Abstract

Aim: Aging is a process that involves all living creatures, including human beings. Statistical indicators show that the aging trend is progressing in Iran, too. The volunteer women cooperating with the urban areas’ health system (called Healthy Volunteers) are amongst the pioneers and symbols of health care social participation.

Methods: This cross-sectional study was performed on 86 elderly members of the healthy volunteer group of health centers. Data collection instruments consisted of demographic information and LEIPAD questionnaires. Data were analyzed using SPSS18 and descriptive and analytic statistics.

Findings: The mean age of the participants was 64±4.007 years. The mean total score of QOL was 72.7±11.32. The mean score of the seven dimensions of QOL was as follows: physical function (71.5%), self-care (92.4%), social function (76.7%), anxiety and depression (82.8%), life satisfaction (67.9%), sexual function (71.5%) and cognitive function (78.9%). There was no significant relationship between QOL the variables such as age, educational level, marital status and number of family members (P>0.05). However, the relationship between QOL and the duration of elderly cooperation was significant (r=0.23, P<0.05).

Conclusion: The results showed that the quality of life in healthy volunteers was moderate. Therefore, health volunteers as elderly persons are role models and can take effective steps in the transfer of health information in the community.

Keywords: Elderly, Quality of life, Healthy volunteer
Introduction
Aging is a process that involves all living including human beings. It is not an illness, rather it is considered as a vital phenomenon that comprises all living creatures [1]. Today's increase of life expectancy and reduction of fertility have increased the number of elderly people worldwide. As the aging has become one of the most important public health challenges in recent years [2].

In other words, by the year 2050, we will have around 1.2 billion elderly people over 60, which will constitute 20% of the world's population by 2050. It is important to note that 80% of the population will live in the developing countries, including Iran.

Based on the general census in 2006, 3.7 million were over the age of 60, and it is expected that over the next 20 years, this figure will increase to more than double the size of the current figure (8.5 million). This fact emphasizes the need to pay more attention to the aging population [3]. In the present century, a better quality of life is a major health issue [4].

As life expectancy increases, the importance of quality of life for the elderly is also becoming more evident. What today's sciences take into consideration is not just a prolongation of life but the extra years of human life should lead to the calm, as well as physical and mental health, ultimately. If these conditions are not supplied, scientific advances for longer life will be ineffective and risky [5].

According to the WHO definition, "quality of life" is the understanding of individuals from their place of life in terms of culture, the values of the system in which they live, their goals, expectations, standards, and their priorities. Moreover, the quality of life has different dimensions. Scientists agree that the concept of the quality of life generally involves physical, psychological, social, mental aspects, and symptoms of the disease or treatment-related changes [6]. On the other hand, what is said in countries with high per capita elderly population called "Active and Successful Aging" can be realized through a commitment to social participation of the elderly in society.

Significant linkage of this phenomenon has always been emphasized on health, well-being, and the satisfactory reliability of the transition to the elderliness and life style [7]. In this regard, the use of volunteer groups such as healthy volunteers is necessary to promote health concepts, develop healthy behaviors, empower the individuals to maintain their own and family health, and ultimately, improve the community health [8]. The volunteer women cooperating with the urban areas' health system (called Healthy Volunteers) are amongst the pioneers and symbols of social participation in developing health care [9].

Since the only admission criteria for health-
related women links in the health are reading and writing skills and interest in participation, whether the registered elderly women of these groups can perform as a health symbol in the society or not is a question remaining unanswered. Therefore, this study aims to investigate the quality of life of over 60-years old healthy volunteers as elderly health promoting persons.

Objective
The aim of the study is investigating in the quality of life of elderly health volunteers and their connections with demographic factors.

Materials and Methods
This cross-sectional study was performed on elderly healthy volunteers in the health centers of Shahid Beheshti University of Medical Sciences. The participants were selected by a census sampling method so that all people aged 60 years and over who were members of the healthy volunteer group in the health centers of health networks were studied. The inclusion criteria in the study comprised written willingness and consent, membership in the group of healthy volunteers in the centers, lack of moral disorders and cognitive impairments diagnosed by the physician, being able to understand and answer the questions, and at least one month had passed since their membership in the healthy volunteer group.

The instrument of research was a questionnaire that consisted of two parts; the first part of the questionnaire included demographic characteristics such as age, gender, education, marital status, number of family members and satisfaction of membership in the group (I am satisfied, and I am not satisfied). The second part of the questionnaire was the standard questionnaire for the quality of life LEIPAD, which included 31 questions. The LEIPAD evaluates the quality of life of the elderly in terms of physical function (5 questions), self-care (6 questions), depression and anxiety (4 questions), mental function (5 questions), social function (3 questions), sexual function (2 questions), and life satisfaction (6 questions). The options in this questionnaire are designed as Likert, and each question has four options. The rating of this questionnaire is as follows: the worst (0) and the best (3). The total score varies from a minimum of 0 to a maximum of 93, and finally, the grades are scored on the basis of one hundred. The quality of life was classified into three desirable levels (75-100), relatively desirable (75-50) and unfavorable (less than 50). The Lipad Questionnaire was developed by Diego et al. [10]. Validity and reliability of this questionnaire were confirmed by Abedi and Hesamzadeh (Cronbach's alpha=0.874) in Iran [11]. It was completed by interviewing the authorities of each center within three months.
by self-reporting of the samples. Data analysis was done using SPSS.18 and T-test, ANOVAs, linear regression, Pearson’s correlation and Spearman’s correlation. The significance level was considered 0.05.

**Results**

All participants in this study were female. The age range of the research units was 75-60 years, and the mean of age was 64±4.007 years. The results showed that 98.8% of the participants were less than 75 years old, and 1.2% of the were elderly (75-80 years old). Also 67.4% of the participants were married (58 people) and 44.2% had pre-diploma and higher. The number of family members of about 74% of them was less than 4 people, and about 26% more than 4 people. Other demographic characteristics of the participants are presented in Table 1.

The mean of the quality of life score in the target group was 72.7, with the highest score of 90.5 and the lowest of 42.3. 96% of the women were in a desirable and relatively desirable level, and only 4% of them had the quality of life at an undesirable level. The highest level was in the self-care dimension (90.6%), and in the sexual dimension, the quality of life was on unsatisfactory level (77.3%) (Table 2).

**Table 1:** Distribution of the demographic characteristics and the relationship between the variables and the total quality of life score in the elderly volunteers

<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>Variation range</th>
<th>Frequency</th>
<th>Mean QOL</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>58 (67.4)</td>
<td>75.13</td>
<td>0.273**</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>28 (32.6)</td>
<td>71.72</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Educational status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary education and lower</td>
<td>48 (55.8)</td>
<td>73.98</td>
<td>0.32**</td>
</tr>
<tr>
<td></td>
<td>Intermediate and higher</td>
<td>38 (44.2)</td>
<td>71.35</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/15%</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

**P<0.05**

**Table 2:** Levels of quality of life in the healthy elderly volunteers

<table>
<thead>
<tr>
<th>Dimensions of quality of life</th>
<th>Good (%)</th>
<th>Intermediate (%)</th>
<th>Weak (%)</th>
<th>Mean±SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical function</td>
<td>39 (46.4)</td>
<td>32 (38.1)</td>
<td>13 (15.5)</td>
<td>71.58±17.07</td>
</tr>
<tr>
<td>Social functions</td>
<td>56 (65.1)</td>
<td>23 (26.7)</td>
<td>7 (8.1)</td>
<td>76.74±19.17</td>
</tr>
<tr>
<td>Self-care</td>
<td>77 (90.6)</td>
<td>8 (9.4)</td>
<td>0</td>
<td>92.48±9.22</td>
</tr>
<tr>
<td>Anxiety and depression</td>
<td>58 (68.2)</td>
<td>22 (25.9)</td>
<td>5 (5.9)</td>
<td>82.84±17.12</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>26 (32.1)</td>
<td>48 (59.3)</td>
<td>7 (8.6)</td>
<td>67.90±13.88</td>
</tr>
<tr>
<td>Mental performance</td>
<td>49 (58.3)</td>
<td>31 (36.9)</td>
<td>4 (4.8)</td>
<td>78.96±16.24</td>
</tr>
<tr>
<td>Sexual function</td>
<td>0</td>
<td>17 (22.7)</td>
<td>58 (77.3)</td>
<td>24.88±20.57</td>
</tr>
</tbody>
</table>
The quality of life was not significantly correlated with age, level of education, marital status and number of family members (p <0.05). However, there was a significant relationship between the quality of life and the duration of the elderly’s cooperation as a health volunteer. The finding showed a positive correlation coefficient (r=0.23). Also there was a linear relationship between quality of life score and all aspects of the study, except sexual function dimension (p <0.05) (Table 3).

Table 3: The prediction of linear relationship between the scores of different dimensions of the overall quality of life

<table>
<thead>
<tr>
<th>Dimensions of quality of life</th>
<th>SD</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical function</td>
<td>0.048</td>
<td>0.216</td>
</tr>
<tr>
<td>Social functions</td>
<td>0.035</td>
<td>0.170</td>
</tr>
<tr>
<td>Self-care</td>
<td>0.070</td>
<td>0.137</td>
</tr>
<tr>
<td>Anxiety and depression</td>
<td>0.035</td>
<td>0.259</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>0.048</td>
<td>0.161</td>
</tr>
<tr>
<td>Mental performance</td>
<td>0.048</td>
<td>0.295</td>
</tr>
<tr>
<td>Sexual function</td>
<td>0.024</td>
<td>0.022</td>
</tr>
</tbody>
</table>

**Discussion**

This study was carried out in order to investigate in the quality of life of the elderly health volunteers and their connections with demographic factors. In general, the results showed that the mean score of the quality of life for healthy volunteers was at a high average level, which is in agreement with the findings reported by Saberi and Nasratabadi, who assessed the quality of life of women [12]. However, the results of the current study are not consistent with the results of Rashgar Savakhi et al., who assessed the lifestyle of the health promoting volunteers on a moderate and downward level [13]. One of the reasons for this non-alignment can be the effect of more effective training for volunteers in the city of Tehran.

In a study conducted by Ali Asgharpur et al. [14], it was shown that the quality of life of the elderly people in the self-care dimension was at an unsatisfactory level. While in the elderly members of the volunteers group in the present study, self-care was at the highest level of utility.

Regarding the implementation of the 5th National Self-care Program in Health System and Education of Health Volunteers about this concept, it can be said that the participants of this research enjoyed a relatively favorable position in self-care. Also, in a study by Rostami and et al. [15] on the elderly referred to Masjed Soleyman health centers, the effect of self-care pattern of Oram on the quality of life of the elderly people was studied. The results showed that all aspects of the quality of life
life, including general health, physical functioning, physical and emotional role, social function, physical pain, force and energy, overall understanding of health, and overall mean of the quality of life increased compared to pre-training, and the use of this educational model had a positive effect [15].

In the present work, the elderly volunteers were at the satisfactory level in social function, which is consistent with the results of Berari et al., who declared that women in NGOs had significantly higher socio-economic status [16]. Several studies have shown that social support for the elderly is an important source for improving their quality of life [17,18]. In a study of Theodore McDonald in the United States in the southwest of Idaho [19], the elderly participated in a voluntary retirement program, namely Retired and Senior Volunteer Program (RSVP). The study showed that volunteering can promote the health and the quality of life of elderly people in different dimensions. According to this research, many of the aging problems were not necessarily due to age, but because of social and physical inactivity. These experts concluded that providing a social context for the elderly activity can play as a preventive tool in reducing old age problems. The study also showed that after the volunteering in the RSVP program, the women reported more positive changes in their quality of life than men. It was also found that older elderly were more satisfied of being useful to others, more purposeful and worthy in their life [19].

There was no significant relationship between age and lifestyle in this study; in some studies, there was no significant relationship between the two variables in women [20, 21].

In this study, education level, marital status and family size were not significantly correlated with lifestyle. This finding is consistent with the results of Yarahmadi and Rosta [22] in terms of marital status and number of family members. But in terms of educational level, it is not consistent with the findings of Zahmatkeshan et al. [23]. Most of the research units were married and lived with their spouses and children, so the abundance of other levels of marital status was low, and so no significant relationship was found.

Regarding the insignificant relationship between education and the quality of life, it can also be said that the emphasis on continuing education in the monthly classes of volunteers and the implementation of self-care education programs for this group has undermined the educational differences among them. However, there was a significant and positive relationship between the quality of life and the duration of the elderly’s cooperation. The study of Frasar et al. [9] reported that the experience more than 10 years would increase efficiency. There was also a positive
relationship between all aspects examined, except sex with the quality of life score; this finding is consistent with the results of Hesamzadeh et al. [11].

Conclusion
Aging is a process that never stops, but it can be combined with a longer lifespan for better quality. Successful aging theory improves with the use of effective strategies to prevent or delay the effects associated with age, and increase the quality of lifespan [24]. One of these strategies is the empowerment of the elderly, especially women, through their participation in volunteer groups such as health volunteers. In general, the investigated elderly health volunteers had a moderate quality of life. The benefits of voluntary activities and consistent education in the field of self-care in accordance with the implementation of the health promotion plan in the recent years led to empowered and model health volunteers in communicating health information in the community. Therefore, it is recommended to develop proper planning for increasing the quality of self-care education programs. The limitation of this study was assessing the quality of life as self-report, in which people usually would report the behavior higher than the actual amount. Furthermore, this study was based on a convenience sample, so its findings may not be generalized to all Iranian women groups.

Conflict of Interest
The authors declare that they have no competing interests.

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Authors’ contributions
Study design: Neda Ghobeh
Data collection and analysis: Neda Ghobeh, Sohala Khodakarim
Manuscript preparation: Tayebe Marashi, Neda Ghobeh, Khodakarim Sohala, Fatemeh Pourhaji
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