from a pilot study. *Women Health*. 2019; 59(2): 115-31.
15. World Health Organization. World Health Organization European regional obesity report 2022. Copenhagen: World Health Organization Regional Office for Europe; 2022.
16. Health statistics yearbook 2019. Ministry of Health [Internet]. [Updated: 2024; Cited: 2021 April 20]. Available from: <https://sbsgm.saglik.gov.tr/TR,82338/saglik-istatistikleri-yilligi-2019-yayinlanmistir.html>.
17. Bradshaw C, Atkinson S, Doody O. Employing a qualitative description approach in health care research. *Glob Qual Nurs Res*. 2017; 4: 1-8.
18. Bal H. Qualitative research methods and techniques (applied-exampld). 1st ed. Istanbul: Kayhan Printing; 2016.
19. Sandelowski M. Whatever happened to qualitative description? *Res Nurs Health*. 2000; 23: 334-40.
20. Standards for reporting qualitative research a synthesis of recommendations. Equator Network [Internet]. [Updated: 2024; Cited: 2022 January 10]. Available from: [https://journals.lww.com/academicmedicine/fulltext/2014/09000/Standards\\_for\\_Reporting\\_Qualitative\\_Research\\_\\_A.21.aspx](https://journals.lww.com/academicmedicine/fulltext/2014/09000/Standards_for_Reporting_Qualitative_Research__A.21.aspx).
21. Creswell J. Qualitative inquiry & research design. 3rd ed. Thousand Oaks, CA: Sage Publications; 2013.
22. Lincoln YS, Guba EG. Naturalistic inquiry. Newbury Park, CA: Sage Publications; 1985.
23. McHugh ML. Interrater reliability: The kappa statistics. *Biochemia Medica*. 2012; 22(3): 276-82.
24. Gunbayi I. Developing a qualitative research manuscript based on systematic curriculum and instructional development. *European Journal of Social Sciences Studies*. 2018; 3(3): 124-53.
25. Vanden Bosch M, Wesley E, Strouse S. Perceptions of physical activity in middle-aged women with type 2 diabetes. *West J Nurs Res*. 2021; 43(7): 640-8.
26. Huang Y, Ng OL, Ha ASC. A qualitative exploration of facilitators and barriers to physical activity participation among Chinese retired adults in Hong Kong. *I Int J Environ Res Public Health*. 2022; 19(6): 3495.
27. Owusu C, Antognoli E, Nock N, Hergenroeder P, Austin K, Bennet E, et al. Perspective of older African-American and Non-Hispanic white breast cancer survivors from diverse socioeconomic backgrounds

- toward physical activity: A qualitative study. *J Geriatr Oncol.* 2018; 9(3): 235-42.
28. Burton NW, Barber BL, Khan A. A qualitative study of barriers and enablers of physical activity among female Emirati University students. *Int J Environ Res Public Health.* 2021; 18(7): 3380.
  29. Taylor C, Bhavnani V, Zasada M, Ussher M, Bick D. Barriers and facilitators to uptake and retention of inner-city ethnically diverse women in a postnatal weight management intervention: A mixed-methods process evaluation within a feasibility trial in England. *BMJ Open.* 2020; 10(7): e034747.
  30. Lum KJ, Simpson EEA. The impact of physical activity on psychological well-being in women aged 45-55 years during the Covid pandemic: A mixed-methods investigation. *Maturitas.* 2021; 153: 19-25.
  31. Emir E, Kucuk-Kilic S, Gurbuz B, Oncu E. Leisurely participation of Turkish women's: Constraints and facilitators. *Turkiye Klinikleri J Sports Sci.* 2022; 14(1): 69-78.
  32. Sanz-Remacha M, García-González L, Sevil Serrano J, Generelo Lanasa E, Aibar Solana A. Barriers to physical activity in disadvantaged population: A qualitative comparison between Roma and Non-Roma women. *Res Q Exerc Sport.* 2019; 90(4): 567-77.
  33. Higgerson J, Halliday E, Ortiz-Nunez A, Brown R, Barr B. Impact of free access to leisure facilities and community outreach on inequalities in physical activity: A quasi-experimental study. *J Epidemiol Community Health.* 2018; 72(3): 252-8.