

## Women's Quality of Life in Iran: A Mixed Method Study

### Abstract

**Background:** Quality of life drives from the individuals' perceptions of their position in life long and allows holistic assessment of the effects of health conditions beyond the symptoms, signs, and complications. This study aimed to assess the quality of life and recognize females' point of view about the quality of life aspects. Hence, perhaps it could be a step toward improving women's health status. **Materials and Methods:** This study was an explanatory mixed method research one which was conducted in the two following steps. In the quantitative step, five hundred women aged 15–49 years were selected from varied zone of Tehran Province, using cluster random sampling method. In order to assess the quality of life, Short Form SF-36 instrument was used. In the qualitative step, forty women were selected by purposive sampling in a different range of quality of life based on the result of the first step. Data were collected through semistructured, in-depth individual interviews, which continued up to data saturation point. Data analysis was performed through conventional content analysis. **Results:** Among different aspects of quality of life, the highest and the lowest means (SD) were related to physical functioning mean (SD) 70.58 (24.52) and general health 67.72 (27.66), and mental health 55.27 (30.22) and social functioning 57.02 (30.62), respectively. From the interviews, three main themes were extracted as the following: (i) financial support, (ii) informational support, and (iii) service-based social support. **Conclusions:** The present study revealed that Tehranian women do not have high experience related to the quality of life; however, a sense of receiving support from different sources could help them to wrestle with a complicated condition in everyday life.

**Keywords:** Mixed methods research, nursing, quality of life, women

### Introduction

Quality of life is the pivotal goal of individual health and essential factor to plan and evaluate health care programs. Quality of life is a description of the individuals' physical, emotional, and social living conditions and their ability to wrestle with their daily life.<sup>[1]</sup> Quality of life is a dynamic, broad, and multidimensional concept and illustrates the individual perception about living conditions like higher income, longer holidays, more working satisfaction, having more time for leisure pursuits, emotional enrichment in relationships, and having a long healthy and happy life. In addition, due to cultural differences, quality of life represents the health status of people which may be different between countries, communities, and population groups.<sup>[2]</sup> Although men and women have identical health issues, women are faced with specific issues arising from their biological characteristics consist of puberty, pregnancy, childbirth,

and menopause.<sup>[3]</sup> Women also face different problems associated with gender discrimination and women's rights abuse, including domestic violence, female genital mutilation, self-mutilation, and honor killing.<sup>[4]</sup> Furthermore, during the last decades, women's participation in social and political affairs has remarkably risen.<sup>[5]</sup> It seems that not only do all these factors might have significant impacts on women's health status but also on their quality of life.<sup>[6]</sup> Several quantitative studies have been conducted in the female population as a high-risk group that generally confirm the differences in the health and quality of life and health between men and women.<sup>[7]</sup>

Results of the studies by Campos *et al.* (2014) in Brazil,<sup>[8]</sup> Hart and Kang (2014) in U.S.,<sup>[9]</sup> Farhadi *et al.* (2011) and Hajian-Tilaki *et al.* (2017) in Iran<sup>[10,11]</sup> represented poor women's quality of life in all aspects in comparison with men. However, researchers in the health field noted because of the lack of its constituent components, it cannot be claimed that what

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was gained in the research really reflects the quality of life of the studied population. Based on the differences in women's health status and quality of life, the experiences, expectations, and priorities of different groups of women, it seems more discussion about each improvement is crucial.<sup>[7]</sup> On the other hand, the lack of coherence between the results of quantitative research on the weaknesses and strength of various aspects of women's quality of life is still one of the main problems for women's health improvement in Iran.

In this regard, qualitative studies are able to look deeply into experienced problems related to the desired concept and could clarify the characteristics of the concept from the perspective of studied community.<sup>[7,12]</sup> According to Creswell, mixed method studies with the explanatory design provide an opportunity to further study and explain the relevant factors.<sup>[13]</sup> Therefore, this study aimed to assess the quality of life of Tehranian women. It also describes females' point of view about key aspects of this concept.

## Materials and Methods

This study was an explanatory mixed method. In this design, first quantitative data and then qualitative data were collected. Qualitative data were used to strengthen quantitative data, and then the results of both stages are analyzed in the discussion section.<sup>[13]</sup> In the quantitative phase, inclusion criteria were women aged between 15 and 49 years, who are in a reproductive age group based on World Health Organization's report,<sup>[14]</sup> living in Tehran province more than 7 years, having at least reading and writing literacy, and oral and written informed consent for study participation. The exclusion criteria were failure to respond to questionnaire completely. In this phase, based on the below formula and result of the similar study,<sup>[15]</sup> with a confidence of 95%, test power of 80%, and estimation of 10% attrition rate, five hundred women were selected through cluster random sampling from varied zone of Tehran province from November 2017 to January 2018.

To mention as an instance, Tehran benefits from 200 neighborhood houses. Hence, initially, the city was divided into five parts (north, south, center, west, and east) and then, two neighborhood houses from each part were randomly selected (out of 10 neighborhood houses). A validated SF-36 questionnaire was used to gather information.<sup>[16]</sup> This is a multi-item scale which assesses eight areas, namely, general health (2 items), vitality (8 items), physical functioning (10 items), limitations in daily activities due to physical problems (4 items), bodily pain (2 items), mental health (5 items), role-emotional (3 items), and social functioning (2 items). The score of each field is calculated according to the questionnaire's instructions as below: questions with 2 options' score 0 and 100, questions with 3 options' score 0, 50, and 100, questions with 5 options' score 0, 25, 50, 75, and 100, questions with 6 options' score 0, 20, 40, 60, 80, and 100 which could independently have computed. In each area, zero indicates the worst and

100 is the best condition.<sup>[16]</sup> The short form SF 36 was translated in Persian by Montazeri *et al.* (2005) and has been validated with a reliability over 0.7.<sup>[16]</sup> In this study, instrumental validity was confirmed by ten experts in the health field and quality of life and the reliability of this study was calculated using Cronbach's alpha on among 30 women who participated in this research (0.718). The quantitative data were analyzed using software SPSS version 16 software (ABiComputer-1337, WinWrap Basic-copyright©SPSS inc. 1989–2007 Polar Engineering and Consulting) using descriptive statistics (as percentage, mean, and standard deviation).

In the qualitative phase, the inclusion criteria were similar to the quantitative step. In this phase, data were gathered through semistructured and in-depth individual interviews. To win the women's trust, the interview launched with greetings and asking about public health and followed by a general open question: "please speak to me about your living conditions." Analyzing these data gradually guided us to the concept of support; we focused on this concept and asked these questions: "What does support mean to you? Are you satisfied with received support?" To clarify the participants' understanding, probing questions were also asked such as "Do you mean ...?", "Can you say more or bring some examples?", and "Please explain that situation." Sampling continued until data saturation which achieved with 38 participants; nevertheless, interviewing continued with two other women for further assurance.

Data analysis was performed using a conventional content analysis method.<sup>[7]</sup> First, the interviews were written down and regulated for content analysis. Before encoding, all the handwritten texts were read several times to become familiar with the extracted data to make appropriate decisions about the coding and meaning units. From the third interview, text encoding was performed. With a frequent review, the primary codes combined with maximum similarity and minimum differences, and then the codes were assigned to one category. Then, the potential codes were reviewed and the main classes were determined. In the coding process, manifest and latent content was considered. In order to test the stability and clarity of the themes' definition, the typed text with the extracted code was examined by supervisors. When efficient consistency is accomplished, the entire text was coded based on coding rules. Due to human coders are addressed to exhaustion and presumably tend to make mistakes as coding proceeds, after coding all text data, the researcher re-controlled the coding process to ascertain the agreement among the women and the research team members. The specifications and dimensions of the themes and their relations were recognized and the latent concepts were uncovered and reviewed, and meaning units were offered according to the data.

The analysis method was fully reported to the team members. The qualitative data were managed using

software MAXQDA Version 10. The integration and combination of quantitative and qualitative data was based on the method of reducing, combining, comparing, and correlating data. The researcher was looking at how close these data are to each other, their differences, similarities, convergence, and divergence were considered, and the final results were expressed on the basis of them. Credibility, transferability, conformability, reliability, and dependability were evaluated for data trustworthiness.<sup>[17,18]</sup> To increase the accuracy and strength of data, the researcher used appropriate approaches including the prolonged engagement with the study, maximum variation of sampling, constant comparative analysis, a member check (presenting the codes of six interviews to the participants for evaluating and confirming), a peer check (presenting the interviews, codes, and themes with two experts who were experienced in qualitative research), and evidence-based writing (using quotations), and reporting data precisely in order to let the others to follow up the study.

### Ethical considerations

This study is a part of PhD nursing thesis in nursing entitled “Design and validation of women’s Quality of life Instrument,” which was approved by the research council and ethics committee of Tarbiat Modares University of Medical Sciences, (ID: D52.1918. Date 5.6.2016). Ethical principles of the research consisted of oral and written informed consent to participate in the study and answering questions, anonymity, confidentiality, and freedom of participants were noted for quitting the study. In addition, before the interview, participants were informed about the purpose of the whole study.

### Results

The mean (SD) age of study participants was 35.40 (9.12) years. Sociodemographic information is presented in Table 1. The mean (SD) of the total quality of life was 62.48 (10.18). Among different aspects of the quality of life, the highest mean was related to physical functioning and general health, and the lowest were mental health and social functioning. Information about the quality of life is presented in Table 2.

After identifying the above results, at the quantitative stage, 40 women (W) who had the criteria for this research were interviewed and asked to disclose their experiences regarding issues affecting their quality of life. In this stage, 590 primary codes, 13 subcategories, six categories, and three themes were extracted [Table 3]. These themes are presented in the following sections.

### Financial support

Financial support from the perspective of women in this research was cash and non-cash support which they receive not only from the government but also from their families.

**Table 1: Demographic characteristics of study participants (n=500)**

Characteristic	n (%)
Marital status	
Single - never married	191 (38.20)
Married or living as married	272 (54.40)
Divorced	35 (7.00)
Widowed	2 (0.40)
Qualification	
Below High school	24 (4.80)
High school graduate	115 (23.00)
Two-year college degree	67 (13.40)
Four-year college degree	192 (38.40)
Master degree	76 (15.20)
PhD degree	26 (5.20)
Employment status	
Working full-time	132 (26.40)
Working part-time	163 (32.60)
Housewife	205 (41.00)
individual income	
<10 million IRR*	273 (47.40)
10-20 million IRR	195 (39.00)
>20 million IRR	68 (13.60)
Housing	
Personal home	144 (28.80)
Rental	332 (66.40)
Governmental	24 (4.80)

\*IRR =Iranian Rial Rates

**Table 2: Mean (SD) scores of quality of life in the studied women (n=500)**

SF-36 (Quality of life aspects)	Mean (SD)
General Health (GH)	67.72 (27.66)
Vitality (V)	59.62 (29.15)
Physical Functioning (RF)	70.58 (24.52)
Limitations in daily activities due to physical problems (RP)	65.50 (34.81)
Bodily Pain (BP)	61.94 (26.81)
Mental Health (MH)	55.27 (30.22)
Role-Emotional (RE)	62.59 (39.23)
Social Functioning (SF)	57.02 (30.62)
Total	62.53 (10.31)

This theme has derived from the following two subthemes: family’s financial support and governmental financial support.

One of the respondents stated in this regard: “A couple of years ago, my husband was admitted in a hospital for a while due to stomach hemorrhage. My brother didn’t come to ask me even once if I was satisfied with my life, if I lacked anything, if anybody could go to the hospital to visit my husband and/or if anybody would take of the insurance affairs. He didn’t even ask how you would pay the hospital costs or whether you would have any problem for buying the medicine.” (W = women 13).

**Table 3: The trend of condensation-abstraction process for themes (sample)**

Meaning units	Open coding	Sub-themes	Themes	Main theme
Financial aid of brothers living abroad (p9)	Family's cash supports	Family's financial support	Financial Support	support
Giving money to the wife by the husband without complaining or boasting (p14, p35, p25)				
Supporting the sister financially to pursue her studies (p24)				
Purchase of wife's requirements by the husband (p1, p35, p2, p1)				
Provision of required items by the grandfather as financial aid (p6, p13)	Family's non-cash supports			
Use of the sister's used devices (p36)				
Living in husband's parental house in order to not pay rental (p16)				
Receiving fund for marriage expenses from governmental organizations (Social Security) (p31)	Governmental loans in cash	Government's financial support		
Receiving loan for domestic jobs from Ministry of Labor (p25)				
Availability of MEHR houses with rent for life (p26)	Non-cash governmental aids			
Availability of students' dormitories (p24)				
Receiving health-related information from children (p19)	Receiving health-related information via non-virtual sources	Receiving support with regard to health education	Informational Support	
Receiving information from friends about traditional domestic remedies (p12, p8, p36)	Receiving health-related information via virtual and media sources			
Receiving health-related information via virtual networks (p10, p33, p28)				
Children's help in learning to read and write (p20)	Receiving general knowledge via non-virtual sources	Receiving support with regard to general social skills		
Introducing job-seeking websites via friends (p24)	Receiving general knowledge via virtual sources			
Receiving information about recreational attractions via virtual networks (p30)				
Learning to cook via virtual networks (p28, p29)				
Purchase of required items using Internet (p36, p35)				
Children's help in house chores (p19)		Cooperation and collaboration	Service-based Social Support	
Husband's cooperation in doing the house chores (p14, p18)	Support in daily life tasks by the family members and relatives			
Relatives' support for finding a job (p1, p7)				
Husband's collaboration in child care (p9, p34, p18)	Support in dealing with the children's affairs			
Child care by the neighbors when the mother is at work (p9)				
Grandmother's support in child care (p9, p34, p14)				
Paying attention to lack of sufficient space for women in buses (p8, p7)	Easy transportation	Satisfaction with recreational facilities		
Benefitting from student subway cards (p24)				
Existence of neighborhood centers for instruction of life skills (p25, p23)	Satisfaction with recreational/social centers			
Presence of numerous banks near the living place (p26)				
Existence of women-only parks (p35, p36)				
Controlling people's blood pressure and sugar in the subway or city's main squares (p33)	Receiving services concerning diseases and health			
Abundance of specialized clinics and hospitals (p9, p19)				
Abundance of psychological consultation centers in health and medical centers (p25)				

### Informational support

Informational support from the perspective of women in this research was receiving support regarding general knowledge and health education via virtual and non-virtual sources.

This theme has derived from the following two subthemes: receiving support with regard to health education and receiving support with regard to general social skills.

One of the respondents commented in this respect: *"Nowadays, thanks to the facilities in access, we are more satisfied with our lives than before. I think the cell phone networks such as Instagram and Telegram provide us lots of information. My friends send lots of health-related messages like the ways to alleviate the skin darkness or what to eat. It is much better than buying and read a book."* (W33).

### Service-based social support

Service-based social support from the perspective of women in this research is cooperation and collaboration of family members and relatives regarding daily life tasks and children's affairs and satisfaction with recreational facilities in terms of transportation and social and medical centers. This class has derived from the following two subclasses: cooperation and collaboration, and satisfaction with recreational facilities.

About receiving support, one of the participants said: *"My paternal cousin's husband helps us a lot to proceed with the registration office affairs. He introduced to us one of his friends who has a registration office of official deeds and documents. He talked with us and explained the conditions of transferring the documents. When my late father was alive, he could not walk normally. My cousin's husband brought his friend to our house despite it was against the law. That was where my father signed a couple of papers and determined which apartment would belong to each of family members. It was a great help."* (W9).

### Discussion

This study aimed to assess the quality of life and understand females' point of view about aspects of quality of life. According to the quantitative results, mean (SD) of women's quality of life was in the middle of the quality of life spectrum based on the questionnaire. According to the study results, the remarkable obtained scores among women were related to the domains of physical functioning and general health and the lowest ones were mental health and social relationships. The results of the qualitative section also fully reflected the importance of the support element among women to have a desirable quality of life. In Ghasemi *et al.* study also, the average score in the aspect of the physical health of the quality of life was higher than the other dimensions.<sup>[9]</sup> In addition, the result of the study by Fernandes *et al.* showed that psychological discomfort in women can affect the state of mind, feeling of happiness, and everyday life satisfaction.<sup>[10]</sup> In this regard, our result was in line with these two noted studies. In the present study, fortunately, the samples had a relatively good physical health but it seems they were not mentally healthy and did not satisfy their quality of life. But if this trend continues, we will see a deterioration in their physical health in the near future may occur. Mental problems due to fast-paced and stressful living conditions and domestic violence are remarkable priority problems among women in Tehran. Based on a systematic review, social determinants of health have a remarkable relationship with stressful living conditions not only in Iran but also on a worldwide scale.<sup>[11]</sup>

The total result of the quantitative phase indicates that the quality of life in women in Tehran was not desirable. The results were similar with those obtained in the studies

by Rimaz.<sup>[12]</sup> However, findings in the area of quality of life had laid much emphases on the measures of health condition and less on the subjective perception of aspects of women's quality of life. Due to this shortcoming, there is a need to explain the most important factors involved in women's quality of life. Therefore, we conducted a qualitative study to discover these hidden causes. In the current research from the perspective of women, support was a key of quality of life based on the qualitative section of the study.

Financial support was one of the extracted categories which from the perspective of women means cash and non-cash resources received from family and government to meet their compelling needs in their everyday life. Women in the present study had many economic problems such as housing costs, education, the provision of necessary items, and failure to save money for future problems. They also worried about how to afford the expenses associated with their medical checkup and the costs related to the diseases of their family members. Paying high treatment costs was even more stressful for low-income families particularly for women whose husbands do not have a job because of bankruptcy or laying off, whose husbands did not live with them because of having to work away from home or being in prison, and who were single-parent women because of divorce or widow. These difficulties and concerns had affected their life and they required financial support based on their statements. Unfortunately, no study was found about the concept of support from the perspective of these kinds of women, so there is no way to compare data which were approved the study novelty in this area. But in some studies, economic welfare has been mentioned as a dimension of women's quality of life, which is in line with the findings of this study.<sup>[14]</sup> In addition, the studies pertaining to the quality of life of individual's indicated that financial constraints were the most common barriers having access to health care facilities and also emphasized on the significance of the presence of adequate associations and institutes as a supportive agent to resolve financial concerns.<sup>[15]</sup> It is noteworthy that the participants in the respective research were patients who worried about their living expenditures, specifically their own treatment expenses, whereas in the present study, the respondents were apparently healthy women who not only undertook the responsibility of their own life expenses as a key family member but also in some cases held the responsibility of the entire family life and protection of other family members. Therefore, in their opinion, receiving financial support would have a fundamental role in their life quality. This is especially important for housewives with no special salary. Housekeeping like other occupations causes burnout for women. Hence, it should be considered as a career with an acceptable income for women. In addition, using community and family health nurses in Iran by studying families in terms of financial problems and introducing

supportive systems can reduce the concerns of women and improve their quality of life.

Informational support was another category which from the viewpoint of women means "receiving educations about health and general social skills via direct or virtual sources". In the present study, women believed that access to information about general scopes such as help in reading and writing, use of computer and cellphone, learning a second language and cuisine, and also obtaining information about health and remedies require establishing a direct or indirect relationship with the society members. Kim indicates that active participation in the social networks and web-based groups leads to enhancement of support perception,<sup>[15]</sup> which is in line with our study results. It is noteworthy in the present research that women highly value their health and also seek for receiving health-related services and facilities. This will drastically help health economics at the level of primary prevention. Therefore, it is suggested that health workers should notice to women's health informational needs and establish intervention programs and give professional information to them.<sup>[4]</sup>

Receiving service-based social support was another category in this research which from the perspective of women means receive cooperation and collaboration in daily life and satisfaction with recreational facilities in community. In the statements of women, receiving necessary aid from individuals like husband, children, parents, and even friends and neighbors means receiving attention and meeting their psychological needs. The noteworthy point of some respondents was the fact that man and woman must serve as each other's support under any circumstances, especially they are regarded as the best supporter in dealing with children's affairs. From women's view, children upbringing was a stressful task which affects all personal living aspects including leisure time, nutrition, and relationship with close relatives, and even the possibility of pursuing one's education and profession. Hence, receiving help from the husband and the close relatives and reliable friends in this regard could be presumed as a significant supportive source in stressful situations, which also implied in other studies.<sup>[16]</sup> Easy transportation was proposed as a subcategory of satisfaction with recreational facilities. In addition, in this study also, the absence of appropriate transport, especially during pregnancy, for women was taken into account. Some solutions must be considered using the relevant authorities to solve the problems. Satisfaction with recreational/social centers and receiving services concerning health and diseases were among other supportive factors which influence women's quality of life in the current research. In Mattevi study carried, availability of recreational centers and access to health services were considered among the factors affecting the quality of life.<sup>[19]</sup> Some participants, particularly the religiously veiled women, felt satisfaction with the existence of exclusive parks for women, where they can be present without

worrying about the presence of strange men. In addition, the presence of certain recreational facilities such as free of charge centers for controlling health status was greatly significant for most participants. It is worth mentioning that the respective services are provided only in certain districts during limited number of days in year and that these facilities should be upgraded and implemented at a greater extent.

One of the pivotal limitations of this study was a small sample in the quantitative section. In addition, the results of the qualitative section study, by its nature, cannot be generalized to all population. However, this study had several strengths that validate the findings like maximum variance sampling (based on age, marital status, education, and social status). In addition, it is the first study which was performed in this area using adopting mixed methodology design to assess women's quality of life and discover a key aspect of it known as support. It is suggested that the study should be carried out with larger samples in similar cultures and other provinces of Iran in order to discover other dimensions related to women's quality of life. In addition, it is recommended that a native tool to assess the quality of life of women be constructed based on the obtained data from qualitative research. As Montazeri *et al.*, in their study after the translation and psychometric analysis of the tools, found that although all aspects except of the vitality dimension has gained Cronbach's alpha more than 0.70 and the researcher has called it the problem of translating vitality from English to Persian which can create ambiguity for respondents. Moreover, some dimensions such as psychological or social function only contain two or three questions that do not seem to be sufficiently comprehensible to examine the above areas. In this way, by examining the quality of women's lives with a dedicated and native tool, we will be able to take a major step toward improving the quality of life and health of Iranian women and, therefore, the whole of society.

## Conclusion

In a general conclusion, the quality of life among women who live in Tehran is not very favorable, especially in two dimensions (mental health and social relationships) and based on their statements they need support. Financial issues, obtaining information, and receiving services in different tasks were mentioned as inseparable components of women's quality of life. The study results of the present research could be considered by health care providers in order to create a supportive atmosphere based on women's expectation. But in order to promote women's health, women's quality of life should be considered beyond the element of support.

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### Conflicts of interest

Nothing to declare.

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