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Exploring the Experience of Rural Women toward Community-Based Approaches Associated with Physical Activity, a Qualitative Study

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Abstract

Background: Women are less likely to meet the suggested levels of physical activity compared to men, particularly in the rural setting. For this reason, community-based interventions associated with physical activity were developed to improve physical activity in village women. We conducted the present study to explore the experience of target group in term of physical activity to identify factors that could be strengthened and the weaknesses that could be improved.
Methods: This qualitative study was conducted applying content analysis. The study setting was Saied Abad, a village in the northwest of Iran. The data were collected using semi-structured in-depth interviews conducted between August 2018 and January 2019. All the participants were rural women, who had experienced at least once doing physical activity in the community-based intervention named Women's Park.
Results: The findings were classified into two main categories and six subcategories: (a) intrapersonal facilitators, such as habituation, (b) interpersonal facilitators, such as family support, (c) environmental facilitators, such as practical activities, (d) intrapersonal barriers, such as lack of time due to family responsibilities, (e) interpersonal barriers, such as not having the support of friends, and (f) environmental barriers, such as cost.
Conclusion: In the rural women's experience, the factors affecting doing physical activity were both facilitators and barriers. This study demonstrated that in addition to the intrapersonal factors, doing physical activity is affected by interpersonal and environmental factors. These findings will be helpful in promoting community-based interventions and scheduling rural women's health promotion behaviors.

***Keywords*:** Physical activity, Community-based, Interventions, Women, Iran, Program

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1. Introduction

Developing communities have faced an accelerated stage of unintentional urbanization and mechanization, population-ageing, and worldwide integration. These lead to unsanitary surroundings with fast social and financial conversion occurred with the decrease in physical activity. Consequently, the increasing prevalence of non-communicable diseases (NCDs) and their determinants has become a worldwide concern in undeveloped and developing communities (1). Non-communicable diseases, such as coronary artery disorders and cancers, are the most important reasons behind human death universally (2). In order to control the burden of non-communicable disease and cancer, physical activity is identified as the best strategy (3).

Dumith and colleagues conducted an extensive study on sedentary life, in which the prevalence of being sedentary was 23.7% in women, yet it was lower among men (4). As reported by the WHO, women generally have a substantial role in family and society during different physiological cycles just as pregnancy. However, lower physical activity rate among women may be interpreted by gender-norm constraints that they confront throughout their life (5). Based on other studies, non-communicable diseases, such as metabolic

syndrome, are the most critical origins of Iranian women's diseases, which threaten their health (6). There is robust information that physical activity can decrease the chance of several unfavorable health conditions, for example cardiovascular disease, type 2 diabetes, metabolic syndrome, and psychiatric disease (1).

Therefore, there has been an increasing involvement in expanding physical activity to the public, particularly women (7). Community-based interventions cover a large number of people and could be practical in promoting women's health by modifying their behavior. Fundamentally, community-based interventions with focus on ongoing training and patient protection can enhance the quality of life and the public satisfaction from care and treatment (8). In a previous study, the success of community-based approach in making better physical activity for managing overweightness and obesity challenges in a developing country was reported (9). Another paper reported that community-based approaches could diminish the use of sugar beverages among people, particularly among high-risk families of obesity (10). It has also been reported that community-based interventions have a positive effect on reducing the proportion of sedentary population (1). Other reports have also indicated that community-based interventions are effective on reducing smoking and obesity (11).

Although physical activity is identified as an important behavior for decreasing the long-term burden of NCDs in human populations, sport has been lessened among rural women in Iran, leading to a significant increase in obesity and overweightness-associated problems and other non-communicable diseases; this as increased their visits to health centers (12). Thus, the Women's Park was developed by municipality and sports institutions in Saied Abad village, one of the big villages in the northwest of Iran. The space of this village was altering from rural to semi-urban space and subsequently, the Women's life style changed to accommodate with sedentary life. The Women's Park is a sports space for women with positive implications for urban and suburban institutions. Furthermore, sports have indicated positive physical, psychological, and social consequences. For promoting this community-based intervention, we needed to know more about the experiences of women who had done physical activity in the Women's Park.

In spite of the great deal of studies to promote physical activity among women, the experience of rural women has not been taken into consideration in these studies (1). Currently, written articles address the physical activity among urban women or men more than before (13). There are not enough investigations on the assessment of the experience of women participating in interventions with a community-based approach (14). Hence, in this study, the experiences of women over 30 years old in Saied Abad village were explored considering their presence in the Women's Park. The current work aimed to explore a community-based program for enhancing physical activity among rural women in Iran.

2. Methods

The present qualitative study was carried out applying content analysis. The study environment was Saied Abad, which is a village in the central district of Bostan Abad county, in northwestern Iran. At 2018 census, the population was 2123, in 817 families. During the sampling, 485 rural women were 30 to 55 years old. About half of them participated in the physical activity programs of the Women's Park. The Women's Park was a sports center developed with the cooperation of municipality and sports institutions in Saied Abad village. The women of the region, particularly those in the neighborhood could use the lowest cost and easy access welfare facilities of the sports halls.

Participants

All the participants were rural women who had experienced at least once doing physical activity in the Women's Park and were aged between 30 and 55. The rural women were notified of the research through the investigators and asked to take part. The first five women were chosen based on their experiences of doing physical activity and their competence and eagerness to talk about their experiences. Consecutive women were called up according to the rules of purposeful sampling. The focus of purposeful sampling was tracked in the present study and the sampling was according to the demographic features, including age, residency in the village, and involving in the physical activity programs of the Women's Park.

Data collection

The data were gathered via semi-structured in-depth interviews performed during August 2018 to January 2019. All the meetings were in an exclusive room in the health center of the village. It was a familiar space for all of the rural women. The sampling was finished following data saturation.

Meetings started with two or three common questions asked to create confidence and understanding women and make a feeling of satisfaction and assurance in the study.

The meeting then persisted with statements in term of women's experiences in the Women's Park, such as "please describe one of your physical activity days?" followed by statements associated with the responses to the former questions. During the interviews, the women were asked questions so that we could further examine their comments. Five women participated in a second meeting to refine uncertainties or establish results of the first conversation. Totally, 35 interviews were performed with 30 participants (30 first interviews and five second interviews). All the meetings were held in Farsi language. Some quotes were translated to English for this article. All the interviews were performed by the main investigator who is skillful in performing qualitative interviews. The conversations were recorded and then transformed to verbatim for analysis. The first researcher was merely informed of the names of the women. The other investigators got copies of the data without names.

Data analysis

The data analysis was performed applying common content analysis method introduces by Graneheim and Lundman (15). The examination and determination of the interview contents started after the first interview was done and transcribed. The analysis started by reading each interview several times to perfectly comprehend the experiences of the women; the consecutive interviews were according to the results of the analysis of the former interviews. Words, sentences, or paragraphs that demonstrated critical features of the participants' experiences of physical activity or "meaning units" were recognized and described as concepts; this interpretation of the interviews made 521 codes. These concepts, according to their similarities and differences, were summarized to maintain their concepts and consequently, made two categories.

Rigor

Lincoln s' principles for promoting the rigor of qualitative studies were regarded in this investigation (16). Trustworthiness was backed by reviewing the results among the investigation group and with the participants in order to make sure that the results were consistent. Dependability enhanced with the contribution of all the investigators in data interpretation. Conformability was increased through accurate interpretation and communicating information.

Table 1: Facilitators and barriers of physical activity among rural women

Main categories	Subcategories	Examples
Facilitators	**Intrapersonal factors**	Habituation, weight loss and fitness, stress reduction, knowledge and enjoyment
	Interpersonal factors	Family support, peer support and physician advice
	Environmental factor	Practical activities and availability of the physical activity programs
Barriers	**Intrapersonal factors**	Short time due to family duties
	Interpersonal factors	Low support of friends
	Environmental factor	Cost and the absence of a safe place to do physical activity

3. Results

Thirty women participated in the present study. Their average age was 46 years; they were housewives, at self-reported average to low-income level, and lived in the rural region. The interview sessions were about half an hour to one hour long. No additional information was produced in longer than one-hour interviews and none of the women disagreed with the use of a recorder or taking of notes. The study provided a new perspective on the village women's life style. Furthermore, the findings identified two main categories of village women's experiences in the field of physical activity. Table 1 depicts these main categories and their subcategories.

Facilitators

Facilitators inspired women to take part in physical activities. The main facilitator subcategories that emerged during the analysis of the rural women's experiences included (a) intrapersonal factors, such as habituation, weight loss, and fitness, stress reduction, knowledge and enjoyment, (b) interpersonal factors, such as family support, peer support, and physician advice, (c) environmental factors, such as practical activities and availability of the physical activity programs.

Intrapersonal factors

The participants frequently talked about the importance of habituation in the planning and implementing of the physical activity. Developing the habituation was an important facilitator of physical activity. "I certainly like it. I started out just doing physical activity for 5 minutes, then 15 minutes, and now I can do it for one hour"

"The first thing in the morning, I walk from home to the Women's Park."

Weight loss was a fundamental aim of the physical activity in the rural women. A decline in body weight results into a good body image and the perception of self-esteem. As we know, women's body image is considered by the others to be significant.

"I want to do the type of physical activity that helps me to reduce weight."

"When I am doing physical activity regularly, my family said I look good."

Stress reduction was definitely identified by the rural women as an important goal of physical activity. These women's opinion indicated a general assumption that a decline in stress was associated with health. In their point of view, physical activity was a way of stress reduction. A typical statement was mentioned by one rural woman:

"When I am doing physical activity, I feel much better … that actually relaxes me."

Personal knowledge also seemed to assist the progress of physical activity. The rural women were aware of the benefit of physical activity knowledge; for instance, one rural woman reflected:

"I believe that if the rural women were familiar with the effect of physical activity or if Somebody informed them how important physical activity was; they would do it more seriously."

Other typical opinions of the participants included:

"It is important to do physical activity. Whenever I gain weight, to the problems begin to appear."

The importance of disease prevention or the mortality and morbidity of disease were other mentioned advantages of personal knowledge about physical activity among rural women.

"I need to do physical activity or I have to return to the hospital with a heart attack or stroke."

"I am diabetic; regular physical activity, decreases blood glucose levels."

In addition to the purposes of physical activity associated with self-improvement, rural women mentioned the happiness of physical activity as a facilitator of the engagement in physical activity programs.

"I like doing physical activity. After my children left home, I go to the Women's Park, because I enjoy it".

Interpersonal factors

The role of social communications in the initiation and supplying physical activity programs was stated by the rural women. In fact, peer relationships promoted the motivation to adhere physical activity among the rural women.

"I like doing physical activity with my friends and I knew that there was going to be more than one woman in the Women's Park. I wanted to do physical activity because there were other women there. If I was alone, I would not be motivated."

In almost all of the women, there was the need for the family support. One of them said "When I went to the

Women's Park, my husband told me to never stop and that he would help me to continue doing physical activity in the Women's Park ".

One of the women described the importance of advice from the family physician about being active and doing physical activity regularly.

Environmental factor

Useful and appropriate physical activity equipment was found to be an important facilitator of physical activity in the rural women. Their statements about physical activity definitely demonstrated the demand for feasibility and usefulness of the physical activity equipment in the Women's Park.

"I want something that can be done in a minimum of time, something that is not so time-consuming."

The women described what types of programs they had at the women's park. The most frequently listed were walking and aerobics.

Barriers

A barrier is characterized as the possible negative feature of a specific health activity that can act as an inhibition to be engaged in the suggested behavior (17). These difficulties might be intrapersonal (such as short time due to family responsibilities) or environmental (such as no programs in the community or the absence of an appropriate place to do physical activity).

Intrapersonal

A feeling of tiredness is known as a barrier to do physical activity in these rural women. This barrier was related to the necessary activities from the beginning to the end of the day. "Just after I finish my works, I start to cook for the next day; I will be exhausted to go to the Women's Park in order to do physical activity"

Additionally, the participants expressed that other responsibilities in the family led to the lack of time to do regular physical activities.

Interpersonal

The first major interpersonal barrier to be engaged in physical activities identified by the rural women was no child care. The participants described no child care as a matter that made it impossible to do physical activity. One of their statements clearly shows how these women feel about the impact of not having child care: "Taking care of my child, if there is no baby sitter, I cannot do physical activities". Another interpersonal barrier was not having the support of friends. Some women explained that having someone to do sport with would enhance their ambition to become more physically active in the Women's Park.

"If I had somebody to do physical activity with, it might be easier for me"

Environmental

An important environmental barrier mentioned by the rural women focused on cultural issues. Some participants described this issue:

"My husband did not let me participate in physical activity programs because he believed that other men in the village would watch women while they were going to the Women's Park and it was not good"

Additionally, the cost was an important environmental obstacle to organizing physical activity programs. This barrier was stated in half of the interviews.

"80 Tomans for using physical activity programs for a month, who can afford that? "

4. Discussion

The present study found that in rural women's experience, factors affecting doing physical activity were both facilitators and barriers. In addition to the intrapersonal factors, doing physical activities was found to be affected by interpersonal and environmental factors.

Community-based approaches in the area of physical activity are more satisfactory to achieve beneficial results whenever they are responsive (18). The development of women's sports spaces has had positive implications for intersectoral collaboration (19). Furthermore, women's physical activities have been conducive to positive physical, psychological, and social results (14). Meanwhile, Iranian women, specifically in rural settings, face with exceeding societal restrictions, such as conflict with their spouse or father about their engagement in physical activity program (5). Since rural women play a critical role in the fostering and training of children,

being physically active is highly essential for rural women's health and could help to have sound generations in the future (14). Undoubtedly, inadequate physical activity among rural women can lead to important damages to the community as it has negative effects on their health. This shows the requirement of improving physical activity in the rural women (1). Therefore, exploring the experiences of rural women on community-based approaches in the area of physical activity is crucial to extend our knowledge on promoting physical activity in a rural setting.

A study indicated that the municipality and health system connections within the rural community are useful domains to integrate when planning interventions for the rural women (19). The concepts and views that were ascertained in this qualitative study can make a powerful basis for promoting community-based intervention. Based on the social ecological model), several intrapersonal, interpersonal, and environmental themes were found as both facilitators and barriers in the present study (13). Habituation, enjoyment, and experience of disease were facilitators of health-promoting behaviors among the rural women. Health system and family physicians were of remarkable importance in the improvement of health-related behaviors by disseminating information, training capacities, and strengthening motivation of physical activity among the rural women (20). Moreover, a previous study demonstrated that people who encountered chronic diseases are more likely to participate in health-related programs in order to prohibit other chronic diseases (14). These results showed that rural women were aware of the significance of these behaviors and their effect on health.

Family and peer support, encouraging family physicians, and public education were mentioned by the participants as interpersonal facilitators of physical activity (13). The essentiality of peer support for personal empowerment regarding health-promoting lifestyle has been regarded by a previous study (20) and the impact of family support on increasing wellbeing has been established in other studies (13,14). Accordingly, it is explicit that peer and family help be maintained and strengthened. In a qualitative study, the health-care providers and family physicians were stated as the origin of knowledge for a health-promoting lifestyle (21). Another study reported that repeated health comments from distinct sources give rural women motivation to begin and go on health-promoting behaviors (20).

Availability of physical activity equipment in the Women's Park, provided by the municipality, was an environmental facilitator mentioned by the respondents. In a study among African American women, the availability of space and equipment within the home and work environments contributed to the facilitation of physical activity (13). Accordingly, alteration and promotion of urban environments, along with improvement of the foundation needed for walking or the use of public transit were other interventions stated in the Isfahan Healthy Heart Program as the facilitators of physical activity among women (19).

The barriers that were found to be most common among rural women were in agreement with those mentioned in other studies; for example, short time is an obstacle persistently recognized in sport studies (13, 14). Likewise, short time was the basic intrapersonal obstacle for rural women in the interviews. In this group, the lack of time was due to looking after children embedded in feminine roles (5).

In addition to short time, tiredness was determined as a common barrier to doing physical activity. In fact, the main physical activity obstacle in the interviewed rural women was tiredness.

Additionally, no social network was pointed out as interpersonal obstacles to do physical activity. The social support from husband, family, and friends was a facilitator in the rural women. This is in accordance with the studies that reported social support as a physical activity motivation and a stimulant for behavioral modification in women (13, 20).

Furthermore, the environmental obstacles mentioned by the rural women in the interviews were in accordance with those in other investigations (18, 13). This study revealed that the cost of doing physical activity in the Women's Park was the main problem for women in rural living settings. Cultural concerns have a prominent place in the community-based interventions (13).

In addition, there are certain public expectations and religious restrictions, for example forbidding females from cycling (5). All cultures appeared to specify the responsibilities of a woman as the main person caring for children and the house (13). With these responsibilities, there is less time for the minimum amount of 30 minutes physical activity daily recommended by health guidelines (22). This is also in line with other research findings (5). Investigations have also demonstrated that both

motherhood and marriage were adversely linked with doing physical activity (23).

One of the interesting findings of the current study was that most of the barriers to doing physical activity were alterable; for instance, lack of time due to family duties was one of the important intrapersonal barriers; plans that support child care might help to increase participation of women in physical activity programs. Furthermore, lack of social communication was one of main barriers, yet having group programs and supporting networks of women in the rural settings may promote doing physical activity among them. Most of the environmental obstacles may be modified by improvement of physical activity policies (19).

This study had certain limitations. Primarily, we investigated a small sample of rural women. The women who were interested in participating in the interviews may differ from those who did not concerning some characteristics, for example, attitudes and interest in health and physical activity, and therefore, this sample may not be representative.

Second, even though this study was performed at a grand village placed in the northwest of Iran, it did not contain the complete extent of cultural differences in Iran. Thus, our results could not be generalized to other rural settings, which weakened the transferability. Finally, our study comprised the rural women who participated in physical activity programs. Including either inactive or less active rural women could have addressed further insight considering the factors inhibiting rural women's participation in physical activity programs.

5. Conclusion

This study revealed that in rural women's experience, factors affecting doing physical activity were both facilitators and barriers. The findings of this study demonstrated that besides the intrapersonal factors, doing physical activity is affected by interpersonal and environmental factors. Focus on the advantages of physical activity, such as weight loss and fitness, stress reduction and enjoyment, are particular facilitators that can motivate rural women to do physical activity. Furthermore, decreasing the cost and creating a safe place to do physical activity for rural women would be helpful in promoting physical activity.

Ethical approval

The potential participants were informed about the study verbally. All the rural women signed informed consent form prior to the interviews. This study was approved by the Ethics Committee of Tabriz University of Medical Sciences (IR.TBZMED.REC.1398.068.).

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Conflict of Interests: None declared.

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