

ORIGINAL ARTICLE

A Qualitative Approach to Women's Perspectives on Exercise in Iran

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ABSTRACT

Background: It is believed that women of all ages do less physical activities compared to men. The development of interventional projects for increasing the women's participation in physical activity needs the recognition of resources and exploration of women's perspectives on exercise in their lives in the Iranian culture and context.

Methods: This qualitative study was conducted in an urban area of Iran on 46 women attending healthcare centers, volunteer health care providers, university students, sportswomen and one of the officials of the provincial women's sports. This study was done from April 2015 to June 2016. Four focus group discussions and one in depth semi-structured interview was conducted. A qualitative conventional content analysis approach was used for data analysis.

Results: Four categories were developed as follows: 'preferences', 'planning', 'motivators' and 'inhibitors'. Preferences had three distinct subcategories: preferences to do exercise in specific settings, specific exercise and group exercise. The family role, exercise as one part of daily routines, and exercise as a habit were subcategories of planning. Motivators were physical, emotional and social benefits; physician advice and encouragement; being alarmed; and championship. The inhibitors of doing exercise were various: gender issues, economical and costs issues, geographical access, making excuses, cultural infrastructures, shortage of sports experts, fears, concerns and misconceptions, inappropriate facilities and inadequate administrative cooperation and official barriers.

Conclusion: The findings showed that the women were sensitive to and interested in doing exercise. However, barriers to exercise were multiple and complex. Nursing interventions are required to increase the individuals' awareness of misconceptions and also develop strategic programs for improving exercise among women.

KEYWORDS: Exercise, Iran, Nurses, Qualitative research, Women

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INTRODUCTION

Exercise as a subcategory of physical activity (PA) is planned, structured, repetitive, and purposeful movements for the maintenance or improvement of one or more components of physical fitness.¹ A sedentary lifestyle is a major risk factor for the development of cardiovascular diseases, diabetes and obesity. It is the fourth leading cause of death across the globe.² On the other hand, PA is one of the four major behavioral aspects of the prevention of cardiovascular diseases.³

According to the World Health Organization (WHO), at least 60 percent of the world's population does not do enough PA.⁴ However, studies showed that women of all ages do less PA and exercise compared to men.^{5,6} The percentage of women's partnership in PA in different countries, especially in Iran, is very low.^{7,8} According to the WHO, men are more active than women, with the biggest difference in the prevalence rate between males and females in Eastern Mediterranean countries. Many countries have similar conditions.⁹ In a blood pressure status survey in an urban area of Iran, a high prevalence of obesity was reported in women.¹⁰

Understanding why individuals do not participate in sufficient PA is complex and multifaceted, encompassing personal, interpersonal, environmental, and policy determinants. Research which advances our understanding of any of these factors has a strong potential to better inform PA promotion interventions and thus support positive public health outcomes, both physiological and psychological.¹¹

Most studies on women's participation in PA have not provided an appropriate understanding of the reasons of women's lack of PA. Some reasons of less PA in women compared with men are social factors, care responsibilities and access to sport facilities. It has been reported that personal, social and environmental factors affect women's participation in PA.¹² In a qualitative study, it has been suggested that middle-aged women's adherence to regular

exercise was the result of a complex interaction between social, emotional, environmental and psychological factors.¹³

There is limited evidence in this area in Iran.^{4,7} While individuals' perspectives on PA should be explored for changing their physical behaviors, there are a number of gaps in the literature and little is known about them in the Iranian culture and context. The development of interventional projects for increasing the women's participation in PA needs the recognition of resources and exploration of obstacles to and facilitators of PA. It is clear that the reason for the failure of most development projects is ignoring the people's ideas that are expected to support the projects. Understanding the perspectives of women can help explore the hidden angles of this phenomenon.¹⁴

This qualitative study aimed to explore the women's perspectives on PA and exercise. Understanding the factors related to exercise among women is required for health care providers to encourage the women to incorporate exercise in daily activities. Also, understanding the hidden angles of this phenomenon can help the nurses and policy makers to promote PA among women in the community.¹⁵

MATERIALS AND METHODS

This qualitative study with focus group discussion (FGD) approach was conducted from April 2015 to June 2016. The FGD was used to explore the individuals' perspectives and beliefs about this phenomenon. It is a tool for data collection that provides an opportunity for the users to compare reflection on their behaviors.¹⁶

A qualitative conventional content analysis method was used for data analysis. Content analysis is a standard approach in health and social sciences that uses a set of procedures to make replicable and valid inferences from the textual data.^{17,18}

Purposive sampling was used for the recruitment of participants. The inclusion criteria were women with valuable experiences

on the study topic, age of 20-60 years, and willingness to take part in this study. Non-Iranian ethnicity was the exclusion criterion. Three out of 6 most popular urban healthcare centers were chosen randomly for the recruitment of participants. The health care centers were referral settings from different areas of the city and for women with different socioeconomic conditions; this contributed to sampling with a maximum variation. Also, easy access to women and appropriate space for holding FGDs were the other reasons for using these healthcare centers for data collection. Also, the university campuses and sport clubs were chosen as other sampling settings. Moreover, one of the officials of the provincial women's sports was invited to take part in this study.

A wide range of criteria were used to determine the adequate number of participants and groups for data collection. For achieving a maximum variation in sampling, besides women attending the health care centers, volunteer health care providers who had a strong relationship with their neighborhood women, young and well-educated females and sportswomen and authorities (one of the officials of the provincial women's sports) were recruited.

The groups were homogeneous based on age, level of activity and employment to ensure the validity. Attentions were paid to the composition of groups in terms of similarities in experiences. 45 women participated in four FGDs, each containing 10-12 women. One women's sports official participated in an individual in depth interview.

The FGD and in depth interview are two valuable strategies for data collection in qualitative research.¹⁹ The main characteristic of a FGD is an interaction between the moderator and the group, as well as the interaction between group members.²⁰ All FGD sessions were held after a previous agreement with the participants. All conversations were recorded using a voice recorder and in addition field notes were taken in all FGDs. In each FGD, a facilitator

and a note taker were present and a circle mode of sitting was provided to facilitate communication. A summary of the title and research objectives, rules and duration of the sessions was presented to the participants. For increasing reliability and providing necessary equivalence for all interviews, the facilitator and note taker remained unchanged and participated in all stages of data analysis. The duration of each session was 60-75 minutes and a tape-recorder was used for recording the interviews. Data collection and analysis were conducted concurrently and continued until data saturation was reached.

The FGD guide provided a framework for the moderator to ask and probe the questions.²⁰ The questions asked during the interviews were: "What is the role of exercise in your daily life?" and "what are your perspectives on exercise by women?" As the discussion continued, the questions became more specific and focused on the improvement of the depth of data collection.

In this study, Graneheim and Lundman's method was used for qualitative conventional content analysis.¹⁸ In this method, the interviews were transcribed verbatim and the smallest meaning units were recognized through reading the interviews several times and breaking the data down to smaller pieces. Subsequently, words, phrases and sentences were labeled as codes. Next, the initial codes with similar meanings were arranged and grouped into subcategories and categories. Two researchers who conducted FGDs listened to the audiotapes and compared them with the transcriptions. They independently reviewed the transcripts and identified the key categories. For consistency during the coding process, a researcher had the main responsibility for guiding the analysis process, which facilitated the final compilation of the key categories using illustrative quotes.

The ethics committee of Shahid Sadoughi University of Medical Sciences, Iran approved the study (code number: IR.SSU.REC.1394.224). Prior to the interviews, the participants were informed of the

purpose and method of the study and the informed consent form was signed by those women who willingly agreed to take part in this study. Participation in the study was voluntary and they could withdraw from the study at any time.

Trustworthiness of the Data: The criteria suggested by Lincoln et al. were used²¹. It involved establishing credibility, transferability, dependability and conformability. Prolonged engagement, triangulation, peer debriefing and member-checking ensured the credibility. Maintaining variation in sampling in terms of the research zone and participants, member checking and peer debriefing enhanced the credibility of the findings. T Description was provided for establishing the transferability. Dependability was achieved through audit trail. All documents including the records and computer files were saved for conformability.

RESULTS

The mean age of the participants was 34 years (20-60 years) (Table 1).

Four categories were developed during the data analysis as follows: 'preferences', 'planning', 'motivators' and 'inhibitors'. The categories were extracted from 20 subcategories (Table 2).

Preferences

According to the participants' viewpoints in this study, a persons' preferences and interests were very important key factors in doing exercise and PA in women. Individual preferences are mentioned by many participants. This category was divided into three subcategories as follows: 'preference to do specific setting', 'preference to do specific exercise', 'preference to do group exercise'.

Preference for a specific setting was

Table 1: The demographic characteristics of the participants

FGD sessions	Demographic characteristics
1	Women attending the health care centers=12 people, 29-59 years, married and housewife.
2	Volunteer health care providers=12 people, 38-45 years, married and housewife.
3	Medical university students=12 people, 20-24 years, single.
4	Sportswomen=10 people, 20-28 years, single, student.
Individual interview	The official of the provincial women's sports=1 people, 38 years, married.

Table 2: Categories and subcategories of women's perspectives on exercise in Iran

Categories	Subcategories
Preferences	1. Preference to do specific settings 2. Preference to do specific exercise 3. Preference to do group exercise
Planning	1. The family role 2. Exercise as one part of daily routines 3. Exercise as a habit
Motivators	1. Physical, emotional and social benefits 2. Physician advice 3. Encouragement 4. Being alarmed 5. Championship
Inhibitors	1. Gender issues 2. Economical and costs issues 3. Geographical access 4. Making excuses 5. Cultural infrastructures 6. Shortage of sports experts 7. Fears, concerns and misconceptions 8. Inappropriate facilities 9. Inadequate administrative cooperation and official barriers

addressed by the majority of the participants. One employed woman said:

"I would like to do exercise in Gym." (43 Y/O health care provider)

Some of the participants believed that they could do exercise in specific places. Another person declared:

"I prefer to go to the park for doing exercise." (21 Y/O student)

Preference to do group exercise was highlighted by the majority of the participants. According to their viewpoints, they enjoyed group exercise. One of them stated:

"I do not do exercise because I am alone. I am scared of walking alone. In group exercise, I can find a person to talk with." (57 Y/O housewife)

Planning

Planning was considered as one of the main factors for doing PA in women. The majority of the participants stressed the importance of planning for doing exercise. They pointed many aspects of this issue. The subcategories were as follows: 'the family role, 'exercise as one part of daily routines' and 'exercise as a habit'.

The family role was described by many participants. They believed that they could play as an advocator. One woman stated:

"My husband takes care of the baby while I am doing exercise." (32 Y/O housewife)

On the other hand, some women pointed to the role of the family as an obstacle to exercise. In this regard, a student stated:

"My family that always encouraged me to do exercise from childhood to high school, at the first year of high school told me: now the time for exercise is over. It is the time to study!" (21 Y/O university student)

Exercise as one part of daily routine was mentioned by many participants. According to their perspectives, it is very important to do exercise as a program in daily activity. One employed woman declared:

"I have it [PA] all planned. I cook the meal for the next day every night, so I am free in the morning. My husband wakes me up early and we go together to the park to do exercise."

(40 Y/O health care provider)

Exercise as a habit was addressed by several participants. They thought habitual behavior like doing exercise can influence PA in women. One of the participants said:

"Doing exercise is a habit for me. I go for walking at 8 o'clock every morning and I feel happy all day long." (37 Y/O housewife)

Some participants stated that habits formed in childhood do not matter in schools. In this regard, a student pointed:

"The exercise time was a break time for students. Also, if another class was behind the schedule, the teacher would use the exercise time to make up for it." (23 Y/O university student)

Motivators

The participants believed that it was essential to do exercise and their perspectives regarding PA depended on motivational factors. Five subcategories were developed as: Benefits in physical, emotional and social domain, 'physician advice', 'encouragement', 'being alarmed', and 'championship'.

The benefits of exercise and PA were described by numerous participants in various domains including physical, emotional and social. They believed that benefits were the key element of doing and continuing PA. They mentioned that they experienced the aforementioned benefits in various domains of their life. For example, one of the women about the beauty as a benefit of exercise stated: *"Beauty is very important to women and affects their mood and psychological status."* (39 Y/O health care provider)

Doing exercise for weight loss instead of having a strict diet or using weight loss drugs was mentioned by many participants. One woman mentioned:

"My blood lipid was high, but now after doing regular exercise it is about 300. I prefer doing exercise every day rather than using drugs that may damage my liver and kidneys." (56 Y/O housewife)

A girl said: *"I was obese and my menstruation was irregular. I lost five*

kilograms by doing body fitness exercises and it became regular. I do not like weight loss drugs or using strict diets to lose weight." (21 Y/O student)

Another participant declared: *"Since I started PA, my husband and I thought that our sexual relationships were improved; we are now more satisfied."* (39 Y/O housewife)

Another person said:

"I feel that I am able to control my bad moods and emotions after PA. Also, I become more cheerful and it influenced mood in the family." (21 Y/O student)

The social domains of PA were emphasized by the majority of the participants. Two of women mentioned:

"I like to get socialized. When I go for a walk, I see more people and talk to them." (59 Y/O housewife)

One girl stressed that her perspectives due to doing exercise were reflected in her future job:

"If I receive professional training, I can choose PA as a career in my life." (22 Y/O student)

Physician advice was one of the motives that many of the participants described. A married woman mentioned:

"My physician recommended doing exercise in order to relieve my leg pain." (52 Y/O housewife)

Encouragement has an important role in beginning and continuing doing PA. One of the participants declared: *"a clergyman in a mosque said yoga was a good sport. If you do not want to be blamed for laziness from your body in the next world, do yoga. The next day, I had lots of phone calls from women that had found a passion for Yoga."* (38 Y/O, the official of the women's sports)

'Being alarmed' was described by a girl as *"I have bad habits. If I am not alarmed, I do not move. When my father got backache, he got alarmed and started to do exercise every morning."* (24 Y/O student)

Championship was highlighted by some participants. One woman said:

"For me, obtaining a medal and going for

championship are strong motivators." (27 Y/O sportswoman)

Inhibitors

The participants' perspectives regarding PA resulted from several inhibitors of doing exercise. They believed that barriers to PA were various and multiple. This category was divided into 9 subcategories as follows: 'gender issues', 'economical and costs issues', 'geographical access', 'making excuses', 'inappropriate cultural infrastructure', 'inappropriate facilities including scheduling sports venues, ancillary, gym space and environment', 'shortage of sports experts', 'fears, concerns and misconceptions' and 'inadequate administrative cooperation and official barriers'.

Gender issues were considered as an important inhibitor to do exercise in women, as stated by many participants. With regard to gender issues, a woman stated:

"Sometimes, families do not let their girls and women go out and do exercise." (21 Y/O sportswoman)

Another one focused on gender inequalities:

"During summer, the gym is open for women only from 6 to 9 AM, because of the hot weather, but men use the Gym in the evenings when it is cooler." (44 Y/O health care provider)

One girl stated:

"There is a mandatory dress code in the Gym, so many girls and women do not go to such places. Women can compete in the national level championship, due to the dress codes." (26 Y/O sportswoman)

'Economical and costs issues were stressed as a barrier in doing PA by several participants. Regarding the economical issues of PA, a participant stated:

"My coaches need to have other jobs for paying their bills. The only method for making some money is to become a professional athlete and win a championship, which is extremely difficult." (26 Y/O sportswoman)

As to the costs issues of PA, a woman said:

"The cost of sport clothes and equipment

is high. How can a 500,000 Toman salary per month be enough for such charges? The gym is like a fashion show. They [women] come to the gym to show off. I do not have money to spare!" (50 Y/O housewife)

The geographical access was mentioned by many participants. One sport coach said:

"There are only a couple of public gyms specified to women in this city and for a lack of security in neighborhoods, they [women] cannot be used during the daytime." (38 Y/O, the official of the women's sports)

Making excuses for doing exercise was described by the participants. One married woman said:

"A high cost, lack of time and lack of transportation are just excuses to skip work out. Laziness is the problem! Going for a walk requires nothing but will." (58 Y/O housewife)

Inappropriate cultural infrastructures at the school, university and society were mentioned by many participants. One girl said:

"In schools, PA is not taken as serious as other things and it is the last priority. Teachers, coaches and families do not pay enough attention to exercise." (20 Y/O student)

'Inappropriate facilities including scheduling sports venues, ancillary and gym space' were emphasized by several participants. They believed that these barriers can influence the PA in women.

'Inappropriate scheduling of sports venues was stressed by many participants. A woman stated:

"There are 200 Gyms in this city and 80 gyms are shared between women and men. In this city, 20-25 private gyms are specified to women, but they have special requirements that usually cannot be met, because of geographical dispersions and other reasons." (38 Y/O, the official of the women's sports)

Required ancillary facilities were emphasized by some participants. One married woman said:

"I have a little child. If day cares would be available in gyms, I could go more often."

My husband cannot take care of the child all the time and I cannot leave her alone." (29 Y/O housewife)

The gym's space and environment was important from the participants' perspectives. One said:

"Pools are very dirty and infectious. Some gyms have inadequate air conditioning." (24 Y/O student)

'Shortage of sports experts was considered as an important inhibitor of doing exercise in women, as stated by many participants. They believed that a lack of sport experts in various medical domains was a barrier to PA. One stated:

"I do not have enough specialists in gyms to look after women with skeletal disorders." (22 Y/O sportswoman)

Fears, concerns and misconceptions also were expressed by some participants'. A woman mentioned:

"I have backache and I am scared that it gets worse, if I do exercise." (45 Y/O housewife)

One said:

"There is a belief that sports such as gymnastics, martial arts and track and field may lead to the rupture of hymen in virgin girls." (20 Y/O years student)

A woman stated:

"Some women do not believe that doing exercise has benefits!" (45 Y/O health care provider)

Inadequate administrative cooperation and official barriers within and between organizations were addressed by several participants. A woman mentioned:

"There is not enough cooperation between responsible organizations to handle and overcome barriers to PA in this city." (38 Y/O, the official of the women's sports)

Official barriers such as regulations and rules were focused by the majority of the participants. One employed woman declared:

"Some organizations provide their female employees with free access to gym four hours a week, but many others do not." (39 Y/O health care provider)

DISCUSSION

The categories extracted in this study presented the participants' perspectives on various aspects of women's exercise. It is noteworthy that these concepts do not have clear boundaries and sometimes they may overlap. In contrast to other studies, the categories in this study were divided into two parts. The first part included the individual 'preferences' and 'planning' for PA. Concepts discussed in these categories could be covered in the exercise or could also lead to a lack of PA. Six categories identified by Mc Arthur et al. in the investigation of factors influencing adherence to regular exercise in middle-aged women showed a similar classification.¹³ These categories were the enabling factors or barriers to adhere to regular exercise. Unlike this research, most studies in the field of women's exercises examined the barriers and facilitators separately^{11,22,23} or only reported barriers.^{7,12,24} The second part of categories consisted of motivators and inhibitors that facilitated or hindered PA.

The first category emerging in this study was the women's preferences. Women's tendency to PA in groups was highlighted by the participants in this study. This subcategory of 'preferences' might be due to environmental restrictions. In a study on overweight and obese women in an Afro-Caribbean sample, the researchers obtained a similar result and suggested that women discussed exercise with other women and joined all-female exercise groups.²² In other studies, it was also shown that a lack of an attendant can be a barrier to PA among women.^{12,24}

The second category in this study was 'planning'. The family role was a subcategory developed based on several inconsistent codes. The positive role of family members such as husband in encouraging the women in doing exercise was stressed in this study. The results of a study on teaching men to support and encourage their wives to do physical activity had a significant effect on increasing physical activity.²⁵ The women in this study talked specifically about the role of family as

a barrier, for example the role of parents in preventing exercises in terms of the lives of girls, such as exams or national examinations, because they consider it more important to learn than anything. It was also cited that the family discouragement was a barrier in doing exercise from the perspective of non-athlete female students.¹¹ 'Lack of family support was also suggested in a focus group study of participation in diabetes prevention programs following gestational diabetes.²⁶

The category of 'motivators' referred to the factors that had a positive role in PA. The positive physical outcomes of PA, beauty and fitness were emphasized by the women. Also, it was mentioned, from the female students' viewpoint, that the physical performance was rated significantly higher than all other benefits.¹¹

Encouragement by the key personnel in the society was mentioned as a motivator in this study. Previously, the role of the priest was referred to as a exercise activator: "Rural women discussed the role that the church played in supporting exercise."²³

'Inhibitors' was ultimately classified into 9 subcategories. The three subcategories of gender, cultural infrastructures and fears (such as fear of street intruders) are interconnected and in some cases overlap with each other. PA seemed to be gender-specific. Gender limitations for women in the Iranian society were related to cultural infrastructures such as the fear of harassment and restrictions on using open spaces for doing exercise. Many women were worried about their safety if they were to go out into the neighborhood with anyone to accompany them. In a study in Iran, it was also mentioned that women cannot easily do exercise in parks; therefore, opportunities such as express happiness, show off, competition, ambitions, self-cultivation, recreation and vitality of the youth for women compared to men were low.⁷ In Afro-Caribbean population, it was shown that due to the gender norms there are limited opportunities for women to do exercise.²² Other studies also referred to fear

of harassment.^{12,27}

Another issue related to cultural infrastructures in this study was the lack of habits for doing exercise. Women emphasized the importance of exercise from childhood to stablish the habit. This result was also pointed out in another study in Iran.⁴

In addition to the fear of harassment, fear of catching a disease or recurrence of an illness was mentioned by the participants. Similar findings were reported among women in South Asia.²⁷

Unlike other studies, ‘misconception’ about the uterine dysfunction and tearing of the hymen, deterioration of physical conditions, and obesity in the case of leaving PA were raised by some women. Concerns about worsening joints pain and vaginal and ear infections caused by swimming in the pool were expressed as the consequences of PA. It seems that there is confusion about what an appropriate physical activity is and how to do it.

Not having enough time due to the lack of cooperation of authorities; work; inappropriate gym schedules; and family care-related obligations by cultural norms that encompassed domestic duties, including child care, cooking and cleaning were described by the women. The women reported that in such a culture they focused on the family and prioritized domestic duties over all other activities. Time was raised as a barrier to women’s sports by many studies, as reported in a systematic review.²⁷ In a study in Arabic-speaking women living in Australia, ‘finding the time to be physically active’ has been reported as a key theme²⁸ and the rural Midwest women mentioned personal barriers, such as lack of time.²⁴

Unlike the findings of our study, time and environmental issues were not identified as common barriers in a study on middle-aged women, living in an urban Canadian city.¹³

In this study, some women talked about lack of accessibility to gyms, lack of ancillary facilities and trained coaches as barriers to PA. Similar barriers have been found in a

recent review of physical activity among South Asian women and another study on non-exercising female university students in the United Kingdom about perceived barriers; the participants agreed mostly with ‘places for me to exercise are too far away’.¹¹ It was also found that structural factors such as lack of access to sports spaces are the most important inhibiting factor in recreational sports activities.⁷

According to the results of this study, attention to ‘preferences’ and ‘motivators’ for women’s exercise practitioners, especially nurses who directly interact with women in the community, can enhance the women’s physical activity in the society. The numerous subcategories of ‘inhibitors’ obtained in this study can indicate that women in Yazd face many obstacles to exercise. In the meantime, the barriers related to the gender and culture of society is emphasized by women which need more attention.

The strength of this study was that women were allowed to express their understanding of the motives and barriers to engagement in sports activities in their own language and discuss with other women. In this way, nurses and other health care practitioners can better follow their educational and therapeutic goals. It is noted that education about Islam motivated the community since PA was considered essential to a Muslim’s lifestyle.²⁷

Although attempts were made to include women with different cultures in this study, the study in one of the urban areas of Iran is subject to study limitations.

CONCLUSION

The findings showed that women were sensitive to and interested in doing exercise. However, barriers to exercise were multiple and complex. The gender barriers, the role of habit in exercising, cultural infrastructure and misconceptions were specifically addressed in this study.

Nursing interventions are required to

develop strategic programs to improve exercise among women and also increase the individuals' awareness of misconceptions.

Understanding the factors related to exercise among women is required for nurses and health care providers, but they have to go beyond the assessment of barriers to exercise, and focus on the issue so that women are able to overcome these barriers. Addressing barriers and motivations for women can help them achieve their goals. A study on the women's experiences with overcoming barriers to exercise is suggested.

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