



ORIGINAL ARTICLE

Is Exercise in Pregnancy Useful for a Healthy and Vaginal Birth?: Postpartum Women Explain Why They Performed No Exercises During Pregnancy: A Qualitative Study

Gebelikte Egzersiz Sağlıklı ve Vajinal Doğum İçin Faydalı mıdır? Doğum Sonrası Kadınlar Gebelik Sürecinde Neden Egzersiz Yapmadıklarını Açıklıyor: Nitel Bir Çalışma

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ABSTRACT

Aim: Although the positive effects of exercise during pregnancy on health are widely recognized, some women do not prefer physical activity during this period. Therefore, this study aimed to examine the barriers to exercise participation in postpartum women who did not exercise during pregnancy.

Methods: The qualitative descriptive study was conducted with 12 postpartum women who did not exercise during pregnancy, selected by snowball and criterion sampling. In the study, a semi-structured interview form was prepared and conducted with face-to-face and online data collection methods. Content analysis was used to evaluate the data.

Results: The factors preventing women from participating in exercise during pregnancy were grouped into five main themes: (1) Safety Concerns: Participants avoided exercising due to concerns that exercise could lead to preterm birth or miscarriage. Most considered light exercises, such as walking, to be safe. (2) Lack of Interest and Habit: The majority of participants did not engage in exercise before pregnancy and lacked interest in it, leading them to refrain from exercising during pregnancy. (3) Fatigue and Weakness: Women who continued working during pregnancy reported being unable to find the energy to exercise due to fatigue. (4) Time Constraints: Most participants reported that long working hours and a demanding work pace left them with no time for exercise. (5) Lack of Information and Support: Participants indicated that they lacked sufficient information about the benefits of exercise during pregnancy and did not receive adequate support from healthcare professionals.

Conclusions: In the study, women's negative beliefs about exercise, environmental barriers, and social norms were found to be the main reasons for not exercising during pregnancy. These findings suggest that health professionals have an important responsibility to inform and encourage women that exercise is safe and beneficial. Future studies should focus on developing strategies to overcome these barriers.

Keywords: Exercise, midwifery, pregnancy, vaginal birth, women's health

ÖZ

Amaç: Gebelik döneminde egzersiz yapmanın sağlık üzerindeki olumlu etkileri yaygın olarak bilinmesine rağmen, bazı kadınlar bu dönemde fiziksel aktiviteyi tercih etmemektedir. Bu nedenle, bu çalışmanın amacı gebelik sırasında egzersiz yapmayan postpartum kadınların egzersize katılımının önündeki engelleri incelemektir.

Gereç ve Yöntemler: Nitel tanımlayıcı çalışma, kartopu ve ölçüt örnekleme yoluyla seçilen, gebelik döneminde egzersiz yapmamış 12 postpartum kadın ile yürütülmüştür. Çalışmada yarı yapılandırılmış görüşme formu hazırlanmış, yüz yüze ve çevrimiçi veri toplama yöntemleri ile yürütülmüştür. Verilerin değerlendirilmesinde içerik analizi kullanılmıştır.

Bulgular: Kadınların gebelik sırasında egzersize katılmalarını engelleyen faktörler beş ana tema altında toplanmıştır: (1) Güvenlik Endişeleri: Katılımcılar, egzersizin erken doğuma veya düşüğe yol açabileceği endişesiyle egzersiz yapmaktan kaçınmıştır. Çoğu katılımcı yürüyüş gibi hafif egzersizlerin güvenli olduğunu düşünmektedir. (2) İlgi ve Alışkanlık Eksikliği: Katılımcıların çoğunluğu gebelikten önce egzersiz yapmamış ve egzersize ilgi duymamış, bu da gebelik sırasında egzersiz yapmaktan kaçınmalarına neden olmuştur. (3) Yorgunluk ve Halsizlik: Gebelik sırasında çalışmaya devam eden kadınlar, yorgunluk nedeniyle egzersiz yapacak enerjisi bulamadıklarını bildirmiştir. (4) Zaman Kısıtlamaları: Katılımcıların çoğu uzun çalışma saatlerinin ve zorlu iş temposunun kendilerine egzersiz için zaman bırakmadığını bildirmiştir. (5) Bilgi ve Destek Eksikliği: Katılımcılar, gebelik sırasında egzersizin faydaları hakkında yeterli bilgiye sahip olmadıklarını ve sağlık uzmanlarından yeterli destek almadıklarını belirtmişlerdir.

Sonuçlar: Çalışmada, kadınların egzersizle ilgili olumsuz inançları, çevresel engeller ve sosyal normlar gebelikte egzersiz yapmamanın başlıca nedenleri olarak bulunmuştur. Bu bulgular, sağlık çalışanlarının kadınları egzersizin güvenli ve faydalı olduğu konusunda bilgilendirme ve teşvik etme konusunda önemli bir sorumluluğu olduğunu göstermektedir. Gelecekteki çalışmalar, bu engellerin üstesinden gelmek için stratejiler geliştirmeye odaklanmalıdır.

Anahtar Kelimeler: Ebelik, egzersiz, gebelik, kadın sağlığı, vajinal doğum

Introduction

Pregnancy is a period of significant physical and emotional changes in women's lives. During this period, the role of exercise and physical activity is of great importance for the health of expectant mothers and the healthy progress of the pregnancy process [1]. The World Health Organization (WHO) and other professional organizations, such as the American Congress of Obstetricians and Gynecologists (ACOG), recommend that pregnant women engage in at least 150 minutes of moderate-intensity physical activity each week [2, 3]. Many studies have shown that regular exercise during pregnancy has many positive effects on maternal health and fetal development. Exercise can help prevent pregnancy-related disorders such as gestational diabetes, excessive weight gain during pregnancy, hypertensive disorders, urinary incontinence, fetal macrosomia, lumbopelvic pain, anxiety, and prenatal depression [4-6]. However, despite this, some women choose not to exercise during pregnancy.

Physical activity during pregnancy is influenced by a number of different factors. These factors are identified at five main levels in the socio-ecological model. At the first level, individual characteristics, sociodemographic, biological, and psychological factors shape a woman's approach to physical activity. At the second level, social networks and support systems play an important role; family, friends, and other immediate environment can influence a woman's decision to exercise. At the third level, there are social institutions such as health services and gyms; their accessibility and the services they provide can encourage physical activity. At the fourth level, there are relationships between institutions and networks; the living environment, appropriate sports facilities, and support within the community are important factors that influence physical activity. Finally, at the fifth level, there is public policy; laws and policies at local, state, and national levels may include regulations to promote physical activity in pregnancy. These five levels comprise the factors that influence physical activity in pregnancy and complement each other, shaping a woman's approach to physical activity [7].

On the other hand, women may choose not to exercise during this period due to various misconceptions about exercise, cultural pressures, physical discomfort, or health concerns. Changing body image during pregnancy, physical discomfort (e.g., morning sickness, fatigue, lower back pain), and psychological factors can also be barriers to exercise [8]. In a qualitative study conducted by Brown et al. (2014) in England, it was found that physical and psychological factors such as morning sickness, fatigue, and fear of miscarriage were prominent among the reasons why women did not exercise [9]. In another study conducted in South Africa, it was reported that 85% of the participants did not have sufficient information about exercise during pregnancy, and 64% did not receive any advice from health professionals [10]. In the systematic review by Evenson et al. (2009), it was emphasized that women avoided physical activity due to lack of time, lack

of social support, and uncertainty about whether exercise is safe in pregnancy [11]. However, studies have shown that regular exercise during pregnancy provides significant benefits, such as increasing the chances of a normal birth and reducing the risk of cesarean sections. In this context, encouraging women to engage in appropriate exercises throughout pregnancy is crucial for improving both their physical and psychological health [12, 13]. Unfortunately, cesarean section rates are steadily increasing worldwide. According to data from 2010-2018, 21.1% of women gave birth by cesarean, with the highest increases observed in East Asia, West Asia, and North Africa. By 2030, cesarean birth rates are expected to rise to 28.5%. This increase could lead to health issues due to both the overuse of cesareans and the unmet need for cesareans in cases where they are required. Exercise should therefore become a global priority for a healthy pregnancy and an easy vaginal birth experience [14]. In this context, it is of great importance to better understand the experiences of women who do not exercise during pregnancy, to explore the reasons behind this decision, and to shape public health policies with these findings. Therefore, the current study was conducted to examine the barriers to exercise participation of postpartum women who do not exercise during pregnancy. The results of the study aim to identify the barriers faced by women and provide clues on how to overcome these barriers so that health recommendations on exercise during pregnancy can be more effective.

Materials and Methods

Research Design

Qualitative approaches provide information about individuals' experiences and their views and perceptions of certain phenomena [15]. This study is a qualitative descriptive design to examine the barriers to exercise participation of puerperant women who did not exercise during pregnancy. Reporting Qualitative Research (SRQR) was used to report the research [16].

Population and sample of the study

In this study, which utilized the snowball sampling method, one of the purposive sampling methods, 12 puerperant women were included in the study using criterion sampling. In the literature, in the assessment of sampling volume in qualitative research, it is reported that the answers given to the interview questions reach the saturation point, and generally, 5-25 people are sufficient [17]. In the study, it was determined that the data started to repeat in the 10th participant, and the interviews were terminated in the 12th participant.

The inclusion criteria were composed of the following: (1) Over 18 years of age, (2) Primiparous, (3) Not experiencing a risky situation during pregnancy, (4) Not exercising during pregnancy, (5) Vaginal delivery, (6) Being on the 1st - 42nd day after delivery (puerperium), (7) Being able to communicate, (8) Accepting to participate in the study.

Data Collection Tools

In the study, a semi-structured interview form was prepared by the researchers in line with the literature [8, 18, 19]. In the preparation of the semi-structured interview form, attention was paid to principles such as easy understanding of the questions, not being multidimensional, and not directing the participant. The questions in the interview form included questions about the participants' descriptive characteristics, exercise habits before pregnancy, knowledge and awareness of exercise during pregnancy, and reasons for not exercising.

Research Procedure

Research data were collected between November 2023 and April 2024 through face-to-face in-depth interviews. Interviews were conducted face-to-face with participants residing in the same province and online (video) with participants living in different provinces. Participants were reached through purposive and snowball sampling methods. Initially, women who met the inclusion criteria were identified via healthcare professionals working in family health centers and maternity clinics. Additionally, voluntary participation announcements were shared on social media platforms (e.g., Instagram and WhatsApp groups), encouraging eligible women to contact the researcher. Some participants also referred others who met the criteria, supporting the snowball sampling process. The interviews took place in environments where the participants could feel comfortable and their privacy was ensured. Short conversations were held with the participants before the interviews to ensure that they relaxed. Participants were read the content of the voluntary participation form, their consent was obtained, and participant information forms were filled out. The interviews, which lasted an average of 30 minutes, were audio-recorded and preserved by the researcher with the permission of the participants. The names of the participants were kept confidential, and participant numbers were given to each of them instead of their names.

Data analysis

The content analysis method was used to evaluate the research data. A data set of approximately 45 pages was obtained by transcribing the audio recordings obtained in the computer environment. The data were grouped, and content analysis was performed with the help of the Microsoft Word program. In this process, the data were read repeatedly, and notes were taken continuously to become familiar with the data. With each reading, patterns and coding were revealed. Sub-themes were determined from the codings obtained. In the study, an inductive analysis was adopted in determining codes and sub-themes.

During the analysis of the data, codes and sub-themes were created by the expert researcher. The data obtained were evaluated within the framework of these codes. As a result, the data obtained in line with the determined theme were analyzed and interpreted. In order to increase the validity of the data, no names were taken from the participants;

in this way, it was ensured that they expressed their views sincerely without any anxiety or fear. This approach increases the reliability and validity of the research and ensures that the findings are more solidly grounded.

Reliability

The reliability of this study was ensured by Lincoln and Guba's reliability, consistency, verifiability, and transferability [20]. For reliability, the data collection tool was prepared with the opinions of two experts, and its comprehensibility was confirmed with a pilot interview. The researcher, who has experience in conducting qualitative research, made important comments during the data collection, data interpretation, and reporting stages. Participants were also asked to check the transcripts and evaluate the researcher's comments. Consistency was ensured by providing the same interview conditions and environment for all participants. One researcher conducted all interviews for consistency. A clear view of the interview notes, interview records, transcriptions, codes, sub-themes, and themes, and the discussions of the researchers about the themes was presented, and verifiability was ensured. To ensure transferability, the researchers provided detailed explanations of the study contexts, data collection, and data analysis process.

Ethical Considerations

For the implementation of the study, ethical approval was obtained from the Non-Interventional Ethics Committee of a state university (Date: 03/11/2023, registration number: 138/53). To protect participants' rights, both verbal and written informed consent were obtained before data collection. Participants were informed about the purpose, duration, and procedures of the study. The research was completed under the principles of the Declaration of Helsinki.

Results

Information on the descriptive characteristics of the participants in the current study is presented in Table 1.

Table 1. Descriptive characteristics of the participants (n=12)

Variables		n
Education status	High School	2
	University and above	10
Place of Residence	Province center	12
Employment Status	Yes	12
Income Status	Low	6
	Medium	2
	High	4
Age	$\bar{X}\pm SD$	33.00 \pm 3.76
	Minimum- Maksimum	25-40
Gestational Week at the Time of Birth	$\bar{X}\pm SD$	38.13 \pm 2.76
	Minimum- Maksimum	37-41

SD: Standard deviation

Accordingly, the mean age of the participants was

33.00±3.76 years, and the mean birth week was 38.13±2.7. It was found that the participants lived in the city center, worked in a job that brought income, and most of them had low income.

In the current study, as a result of the content analysis conducted to examine the views of the participants on the factors preventing them from exercising during pregnancy, 5 sub-themes were identified under a single theme. In the following sections, sub-themes are explained in detail using participant quotes. In addition, all themes and sub-themes are presented in Figure 1.

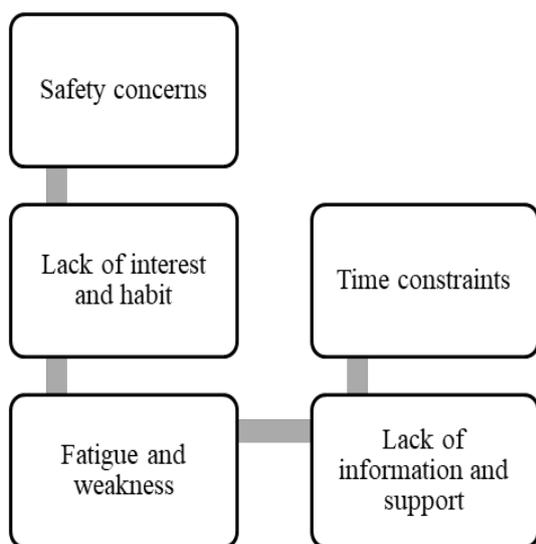


Figure 1. Figure showing participants' views on the factors preventing exercise during pregnancy.

Safety concerns

Participants were very concerned about exercise in pregnancy, even though they knew that exercise was important for quality of life. Although some participants thought that exercise during pregnancy would provide weight control and ease of labor, they also stated that exercise had risks. All participants mentioned that exercise in pregnancy can lead to the risk of preterm labor or miscarriage. However, only a few participants emphasized that light exercise would not cause problems in pregnancy and that heavy exercise should be avoided. Most participants found it safer to walk during pregnancy.

"I think it will be useful in order not to gain too much weight during pregnancy and because it will facilitate delivery, but I think that not every exercise should be done in order not to affect the baby in a bad way." (3)

"I think that exercise may increase the risk of preterm labor or miscarriage. I think that only walking is appropriate during pregnancy..." (11)

Lack of interest and habit

The most striking statement of the participants was that they had not exercised before pregnancy and had no interest in exercise. Although the participants complained that they could not develop healthy life behaviors, they did not have the motivation to change their habits. They defined exercise as a luxury

because they were struggling to survive in difficult economic conditions.

"I'm not normally into exercise. I was not interested in pregnancy either, to be honest..." (7)

"I have to work early in the morning until the evening. I don't even think about exercising because of the rush of life... Exercise is for the rich, a luxury for us low-income people." (3)

Fatigue and weakness

Although the income status of the participants was distributed as low, medium, and high, none of them left their professions and continued their work life during pregnancy. While some participants continued to work because they liked working, others wanted to postpone their leave to the postpartum period. They stated that the biggest difficulty of working during pregnancy was fatigue and weakness, so they had no energy to exercise or even walk.

"I felt very tired when I came home in the evening because my work was busy. I did not do it because of a lack of time, tiredness, and my desire to sleep early in the evening". (1)

"I was very tired because I was working and I wanted to go home and put my feet up and rest and sleep." (2)

Time constraints

All participants continued their professional lives during pregnancy. They emphasized that women should have more comfortable working conditions so that they are not deprived of their work life during pregnancy. A participant working in the private sector stated that she experienced difficulties due to the continuation of her busy shifts and heavy work during pregnancy, and that there was no time, even if she wanted to exercise.

"My working hours were long and I was working very hard. ... I had neither the time nor the inclination to exercise due to overtime work. I could if my working conditions were better." (8)

Lack of information and support

Participants stated that although they knew that active life was beneficial for health, they should be guided to exercise/movement during pregnancy by health professionals. In addition, one participant said, "I also did not have the economy to go to the gym. I would like to exercise if free trainings were organized by health professionals." (5), emphasizing that the health system should encourage exercise. It is seen that the participants did not receive support from their social environment for the benefits of exercise, and that there is a lack of awareness and knowledge on this issue as a society. One participant stated as follows: "I was prevented by my husband. My husband was very anxious that something would happen to the baby during my pregnancy. Therefore, she did not want me to exercise." (9). In general, it was found that there was a lack of knowledge about the importance of exercise during pregnancy, people had misconceptions, and therefore negatively

affected both themselves and their environment towards exercise.

"If I had been made aware of the importance of exercise during pregnancy by health professionals, if I had been guided to training on how to do it, I would have thought that it would be beneficial for my health and my baby, and maybe I would have created an opportunity to go to sports. The training I received could have motivated me to go to exercise." (1)

"My relatives always spoke negatively... I would exercise if I had accurate information that it was beneficial for me and my baby. Maybe I would be more aware of the importance of exercise during pregnancy, and maybe I would recommend it to pregnant women around me." (6)

Discussion

The findings of this study reveal several factors that influence women's decisions not to exercise during pregnancy. Participants' reasons for not exercising are shaped by personal beliefs, environmental barriers, and social norms. Considering the positive health effects of exercise during pregnancy, these findings suggest that women's negative attitudes towards physical activity and external barriers should be addressed more broadly. Accordingly, we will discuss the reasons for not exercising during pregnancy in a broader context, based on studies in the literature and research conducted in other countries. These studies provide valuable insights into how different cultural and social structures shape women's attitudes towards physical activity during pregnancy.

The first of the sub-themes obtained in the study was determined as safety concerns. It shows that safety concerns play an important role in women's decisions not to exercise during pregnancy. Although the participants know that exercise during pregnancy contributes to quality of life, they are concerned about the potential risks of exercise on infant and maternal health. In particular, safety concerns, such as the risk of preterm labor and miscarriage, were among the main reasons why participants did not exercise. These findings are in line with other studies in the literature. Tinius et al. (2020), in a study conducted in a rural area, emphasized the positive effects of exercise during pregnancy on health, but also stated that there are disadvantages, such as increased fatigue and safety concerns [21]. Dolatabadi ve ark. (2022) in Iran found that personal concerns (pregnancy complications, nausea) and environmental barriers (inadequate facilities, air pollution) prevent physical activity in pregnant women [22]. These studies support that safety concerns are one of the important factors that make it difficult to exercise during pregnancy. Participants indicated that low-intensity exercise, especially walking, was safe, and, similar to other studies, low-risk exercise was more preferred.

Participants' lack of interest in exercise and habitual exercise habits was another factor that prevented physical activity during pregnancy. Most women reported that they were not interested in exercise

before pregnancy and had difficulty adopting healthy lifestyle behaviors. Challenging economic conditions and life responsibilities often led to exercise being defined as a "luxury". Participants saw exercise as a mere waste of time in the hustle and bustle of daily life and therefore lacked any motivation to exercise. These findings are in line with the results of Currie et al. (2016) [18]. In the study, it was emphasized that although pregnant women have positive thoughts about physical activity in the antenatal period, they are often reluctant to participate in exercise due to various biological, psychological, and environmental barriers. In particular, lack of appropriate motivation and opportunities for habits such as exercise are among the factors that make participation difficult. Our working participants were also unable to make a strong commitment to exercise due to busy work schedules, busy daily lives, and personal barriers.

One of the biggest difficulties that the participants experienced during pregnancy was fatigue and weakness, especially while continuing their work life. Working women integrated their work life into the pregnancy process by not using their prenatal leave. However, most participants reported feeling extremely tired in the evenings after long hours of work and therefore had no energy for exercise, even a simple walk. These findings are in line with many studies in the literature. In Shang et al. (2023), fatigue was identified as the most common barrier causing pregnant women not to exercise [8]. In addition, pregnancy-related physical symptoms such as low energy levels, morning sickness, and weight gain were also cited as factors that make exercise difficult. Similarly, in the study by Gari et al. (2022) in Saudi Arabia, fatigue and lack of time were among the main factors preventing pregnant women from exercising [23]. In addition, Okafor and Goon (2022) in South Africa similarly emphasized that barriers such as fatigue, lack of time, and low energy limit the participation of pregnant women in physical activity [10]. In the study of Aljehani et al. (2021), lack of energy and fatigue were identified as factors that made it difficult for women to perform physical activity [24]. These findings suggest that most of the factors that prevent exercise during pregnancy are due to biological and environmental challenges, and strategies should be developed to increase women's energy levels.

Another important barrier faced by working women during pregnancy is time constraints. Participants stated that they could not find time to exercise due to their working life and that it was difficult for them to engage in physical activity, especially due to busy working hours and heavy workload. One participant stated that she would find it easier to exercise if her working conditions were more favorable. These findings are in line with many studies in the literature. Haakstad et al. (2018), in the "Fit for Delivery" study in Norway, stated that the most common factors that prevented women during pregnancy from participating in physical activity were lack of time, mother-infant safety concerns, and low self-efficacy [25]. Although these barriers are expected to decrease over time, they did not change in postpartum follow-

up. Similarly, Sytsma et al. (2018) found that in the first trimester of pregnancy, barriers such as lack of time and fatigue were the leading reasons for not exercising [26]. These findings suggest that many of the biggest barriers to exercise in pregnancy are related to work and time management, and that women should be offered more flexible and supportive working conditions to overcome these barriers.

Although the participants were aware of the importance of exercise in pregnancy, most of them stated that they faced barriers due to a lack of knowledge about exercise and a lack of support. Many participants stated that health professionals should provide more guidance on exercise during pregnancy, which would motivate them more. In addition, it was observed that the participants did not receive sufficient information and support about exercise from their environment. This situation points to a lack of social awareness and knowledge. The statement of one of the participants that training provided by health professionals would help them exercise emphasizes the role of health professionals in exercise during pregnancy. There are similar findings in the literature when studies conducted in other countries are examined. In their study conducted in Nigeria, Suberu and Adeoye (2024) emphasized the importance of training health professionals to promote physical activity during pregnancy [27]. In addition, Flannery et al. (2018), in their study in Ireland, stated that most of the participants received inadequate information on safe activities during pregnancy [28]. In another study, it was found that the educational level of the participants, regular exercise, attending a pregnancy school, and knowing the benefits of exercise during pregnancy were factors affecting exercise attitudes [19]. In the study of Dudonienė and Kuisma (2023), most of the participants stated that they needed more information about the effects of exercise during pregnancy [29]. These findings suggest that there is a need to raise more awareness about exercise during pregnancy and for health professionals to guide women. In addition, Alnaeem et al. (2024) reported that digital platforms and social media are an important source of information about exercise among women, which reveals the need for alternative ways to ensure that information about exercise reaches women [30]. Schmidt et al. (2017) emphasized that half of pregnant women consulted physicians for information about physical activity and exercise, but 13% stated that they were "insufficiently" informed about exercise during pregnancy [31]. This reveals the importance of health professionals providing more comprehensive information on exercise during pregnancy.

Conclusion

The findings suggest that education and support programs for exercise in pregnancy should focus on reducing safety concerns and informing women about safer exercise options. In this process, it is necessary to develop strategies in institutions to increase physical activity, especially for pregnant working women. Consideration of the economic and

environmental barriers faced by working women is critical to the success of these strategies. In addition, the findings suggest that the majority of barriers to exercise during pregnancy are physical and environmental challenges, but lack of information and support is also a significant barrier. Given that pregnant women face challenges such as busy work schedules and time constraints, it is important to raise awareness in institutions and society to promote exercise in pregnancy so that women can use their opportunities to exercise more efficiently. Furthermore, promoting regular physical activity during pregnancy can contribute to lowering caesarean section rates by increasing the chances of vaginal birth and reducing pregnancy-related complications. It is also emphasized that to increase participation in exercise during pregnancy, strategies to increase women's energy levels should be developed. These strategies will help working women to have a safe and healthy pregnancy by enabling them to maintain physical activity while balancing their work life.

Limitations and Strengths

This study also has some limitations. First, the study focused only on working women in a specific geographical area, which may make it difficult to generalize the findings. As the study only included working women, the experiences of stay-at-home or self-employed women were not considered. This did not provide an opportunity to capture the diversity of barriers to exercise in pregnancy with a wider audience. Finally, the study could benefit from a more in-depth examination of factors such as time constraints and lack of social support, and a follow-up study on the long-term effects of these barriers.

The strengths of this study include its comprehensive consideration of multiple barriers and opportunity factors related to exercise in pregnancy. This examination of working women takes a broad perspective, considering both biological and environmental factors that influence physical activity during pregnancy. In addition, in-depth interviews to understand the challenges in the participants' daily lives and their responses to these challenges allowed for an accurate reflection of their experiences. These findings, supported by different sources in the literature, contribute to a better understanding of the factors that prevent exercise during pregnancy and ways to cope with them. In addition to the physical and environmental barriers faced by working pregnant women, studies conducted worldwide have also revealed that a lack of knowledge is also an important barrier. In this context, these findings, which are supported by both national and international literature, allow for a more comprehensive understanding of the factors that prevent exercise during pregnancy and ways to cope with them.

Conflict of interest:

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