

Original Article

A Qualitative Investigation of the Determinants Influencing Physical Activity Among Women in Ilam Town

Mohammad Sadegh Abedzadeh Zavareh¹, Fatemeh Shirzadi¹, Manijeh Hoseiny-Rad^{2*}, Ali-Ashraf Aivazi³

¹Department of Public Health, School of Health, Ilam University of Medical Sciences, Ilam, Iran

²Department of Biology Education, Farhangian University, Tehran, Iran

³Department of Vector Biology & Control, School of Health, Ilam University of Medical Sciences, Ilam, Iran

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*Corresponding author:

Manijeh Hoseiny-Rad,
Email: m.hosseini-rad@cfu.ac.ir

Abstract

Background: The female population above the age of 50 exhibits a higher inclination toward sedentary lifestyles compared to their counterparts. Moreover, physiological factors, such as breastfeeding, pregnancy, and menopause, render women more susceptible to ailments and disabilities. This study was conducted in an attempt to discern various elements contributing to women's physical activity levels in Ilam town.

Methods: A targeted sampling approach was employed for this qualitative investigation. The data collection involved conducting individual interviews with 16 females who fell within the middle-aged bracket of 30–59 years in the year 2019 in Ilam town, Iran. These interviews followed a semi-structured format wherein open-ended questions were asked that aimed at gaining clear and comprehensive insights without any biasing influence. To derive patterns from these interviews, the content analysis method was utilized by identifying differences and similarities among codes, along with repetitions of semantic units. For this purpose, MAXQDA software (version 10) facilitated effective analysis.

Results: Upon analyzing the obtained information from participants aged around 40, primarily homemakers; several categories emerged pertaining to advantages associated with regular physical activity, as cited by the respondents themselves. The overall outcome thus encompassed four distinct categories, disclosing beneficence related to consistent exercise engagement among them. The findings of the study were divided into three primary classifications, including comprehending the advantages of physical activity, explanatory factors, and persuasive factors. Additionally, there were barriers to regular physical activity that fell into seven major categories, including family, social, customary, economic, environmental, and cultural spheres. Each barrier encompassed both tangible and intangible aspects.

Conclusion: The participants provided accounts of various individual, socioeconomic, political, and environmental elements that fostered consistent engagement in physical activity. Moreover, the study subjects reported encountering a range of barriers and facilitators with respect to cultural and economic influences on their physical activity levels. Therefore, strategies devised to encourage women's involvement in physical activity should primarily focus on bolstering social support knowledge and self-efficacy while concurrently minimizing or eliminating cultural and economic hindrances. These socio-cultural factors should also be considered when formulating future initiatives by communities, organizations, and policymakers so as to develop interventions that more effectively align with the needs and perspectives of women.

Keywords: Physical activity, Qualitative research, Barriers, Middle-aged, Women, Exercise, Attitudes, Enablers



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Introduction

The increasing significance of physical activity as a crucial contributor to both cognitive and physical well-being (1) has placed it at the forefront of health priorities, according to the "Healthy People by 2020" report (2). Physical activity is defined as any bodily movement performed by skeletal muscles that requires energy expenditure.

This should not be confused with exercise, which refers to a specific subset of structured and repetitive physical activity aimed at enhancing and sustaining fitness levels. Shockingly, over 80% of adults worldwide do not engage in sufficient physical activity (2). In Iran, recently conducted surveys, which were made available to the public in 2021, unveiled distressing data concerning



insufficient physical activity among various age groups of Iranian females. Specifically, it was discovered that a staggering 57.3% of females between the ages of 25 and 34 did not engage in adequate physical exercise. Similarly, alarming figures were observed for the age groups of 35–44 (53.99%) and 45–54 (54.57%) years. Furthermore, when considering all female age brackets within Ilam province collectively, an overall lack of sufficient physical activity was found to be prevalent at a rate as high as 56.05% (3). Insufficient physical activity poses significant risks to global mortality rates and contributes to the development of non-communicable diseases (4). The predominant causes of mortality on a global scale have been primarily attributed to four non-communicable diseases, specifically cardiovascular, cancer, diabetes, and respiratory ailments. Correspondingly, these non-communicable diseases are projected to make up 82% of all fatalities in Iran. A forecast for the year 2030 indicates an alarming eight-fold increase in the prevalence of such diseases within low-income nations compared to their high-income counterparts (5). Engaging in physical activity not only presents a secure path but also offers potential preventive measures against these afflictions, particularly benefiting vulnerable groups such as the elderly and women (6).

An examination focusing on age and gender unveils that women over the age of 25 face a susceptible state of inactivity (7). Emphasizing the indispensable role held by women is crucial since they lay down the foundation upon which everything else thrives for men. Women serve as the fundamental element within society; it is through them that families emerge and homes grow from families, ultimately culminating in societies shaping entire countries themselves. For any nation's progress to transpire fruitfully, its women must lead initiatives pertaining to developmental endeavors tirelessly (8). Women are more prone to acquiring illnesses and disabilities compared to men due to physiological factors such as breastfeeding, pregnancy, and menopause. Conversely, women are less inclined toward physical activity, which can be attributed to sociocultural influences that often deem them weaker beings (9,10).

Juggling multiple responsibilities places women at significant risk, both physically and psychologically. The societal expectations placed on women, particularly in terms of regeneration and parenting, hinder their equal participation in leisure activities or sports. Women's limited leisure time compared to men is primarily a result of time constraints and financial limitations (11). Numerous studies have demonstrated that various individual environmental, social, and physical activity factors contribute to one's perception of the advantages and disadvantages associated with regular physical activity (12–18). Additionally, positive and negative cognitive elements play a crucial role in determining whether individuals engage in consistent physical activity or not.

Various studies have endeavored to discern the desires of the audience and elucidate the most significant advantages

of engaging in physical activity according to these desires (1). While an active way of life undoubtedly plays a pivotal role in maintaining good health, women engage in regular physical activity less frequently than men do, with this disparity only increasing as they age (8). In tandem with the evolution of women's social lives in Iran, their presence within fitness clubs, gyms, and sports parks has undergone a marked surge during recent years. Such participation is linked to an enhanced awareness regarding the merits of physical exercise; appraising one's own well-being, staving off illness (physical aims), fulfilling social needs (social aspirations), and fostering resilience while combating aging and depression (psychological objectives) are among its manifold objectives (19). Moreover, female individuals enjoy improved overall wellness when they gain access to medical facilities and educational resources; they take part in communal activities and generate trust among their kin and close allies, thereby adhering closely to their networks (20). Ilam stands as a town deeply rooted in Iranian tradition and Illyrian culture. However, the rapid growth of the industry within its borders has ushered in a new perspective, one that seeks to embrace modernity at the expense of traditional values. As this process unfolds, it becomes evident that different social strata within Ilam are being shaped by the expanding influence of modernity, leading to the emergence of distinct lifestyles among its inhabitants (21). This shift is particularly noticeable among women in present-day Ilam, who feel an increasing sense of dissimilarity from both previous generations and even some contemporaries. The differences manifest themselves not only in their choice of activities but also in their interests and perspectives on life.

Official statistics provided by both the Ministry of Sport and Youth and the Medical Association of Sports Medicine indicate a clear gender disparity when it comes to women's participation in sports across Iran, with Ilam province reflecting similarly low rates compared to men (22). A previous study conducted in Ilam revealed that there is a notable correlation between physical activity levels and certain characteristics of women. Specifically, younger, single, urban, and educated women tend to engage in more physical activity compared to their counterparts (23).

It is of significance to acknowledge that women encounter food cravings in a distinct manner than men, owing to disparities in hormonal levels and their inclination toward consuming foods rich in fat and sugar. This dietary behavior frequently culminates in obesity. However, middle-aged women have the ability to skillfully manage obesity through engaging in physical activity, which also facilitates weight loss. Additionally, adhering to regular exercise aids these individuals in alleviating stress and anxiety (24). Numerous studies have demonstrated the effectiveness of educating women on physical activity as a means of increasing their own levels of engagement (25–30). Nevertheless, it is imperative to identify the various factors that influence women's participation

in physical activities due to their complex intersection with financial circumstances, employment status, environmental conditions, family dynamics, cultural norms and sub-culture values, systems, religious practices, educational background, and socio-demographic traits (17,26, 31-43).

In spite of many existing studies on a topic, they may not capture the nuances and complexities of women's experiences with physical activity in local communities; thus, to uncover local contextual (cultural, social, and economic) factors, to understand the subjective experiences of women, and to generate recommendations that are more tailored to the needs and preferences of women in such a specific local community, our study aimed to fill this gap by identifying the benefits, barriers, and facilitators that affect physical activity among middle-aged women in Ilam during 2019. To support organizations and public health authorities in developing effective physical activity interventions that truly address the needs of women in Ilam according to their perspectives, up-to-date fundamental information is provided through this groundbreaking study—the first of its kind as far as our knowledge goes.

Materials and Methods

Study Design

This study employed a research design known as "Conventional content analysis." It was a qualitative investigation based on individual semi-structured interviews conducted in Ilam, Iran, from May to July 2019.

Study Participants and Sampling

The participants included individuals aged between 30 and 59 years old who regularly visited urban comprehensive health centers. Pregnant women were excluded from the study due to their distinctive physical activity style during pregnancy, which made them unsuitable for this specific research. In assessing the adequacy of purposive samples for qualitative research, saturation was utilized as the primary guiding principle. Saturation, attained through fewer than 25 interviews, specifically between 9 and 17 excluding outliers, was considered sufficient (44).

Data Collection Tool and Technique

The data collection tool and technique consisted of an initial meeting with the participants, during which the purpose and methodology of the study were explained, and their availability and preferred location for the interviews were determined as well.

Following approval from the Research Ethics Committee of Ilam University of Medical Sciences (code: IR.MEDILAM.REC.1398.090), arrangements were made to conduct 16 interviews at a comprehensive urban health service center. The interviews took place in a comfortable, friendly room that was free from noise distractions. The room was also designed according to each participant's personal taste in flooring, ensuring their comfort and

satisfaction. One interview deviated from this setup as it took place at one participant's house instead. With this final interview, the study reached its saturation point, as no new content or information was being generated by subsequent participants.

Overall, these meticulous procedures ensured a thorough collection of data while prioritizing the comfort and satisfaction of the participants. Before commencing the physical activity interview, individuals were classified as engaging in any form of physical activity that requires energy expenditure from skeletal muscles. This encompassed activities such as walking, cycling, or swimming for a minimum of 30 minutes each day, resulting in perspiration and an increased heart rate.

The interviews were conducted in a semi-structured manner, using open-ended questions that were clear and easily comprehensible. These questions aimed to explore individuals' involvement in physical activity and exercise. Specifically, participants were asked four semi-open-ended sub-questions:

1. Do you engage in any exercise or physical activity as previously defined? If so, please provide an explanation.
2. What are the benefits associated with regular physical activity?
3. Are there any factors inhibiting your engagement in regular physical activity?
4. Conversely, what factors facilitate your participation in any form of physical activity?

The initial inquiry inquired about one's current engagement in regular exercise or physical activity. If the response indicated a lack thereof, the subsequent query pertained to whether they harbored intentions of incorporating consistent physical activity and exercise into their routine within the next half-year. Affirmation would position them within the contemplative stage, whereas negation would place them in a preliminary cogitation phase. Should an individual express aspiration for engaging in regular physical activity or exercise within the coming month, they would reside in a preparatory realm; if it had been less than six months since their last participation, they would find themselves situated within a progressive period; conversely, surpassing six months without any involvement was indicative of reaching a maintenance stage.

Conducting these interviews required time spans ranging from 20 to 48 minutes. Throughout this process, the utmost impartiality reigned as the researcher attentively absorbed each participant's discourse. The conversations were conducted employing both Kurdish and Ilami vernaculars before culminating with Farsi (Persian). The ease of understanding the terms and expressions in the study was facilitated by both the researcher and participants being monolingual. All interviews were recorded using a mobile phone, and transcriptions in Persian were completed through repeated listening and meticulous typing.

Certain steps were taken to standardize the data

collection process. Clear research questions were developed, an appropriate method (interview) was selected for data collection, a structured interview guide/protocol was created, and a standardized interviewing process was established. Additionally, a pilot interview with a small sample consisting of three individuals was conducted before conducting interviews with the target participants. This allowed for the identification of any issues or areas where improvement could be made to enhance the effectiveness of the applied tool.

The interviews were validated through member checking and peer review methods. The individuals with low levels of education had their interviews thoroughly read again for reassurance. Meanwhile, the educated individuals received the interview texts in PDF format via email. For individuals without personal emails, the interview texts were sent through Telegram Messenger also in PDF format. After receiving feedback from participants regarding the validity of the interviews, the researchers felt confident enough to proceed with the next step of analysis.

Data analysis

All interviews underwent separate analyses by two researchers, ensuring that necessary corrections were made to enhance clarity and ensure rigorous and valid data collection.

For data analysis, a content analysis approach was employed using MAXQDA software, version 10. The interviews were examined for meaningful units, which were then categorized based on differences and similarities between codes and semantic units, along with their repetition patterns.

All the extracted codes and categories were utilized in the creation of two tables. The first table presented

data about the interview, along with the initial codes assigned to each of the 16 participants. The second table demonstrated a combination of all initial codes, along with their respective categories. Upon examining the opening table, various aspects of the codes were considered, including the length of text it referred to, any uncertainties marked by strikethroughs, which were also indicated in the table, its importance, frequency of use, and whether it was employed consistently throughout the document.

Results

The study consisted of a total of 16 middle-aged women, aged between 30 and 59 years old. These women were all Kurdish-speaking and resided in the town of Ilam. The average age of the participants was found to be 40 years old, and each participant had an average of 2.5 children. Further details about their demographic information are provided in Table 1.

Out of the 16 participants, it was observed that two women were in the pre-thinking stage regarding physical activity, while seven were in the thinking stage, and another seven were actively practicing physical activities. Through careful analysis of the results obtained from this study, three main categories emerged, including an understanding of the benefits associated with engaging in physical activity, factors deterring individuals from participating in exercise or physical activities, and various facilitators that encouraged individuals to engage in exercise or physical activities (Table 2).

Concept of Physical Activity Benefits

The notion of the advantages derived from engaging in physical activity can be classified into distinct realms encompassing social, psychological, familial, and physical

Table 1. Socio-demographic Characteristics of Participants Investigated for Women’s Physical Activity in Ilam, Iran, 2019

Participant No.	Age (y)	Occupation	Education/ Literacy Level	Marital Status	Number of Children
1	42	Housewife	K12	Married	3
2	40	Housewife	K12	Widow	3
3	45	Housewife	K12	Married	3
4	33	Housewife	K9	Married	3
5	34	Housewife	K12	Married	2
6	51	Housewife	K12	Married	4
7	47	Housewife	K6	Married	4
8	39	Teacher	Associate’s degree	Married	2
9	37	Office staff	Master’s degree	Married	2
10	41	Office staff	Master’s degree	Married	3
11	37	University Lecturer	PhD student	Single	NA**
12	30	Housewife	K12	Single	NA
13	36	University lecturer	Master’s degree	Married	1
14	38	Office staff	Master’s degree	Married	1
15	53	Housewife	Illiterate	Widow	6
16	57	Housewife	Illiterate	Married	6

Note. *K: Class/grade studied; **NA: Not applicable.

Table 2. Major Themes and Sub-themes Related to Physical Activity Among Women in Ilam

Theme	Sub-theme	Concept/Code
Benefits	Physical	Balance of calories, increased physical strength, reduced skeletal muscle soreness, adjusted blood pressure, prevention of diseases, improved appetite, improved breathing, weight loss, and discharge of toxins.
	Family	Positive impacts on children's health, family happiness, improved home performance, and stress reduction in the family
	Social	Increasing the number of friends, expanding social networking, and transferring positive energy
	Psychological	Having a good mood, experiencing a sense of relaxation, vitality, and happiness, preventing depression, increasing self-esteem, increasing self-confidence, feeling lightness, and having a free mind
Barriers	Family	Spouse's job and husband's long working hours
	Social	Harassing women in the park and the negative attitude of society toward women's sports
	Environmental	Climatic conditions, presence of air dust particles, lack of closeness of parks and sports equipment to the main streets, improper health of some sports areas, lack of amenities, club walking paths, green space, and horseback riding
	Customary	Prohibition on cycling for women
	Economic	High cost of clubs and gyms
	Cultural	Women's clothing and prejudice, extravagance in over-caring women, and fear of taking snapshots of women on sports sites
	Individual	Pregnancy, lactation, skeletal muscle disorders, malnutrition, tendency to be sedentary and eat fatty foods, laziness and accepting it, day-to-day engagement, and lack of prioritization
	Facilitators	Individual
Social		Encouraging subclasses, training, mass media, group physical activity, culturalization, spouses, and satisfaction
Environmental		Simultaneous timing of clubs for adults and children, children's care ward, provision of physical activities for women over the age of 50 and postmenopausal, and provision of a women's park
Policy making		Security maintenance, comprehensive sports insurance for women, and approval of legal rules to do physical activity in the workplace
Economic		Full or half-free-of-charge club payments, financial support from urban health centers, and financial rewards from physical training organizations

benefits.

Physical Benefits

Within the realm of physical well-being, individuals partaking in regular physical activity maintain an equilibrium between caloric intake and expenditure. Furthermore, they experience enhanced bodily strength and a reduction in skeletal muscle soreness. Their blood pressure becomes stabilized while cardiovascular diseases are thwarted. Moreover, their appetite is improved, and their breathing becomes more efficient. Weight loss is achieved as toxins are actively expelled from the body's system. Lastly, regular exercise serves as a preventive measure against diabetes and hyperlipidemia.

"Yo, working out keeps you safe from diseases like back pain, foot pain, and knee problems." (Participant No. 10)

"I walk a lot to keep my blood pressure and cholesterol in check." (Participant No. 3)

"Sitting around leads to all sorts of health issues, like being overweight or having heart problems." (Participant No. 10)

"Working out regularly is good for your body. It makes you less likely to get sick, and sweating helps get rid of toxins." (Participant No. 12)

The participants expressed the belief that engaging in regular physical activity with a frequency of 7 times for weight loss purposes, 6 times for fitness purposes, and 7 times for preventing high blood sugar and high blood lipids were the paramount benefits they perceived from such endeavors. The reporting of these advantages may

arise from attempting to heighten awareness amidst the community regarding the widespread prevalence of non-communicable ailments such as diabetes. Furthermore, considering one's appearance and striving toward maintaining an optimal weight constitute another hypothesis, possibly justifying the importance attached to these benefits among the studied women.

Family Benefits

The participants eloquently expressed the multitude of advantages that exercise and physical activity offer, particularly in relation to children's well-being, familial contentment, and overall household functionality. Additionally, they highlighted how engaging in regular physical activity can alleviate stress within the family unit. The significance placed on vitality and happiness within the family context was emphasized by the frequency with which these benefits were mentioned, resonating with the participants as being of utmost importance (occurring eight times).

"See closely how physically active women are, how vital their spirit is, and how family internal problems are prevented; it is very beneficial when a person is in high spirits; less stress is experienced within the family." (Participant No. 10)

Social Benefits

Participants mentioned increasing the number of friends, expanding social networking, and transferring positive energy as the social benefits of physical activity.

“People in the sports group with new friends gain energy, find new people, and build self-confidence due to being in the group; apart from the psychological aspects, the received positive energies are unintentionally conveyed to others.” (Participant No. 11).

Psychological Benefits

The psychological benefits of having regular physical activity included eight sub-categories, namely, a good mood, a sense of relaxation, vitality, and happiness, as well as preventing depression, increasing self-esteem, increasing self-confidence, feeling lightness, and having a free mind.

“I was a lot happier when I was going to the club, I enjoyed freer thinking.” (Participant No. 12)

“I feel light when I do physical activity; my mind is set free a lot. When I practice shooting, I feel relaxed, and I feel part of my mind is released. Physical activity is a motion in which all the body muscles engage; this body challenge causes health and happiness for us.” (Participant No. 13)

“Housewives are at risk for depression. They need more physical activity; this is great in respect to vitality (with persistence); whenever we go to the club; we get so energetic (with laughter).” (Participant No. 10)

Moreover, this study shed light on a crucial aspect of regular exercise, namely, its ability to cultivate a positive mood. Participants reported experiencing an enhanced emotional state on twenty-two occasions, signifying that achieving a good mood was recognized as one of the most significant psychological rewards stemming from consistent physical activity.

Concept of Barriers to Physical Activity

Nonetheless, it is crucial to acknowledge certain barriers impeding individuals' endeavors toward maintaining a regular exercise routine. These obstacles encompass various areas, such as individual hindrances experienced at an individual level or those emanating from dynamics within the family structure. Economic constraints also act as deterrents for some individuals who find themselves unable to prioritize physical activity due to financial limitations. Cultural influences further contribute to creating impediments by perpetuating certain norms and customs that discourage engagement in exercise. Additionally, environmental factors play a role in constraining individuals' ability to participate consistently in physical activities. Meanwhile, traditional practices rooted deeply within society exert their influence over people's choices pertaining to exercise routines or lack thereof. Eventually, societal pressures and expectations can have inhibiting impacts on one's efforts toward incorporating scheduled workouts into their lives.

Family Barriers

One notable barrier mentioned by participants was attributed directly to spouses' occupational commitments impacting their availability for joint physical activities

within families. Some women found it challenging, primarily due to tender positions held by husbands, while others cited lengthy working hours undertaken by their spouses prove as detrimental to maintaining their regular fitness routines.

“I am upset about women like me having little children and being alone without the presence of their husbands during the day because of their jobs, and that the culture of going to the ladies club has not gone well yet (with grief).” (Participant No. 4)

Social Barriers

Social barriers encompass an array of hindrances that women face within their community. The sense of vulnerability experienced by women within the societal fabric, the distressing encounter with harassers in public spaces, such as unruly thugs or imprudent motorcyclists, and the dearth of education imparted to men regarding the significance of physical activity for women are all significant obstacles impeding progress. Moreover, there exists a noticeable paucity of research conducted by men pertaining to comprehending and appreciating the important role played by physical exercise in a woman's life. Furthermore, society's pervasive negative attitude toward female-driven sports is another discouraging factor affecting progress for women who aspire to excel athletically. Among these challenges faced, it has been highlighted that feeling insecure ranked foremost among them and was expressed most frequently, marking it as a particularly salient social impediment in need of resolution.

“I already peeped the ladies' park; it's just a regular park where we expect the ladies to chill when the weather is good. Oh, and there were mad car horns blaring and those motorcycle dudes lurking, making it feel Hella sketchy.” (Participant No. 11)

Environmental Barriers

A number of participants discovered that the climate played a significant role in their ability to engage in regular physical activity. Specifically, they found the presence of dust particles in the air during Ilam's summer season to be unfavorable as it obstructed their physical endeavors. Furthermore, various environmental deterrents were identified that hindered their engagement in physical activity. These included the absence of suitable residential accommodations and a lack of house yards, as well as the absence of a sports club and inadequate maintenance of certain sports areas, such as swimming pools. Moreover, participants noted an insufficiency of sports facilities, walking paths, green spaces, horseback riding, and biking trails. Additionally, proximity to parks and sports equipment located near main streets posed issues such as noise disturbances and increased risk for accidents. Finally, there was a noticeable scarcity of nearby gyms accessible within each residential sector. In fact, participants highlighted the lack of proper sporting grounds 12 times

more frequently than any other environmental deterrent. *“Walking under the rain in the fall is one of the things I love, but when it is dusty, it looks like I am getting suffocated (putting her hands around her neck, demonstrating suffocation).”* (Participant No. 1)

Customary Barriers

The prohibition on cycling for women was one of the most commonly mentioned obstacles.

“I reach the piste faster if I ride a bike, but unfortunately, I'm alone, and the community doesn't allow me to do that.” (Participant No. 3)

Economic Barriers

The high cost of clubs and gyms was an economic barrier reported by most participants (9 people).

“Of course, there is a club nearby, but the cost is high, as if they are running a business.” (Participant No. 6)

Cultural Barriers

According to the participants, the most common cultural barrier (repeated 37 times) was considered the most important barrier. These obstacles include two types of Ilami women's clothing and stereotypes. They mainly wear face coverings and long blankets, making them uncomfortable when exercising, especially when walking. In addition, the enthusiasm of fathers, brothers, and husbands of Ilami women in practicing free outdoor sports such as parks and going out alone, the fear of being humiliated when helping women take care of their health, the waste of taking too much care of women, and the fear of photographing women in sports venues due to their easy access by mobile devices were cited as obstacles.

“Our city is very different from other cities. Every city has a special park for women, and many women go there to exercise and have breakfast together; but in our culture, for example, I may use some kind of equipment. Suffered from outdoor sports, when my brother moved aside, it definitely happened to him that his sister practiced in front of everyone.” (Participant No. 11)

“Clothing is very effective, such as a veil that makes it very difficult to walk when I wear it; I get bored when I walk wearing a veil.” (Participant No. 8)

Individual Barriers

Physical barriers refer to conditions or factors that physically prevent a person from engaging in regular exercise. Examples of such barriers include pregnancy, lactation, skeletal muscle disorders, malnutrition, and a preference for sedentary behavior and unhealthy eating habits.

Non-physical barriers encompass mental or psychological inhibitions that hinder individuals from participating in regular physical activity. Some significant non-physical inhibitors include a lack of awareness regarding the benefits of exercise, an acceptance of laziness as a personal trait, preoccupation with daily

responsibilities, failure to prioritize physical activity among women's health concerns, a lack of planning time for exercise sessions, a lack of attention to one's own health needs as a woman, a preference for private transportation over active modes such as walking or cycling, and a limited understanding of what constitutes proper physical activity.

Of all the non-physical barriers mentioned above, excessive mental preoccupation was found to be the most prevalent obstacle experienced by individuals when attempting to frequently engage in physical activities; this occurred at an occurrence rate of 16 times per individual on average.

“I've been practicing since my daughter was three, all the way up until I got pregnant again and had to stop.” (Participant No. 9)

“If I wanna go out but have a kid with me, I want them to come too. And honestly, I'm lazy. For example, in the morning, you gotta wake up mad early, like 6 or 7 a.m., and even going skiing? Nah, that sounds like too much work. Most people may be hitting the slopes, but not me. I just say, ‘I work at home every day-cleaning and stuff, like it's some physical activity or something.’” (Participant No. 12).

“Taking care of my family at home makes it hard for me to get active. Looking after my three daughters and dealing with their questions, plus doing stuff like sewing and weaving carpets, leave no free time for me. If by chance I do get some free time, best believe I may rest because of exhaustion” (Participant No. 1).

Understanding the Facilitating Factors of Physical Activity

These factors fall into five main categories, including individual, social, environmental, policy-making, and economic enablers.

Individual Facilitators of Physical Activity

The sub-categories of individual facilitators that participants believed could help them maintain regular daily physical activity include prioritization of physical activity, planning, individual will, planning continuous group physical activity, individual interest, and pedometer use. The other facilitators included replacing unhealthy behaviors with healthy treatment (e.g., converting inactive behaviors into motion ones such as walking on the phone, and the like), using home physical activity training CDs, and spending free time. Finally, buying a home sporting means instead of buying unnecessary goods, sporting family history, studying issues regarding physical activity, accompanying family, practicing physical warm-up simultaneously with the TV programs, doing gardening and agricultural activities, and considering rewards for themselves after physical activities were other facilitators.

“Regular activity, if not considered part of the schedule, for example, say from which o'clock to which o'clock I have to get out of the house and have a walk, should

have a plan; sometimes, I tell my husband to go for a night walk around, and he agrees; but walking is not well established yet; if it happens, we do that, and still we get happy.” (Participant No. 1).

“Even if we brought in a trainer, we would have to pay from 9 to 10 million rials a month for 2 hours of yoga; even for us with an upward average income, it is difficult to pay such money; middle-income families would not pay any charges, and poor families never afford it. So, I came to the conclusion of buying sports CDs and aerobics at home. What could be done? Half a loaf is better than none.” (Participant No. 8)

Social Facilitators

Social facilitators include encouraging subclasses, training, mass media, group physical activity, culturalization, spouse satisfaction, culturalization to attend religious events such as the Arbaeen rally, motivation by the physical training committee, and sensitization of women’s need for physical activity. Other social facilitators are inter-personal positive feedback on physical activity to increase motivation, multi-occupational cooperation for training, determination of one day a week for women’s walking, background provisions by urban health centers, and cooperation among government agencies that participants believed could help them engage in regular physical activity. Among all the social facilitators, having social incentives is important so that the community can encourage women to engage in regular physical activity in a variety of ways.

“Sometimes a family walk is announced; one day, for example, on Friday, be established for ladies’ walks; rewards should be given to the ladies for the same walk, and people should be justified that walking is really useful for them and talk about its benefits with them.” (Participant No. 10)

Environmental Facilitators

Participants believed that the possibility of simultaneous timing of clubs for adults and children, the creation of a dedicated children’s care ward, the organization of the number of clubs with urban sectors, the provision of physical and sporting activities for women over the age of 50 and postmenopausal, and the provision of a women’s park were environmental enablers.

“For instance, you see two clubs about 200 m away from each other in the downtown, but on the ringway of the town, you see no clubs at all; I think they’re building clubs by the main street to have more customers, while around the sectors, they are not seen; perhaps it is an issue of marketing, but I say if the committee for physical training considers necessary observations, for example, Mehr housing is a place of extended families. I think two good clubs for women to go there in 5 minutes will make the best.” (Participant No. 9)

Policy-making Facilitators

Some participants have mentioned factors related to policy-making as facilitators of physical activities, including three sub-categories of security maintenance, comprehensive sports insurance for women, and approval of legal rules to do physical activity in the workplace.

“In the Ghoochali area (a suburb mountainous area), a portion of the park should be dedicated to ladies, and then they should be secure there. In fact, for example, one could go there alone at 5 or 6 a.m.; her mind should not be scattered so that other people may harass her; these things really exist. Then, one more thing is that our parks are all near the streets, but in other cities, it is not like that at all. New culturalization must take place; the club place should be secure; not only culturalization should be adequate, but also ladies should feel comfort.” (Participant No. 12).

“I mean, sports insurance must not merely be for accidents, but routine check-ups should also be considered in sports insurance.” (Participant No. 9).

Economic Facilitators

Participants reported factors related to economic conditions as facilitators of physical activities. These facilitators included three sub-categories of full or half-free-of-charge club payments, financial support from urban health centers, and financial rewards from physical training organizations.

“One more time, if possible, an agreement should be reached between health centers and clubs to consider a discount for women.” (Participant No. 11).

“If free-of-charge, everyone goes to clubs; I myself used to go to a free club, as it is difficult for poor people to pay a sum of 6 to 7 million rials for the monthly charges of a club.” (Participant No. 16).

Discussion

The aim of this qualitative research study was to explore the benefits of physical activities as well as the facilitators and barriers faced by middle-aged urban women when it comes to engaging in these activities. Specifically, the study focused on those who sought comprehensive health services in Ilam, a town located in western Iran. Its overall goal was to identify factors that influence physical activity participation among this demographic and provide recommendations for promoting more active lifestyles. In this section, we will delve into the findings of the study while also examining their implications for future research and practice.

Benefits

It has already been mentioned that physical activity offers a wide range of benefits for middle-aged urban women. This current research uncovers several notable advantages encompassing social, psychological, familial, and physical aspects of well-being. In turn, these benefits contribute to healthier and more fulfilling lives for these individuals.

By engaging in regular physical activities such as exercise or sports, middle-aged urban women can experience improvements in cardiovascular health and weight management, along with enhanced mental well-being. Furthermore, there is evidence suggesting reduced risks of developing cancer and improved bone health. Additionally, cognitive function and sleep quality have been found to benefit from increased levels of physical activity. Overall, these findings revealed how crucial it is for middle-aged urban women to incorporate regular exercise into their daily routines due to its multitude of positive effects on various aspects of their lives. The aforementioned findings are congruent with the findings of the research conducted by Nedaei et al (26), which explored the perspectives of Tehran women toward regular physical activities, as well as those of other studies (45, 46).

Facilitators

The study delineated numerous catalysts for engaging in physical activity among urban women. These encompassed individual, social, environmental, policy-based, and economic factors that collectively resulted in social support, easy access to secure, and cost-effective exercise amenities, as well as convenient transportation options. The outcomes propose that interventions geared toward augmenting physical activity among urban women should concentrate on establishing robust networks of social support while enhancing accessibility to exercise facilities and offering affordable modes of transportation. Significantly, our research findings regarding factors enabling this concerning trend align closely with those identified in earlier studies conducted elsewhere around the world. For instance, investigations performed in Australia by Lim et al (47) and Allen et al (31), along with similar studies involving Korean American women residing in the United States led by Choi et al (34), specifically focused on this demographic group but were also applicable to other female populations nearby or globally (15). Additionally, Paudel and colleagues' investigation (48) looked into Nepal-specific circumstances, while Urzeala and colleagues' research (46) endeavored to understand Romani cultural contexts behind insufficient physical activity among their women folk. A Western Asian country such as Pakistan (49) and Nigeria, West Africa (50), have also attracted attention due to alarmingly low levels of exercise engagement among females under study. Beyond these regional investigations, in Sri Lanka, Perera et al (51) also delved into potential causes contributing to inadequate physical activity levels among its female populace.

Barriers

Furthermore, the study also identified various barriers to participating in physical activities among urban women. These barriers encompassed a wide range of factors, including societal, familial, environmental, customary, economic, and cultural barriers. These barriers

subsequently give rise to time constraints due to work and family responsibilities, concerns about safety when exercising in public spaces, and limited accessibility to affordable and convenient exercise facilities. The research findings indicated that initiatives aimed at enhancing physical activity among urban women should tackle these barriers by offering flexible exercise options, promoting secure exercising environments, and improving the availability of reasonably priced exercise facilities. These findings are consistent with those of previous investigations performed both domestically within Iran (17,18,52), as well as internationally on expectant women (13), Arab Muslim mothers in the United States (53), and overweight women in Australia (47). The study findings are also in line with the results of studies conducted on rural women in the United States (54), diabetic individuals in Spain (40), adults in Australia (31), Korean-American women residing in the United States (34), and men and women aged between thirty and fifty years old from Rourkela, India (55). Further, it extends to encompass those over eighteen years of age from Tasmania, Australia (36) and urban adults between twenty and sixty years old based in Sri Lanka (51). Last but not least, when accounting for depressed individuals combined with type 2 diabetics aged anywhere from eighteen to sixty-five residing within Pakistan (49), and ultimately considering adults ranging from eighteen to eighty years old living within Lagos, Nigeria (50), family problems and lack of support were identified as significant barriers.

In addition to these challenges related to physical activity promotion for urban women, it is worth noting that Ilam town experienced the brunt of the eight-year Iran-Iraq war (1980–1988) as a border county. This historical context was highlighted by some participants as another significant barrier. Notably, evidence regarding the impact of armed conflicts underlines how such hostilities can affect not only tobacco consumption or poor dietary habits but also lead to decreased engagement in physical exercise (56). Additionally, it is crucial to acknowledge and respect the cultural and religious practices of Ilami women, such as their special dress code known as *Hijab*. This attire is deeply rooted in their cultural heritage and holds significant importance (57). Moreover, individuals who find themselves surrounded by positive social and environmental factors are particularly inclined to derive benefits from incentives that encourage them to partake in consistent and impactful physical activities.

Conclusion

The results of this study revealed that although most participants had awareness regarding the various benefits of engaging in regular physical activity, mere knowledge alone was inadequate to promote healthy behavior. Despite some subjective barriers mentioned by the participants, it was determined that cultural and economic obstacles were the primary reasons behind middle-aged women in Ilam not participating in physical activities

regularly. Moreover, environmental and social factors were found to play a significant role in facilitating physical activity. In particular, incentives that promoted consistent engagement in effective exercise were reported as influential motivators. By identifying timely barriers and facilitators for women's physical activity, policymakers and other stakeholders can implement targeted interventions aimed at increasing motivation among women to partake in continuous physical activity. In addition, individuals who find themselves surrounded by positive social and environmental factors are particularly inclined to derive benefits from incentives, encouraging them to partake in impactful and consistent physical activities.

Strengths and Limitations of the Study

The strengths of this study were the occupational diversity and educational attainment of the participants, which provided complete information to the researchers. Furthermore, qualitative research can provide in-depth insights into women's experiences and perspectives regarding physical activity, which can help identify barriers and facilitators to women's participation in such activities. Further, its findings can inform the development of targeted interventions and programs to promote physical activity among women because of a deep understanding of the cultural and social factors that influence women's attitudes toward physical activity.

This study faced limitations, such as a lack of access to body mass indexes of participating women, that may have had positive and negative effects on women's physical activity attitudes and behaviors. Furthermore, qualitative research often involves a small sample size, which may not be representative of the wider population. Likewise, the findings of the research may not be generalizable to other contexts or populations due to the specific nature of the study. Additionally, it is important to acknowledge that qualitative research methods inherently involve subjectivity, rendering the interpretation of collected data susceptible to researchers' inherent biases or perspectives. Ultimately, despite the arduous task of conducting such extensive and resource-intensive research, the conclusive results may not easily lend themselves to measurement or quantification. Consequently, assessing the true impact of interventions or programs becomes a challenging endeavor. In light of these considerations, it is imperative for future investigators to take these aspects into account when embarking on their scholarly pursuits.

Implications

Qualitative research serves as a valuable tool for delving into the depths of personal experiences and perspectives relating to physical activity (45). By doing so, it becomes possible to unveil both the barriers and facilitators of individuals toward an active lifestyle. Moreover, this wealth of knowledge can inform the creation of interventions and programs aimed at promoting regular exercise. Consequently, not only do public health policies

gain essential insights from such information, but they also stand better equipped to enhance overall well-being by encouraging physical activity.

Crucially, policymakers hold significant influence in fostering physical activity predominantly among women by means of multiple avenues, including procuring funding for relevant initiatives and establishing safe and easily accessible public spaces (58). The other avenues are urging employers to offer flexible work schedules conducive to exercise and designing awareness campaigns that directly address barriers uncovered through qualitative studies; the ultimate aim of all these avenues were to inspire women toward a healthier way of life. These concerted efforts inevitably result in improved health outcomes for women while simultaneously elevating their quality of life.

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Authors' Contribution

Conceptualization: Mohammad Sadegh Abedzadeh Zavareh, Fatemeh Shirzadi, Ali-Ashraf Aivazi.

Data curation: Fatemeh Shirzadi, Manijeh Hoseiny-Rad.

Formal analysis: Fatemeh Shirzadi, Manijeh Hoseiny-Rad, Ali-Ashraf Aivazi.

Methodology: Mohammad Sadegh Abedzadeh Zavareh, Fatemeh Shirzadi, Ali-Ashraf Aivazi.

Project administration: Mohammad Sadegh Abedzadeh Zavareh, Fatemeh Shirzadi.

Resources: Manijeh Hoseiny-Rad, Ali-Ashraf Aivazi.

Software: Fatemeh Shirzadi, Ali-Ashraf Aivazi.

Supervision: Mohammad Sadegh Abedzadeh Zavareh, Ali-Ashraf Aivazi.

Validation: Mohammad Sadegh Abedzadeh Zavareh, Fatemeh Shirzadi, Manijeh Hoseiny-Rad.

Visualization: Fatemeh Shirzadi, Manijeh Hoseiny-Rad.

Writing—original draft: Mohammad Sadegh Abedzadeh Zavareh, Fatemeh Shirzadi, Manijeh Hoseiny-Rad, Ali-Ashraf Aivazi.

Writing—review & editing: Manijeh Hoseiny-Rad, Ali-Ashraf Aivazi.

Competing Interests

None.

Ethical Approval

In adherence to ethical standards, approval was obtained from the Research Ethics Committee of Ilam University of Medical Sciences for this study proposal and interview protocol (code: IR.MEDILAM.REC.1398.090). Prior to participation, all study participants received both verbal and written information about the research project and were made aware that they possessed full autonomy to withdraw from involvement at any given time. Additionally, written informed consent was obtained from each participant before conducting any interviews.

All participants involved in the study were carefully anonymized to maintain the utmost level of confidentiality. The importance of keeping the interview data confidential was also emphasized, highlighting that purposeful sampling would be conducted to select individuals whose experiences aligned with the research questions, and guidance from healthcare providers at the Comprehensive Health Service Center would be sought. Within the written informed consent form, contact information for the researcher was provided

for any inquiries or additional contributions by participants during the course of the study. Furthermore, participants were given ample opportunity to ask questions or include their own material in their interviews throughout the duration of this research endeavor. Prior to commencing each interview session, individuals were asked for permission to record audio as a means of gathering data. Here, they were thoroughly briefed on both the purpose behind this practice and the applied methodology. Participants could take solace in knowing that their interviews would remain highly confidential within a secure location managed exclusively by our research team. Lastly, it was clarified that individuals possessed full agency when deciding whether or not they wished to continue participating in this research undertaking.

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