Investigating the relationship between social support and quality of life in the elderly

Kamele Moghadam¹, Roya Mansour-Ghanaei¹², Mohammad Esmaeilpour-Bandboni¹, Zahra Atrkar-Roshan³

Abstract:

BACKGROUND: Dynamic aging depends on providing opportunities to improve the quality of life of the elderly. The objective of this study was to investigate the relationship between social support and quality of life in the elderly in Guilan.

MATERIALS AND METHODS: This descriptive-correlational study was conducted in the elderly who visited urban public places in the East of Guilan (mosques, parks, weekly markets, and clubs). A total of 168 elderly who met the inclusion criteria were selected through two-stage, cluster, and convenience sampling. Data were collected using Phillips Standard 23-item social support scale and 12-item quality of life scale-short form. Data were analyzed through descriptive and inferential statistics (Pearson correlation coefficient).

RESULTS: The mean score of social support in the elderly in Guilan was 73.25 ± 9.18 and the mean quality of life was obtained at 24.67 ± 7.06. Data analysis showed that there was a significant and positive correlation between social support and quality of life ($r = 0.29$, $P < 0.0001$).

CONCLUSIONS: Increased social support leads to a higher quality of life in the elderly. Thus, it is necessary to timely identify the needs and promote comprehensive social support to improve the quality of life in the elderly.

Keywords: Elderly, quality of life, social support

Introduction

Aging and an increase in the age of the elderly population is a phenomenon that neglecting it will cause many problems for many communities, including the Iranian community.¹ The World Health Organization (WHO) describes aging as a process of progressive change in the biological, psychological, and social interactions of individuals.² In developing countries, people aged 60 years and older are known as the elderly. According to the WHO, the elderly are divided into three groups of 60–74 years old, 75–90 years old, and over 90 years old.³ Accordingly, the number of the elderly in the world was 900 million and it will reach two billion people by 2050, with a growth of 12% to 22%.⁴ Older people are a rapidly growing proportion of the world’s population.⁵ Based on the housing and population census of 2016, the total elderly’s population is 7,417,091 people and the number of the elderly of Guilan is 335,313 (163,438 males and 171,875 females), and this province has the most elderly people in Iran.⁶ It is clear that the goal of the elderly’s life is not just to survive, but their quality of life is also important.⁷ The concept of quality of life is a very broad and dynamic that takes cultural, social, and environmental
individuality into attention, and according to the WHO, it understands people’s situation in life, expectations, standards, and concerns.\(^9\) Quality of life is a subjective and conceptual judgment of one’s life status or one’s satisfaction with his or her life. It is a multidimensional concept, and in the elderly, it means more emphasis on social policy and modifying social goals to create a productive life for them.\(^9\)

Quality of life in the elderly is influenced by three factors of lack of disease, adaptation to life, and mental and psychological competence. Health has been reported as the most important determinant of quality of life in the elderly, which decreases with increasing age.\(^10\) The quality of life has received much attention in the 20th century. It is affected by many variables, including religious attitudes, depression, and social support.\(^11\) Support for the elderly should not be provided merely for enhancing their life expectancy but should also increase their quality of life. Dynamic aging is the process of optimizing opportunities for health, participation, and security to improve the quality of life of older adults. Physical and social environment, socioeconomic and cultural factors, personal independence, communication with family and friends, leisure time, and physical and mental health are among the factors affecting the quality of life of people.\(^11\) Nowadays, the quality of life of populations is used as a framework for providing appropriate services with different aspects of life and allocating resources.\(^12\) Social support is defined as the actual or potential help of personal resources and individuals, groups, communities, and systems that the person is related to. The concept of social support was taken from clinical and therapeutic methods in the context of social psychology that studies coping with stress and tension and the importance of social relationships and social alteration.\(^13\) It can be stated that social support is the level of attention, affection, and assistance provided by family members, friends, and other people around the person to him or her. The elderly are among the most vulnerable groups in society that need to be covered by various supports to provide a quality of life.\(^9\) Social support is important because humans are social beings and social communication is a key factor in people’s quality of life and increased social contact can lead to improved health in the elderly.\(^14\) The effects of the disorders caused by the natural aging process are more prominent in the social dimension of the elderly’s lives, and this dimension has a great impact on health, especially the quality of life.\(^9\) Paying attention to types of social support and strengthening them can be considered as social capital to improve the quality of life and morale of the elderly.\(^15\) Considering all aspects of human existence, especially the elderly, as a vulnerable group, is important to improve their quality of life. It seems that one of the factors influencing on the quality of life is the issue of social support that largely depends on the cultural background and structure of a society. Since in Guilan province with the highest population of elderly in Iran, no similar study has been observed so far in this regard, the present study was conducted to investigate the relationship between social support and quality of life in the elderly in Guilan to use its results in the area of recognizing the level of using social support in the target population.

### Materials and Methods

In this descriptive-correlational study, a total of 168 elderly 60 years and older in the East of Guilan were selected by two-stage, cluster, and convenience sampling. At first, four clusters were selected from the Eastern cities of Guilan (Astaneh Ashrafieh, Lahijan, Langrood, and Rudsan), and then, from each cluster in equal proportion, elderly people were selected through convenience sampling method from public places (mosques, parks, weekly markets, and clubs). Inclusion criteria included an age of 60 years and higher, informed consent to participate in the study, not having mental and cognitive diseases, and the ability to participate in the study and exclusion criteria included incomplete completion of the questionnaire, reluctance to continue participation in the study, and leave the place for personal reasons. The research sample size was determined to be 168 people according to the study conducted by Rimaz et al.\(^9\) and considering 10% dropout in samples and based on the formula of \(n = \left[\frac{z_1 \cdot \alpha + Z_1 \cdot \beta}{c} \right]^2 + 3\)

\(\alpha = 0.5, r = 0.33, \alpha = 0.05, \) and \(\beta = 0.10\)

The study tool included three sections. In the first section, the elderly’s cognitive status was assessed using the clock-drawing test (CDT). If the result of the test indicated normal cognitive status, they would be considered as the main sample and included in the study. CDT is a simple and useful screening tool for cognitive disorders.\(^16\) In this test, the individual is asked to draw the clock face, put in all the numbers, and set the hands for 10 after 11. The performance of the person is rated at six levels, and a score of ≥3 is considered as cognitive impairment.\(^17\) The validity and reliability of this tool were investigated by Sadeghipour et al. who concluded that the CDT was a valid and reliable cognitive screening tool in the Iranian elderly.\(^18\)

In the second section, 23-item Phillips Social Support Questionnaire was used to assess three domains of social support, including the domain of family (8 items), friends (7 items), and other people (8 items). It is scored on a 4-point Likert scale (strongly agree = score

\[\text{score} = \frac{\text{number of agreements}}{\text{total number of items}} \times 4\]
4, agree score = 3, disagree = score 2, and strongly disagree = score 1). The minimum score for this tool was 23 and the maximum was 92, and higher scores showed more support. Its reliability coefficient was obtained at 0.75 in a pilot study of 30 target groups based on Cronbach’s alpha. In the third section, the 12-item Quality of Life Scale-Short form (SF12) is used to assess the quality of life of the individuals. It has been extensively used in various studies. This questionnaire included eight subscales. Due to a low number of items, the total score of the person is often used and the quality of life is examined in terms of general understanding of one’s health, physical function, physical health, emotional problems, physical pain, social function, vitality and vital energy, and mental health. In this questionnaire, questions 1, 8, 10, and 11 are reversed scored. Its subscales include general understanding of self-health (Question 1), physical function (Questions 2 and 3), physical health (Questions 4 and 5), emotional problems (Questions 6 and 7), physical pain (Question 8), and social function (Question 9), vitality and vital energy (Question 11), and mental health (Questions 10 and 12). The total score is the sum of scores of all questions with a minimum score of 12 and a maximum score of 48. In the present study, the reliability of SF12 was obtained at 0.76 using Cronbach’s alpha.

SPSS version 19 (IBM Company, Armonk, NY, USA) software was used for the data analysis. The data were analyzed using the Kolmogorov–Smirnov test and the results showed the normal distribution of data. Descriptive statistics and Pearson correlation coefficient were used in this regard. A numerical value of \( P < 0.05 \) was considered as significant level in all tests. The data were collected after obtaining the relevant permission and after obtaining the consent of the clients and observing the ethical considerations and under the ethics code of IR.GUMS.REC.1396.59 and in accordance with the Helsinki Declaration.

## Results

Of 168 participants, the majority of the participants (\( n = 74, 44\% \)) were in the age range of 60–65 years and the mean age of the participants was 67.85 ± 6.59 years. The demographic results of this study are presented in Table 1.

Based on the results of this study, the mean score of the quality of life in the elderly in Guilan was 34.67 ± 7.06 and the mean score of social support was 73.25 ± 9.18. Accordingly, 66.5% of the elderly had high social support. Among the social support subscales, family support (26.02 ± 4.32) had the highest mean score [Table 2].

The correlation coefficient between social support and quality of life score was obtained at 0.294, with a significance of \( P < 0.0001 \). Accordingly, the level of quality of life increases with increasing the level of social support. Similar results were obtained for the subscales of social support and quality of life [Table 3].

## Discussion

The results of this study showed that the elderly had relatively high and acceptable social support. Furthermore, based on the results of the present study, the family support had a higher impact compared to the support of friends and others, and it highlights the role of members of family and education and investment in this group of people. This result is consistent with the

| Variable                        | Frequency (%) |
|---------------------------------|---------------|
| Gender                          |               |
| Male                            | 85 (50.6)     |
| Female                          | 83 (49.4)     |
| Marital status                  |               |
| Single                          | 1 (0.6)       |
| Married                         | 112 (66.7)    |
| Divorced                        | 51 (30.4)     |
| Widowed                         | 4 (2.3)       |
| Income sources                  |               |
| Salary                          | 118 (70.2)    |
| Children                        | 30 (17.9)     |
| Others                          | 20 (11.9)     |
| Staying with                    |               |
| Alone                           | 15 (9)        |
| Spouse/children                 | 153 (91)      |
| Education                       |               |
| Illiterate                      | 37 (22)       |
| High school                     | 51 (30.4)     |
| Diploma                         | 43 (25.6)     |
| Academic                        | 37 (22)       |
| Diseases                        |               |
| No disease                      | 63 (37.5)     |
| Heart disease and high blood pressure | 40 (23.8) |
| Renal disease                   | 9 (5.4)       |
| Osteoarthritis                  | 16 (9.5)      |
| Diabetes mellitus               | 32 (19)       |
| Respiratory                     | 8 (4.8)       |

| Statistical index               | Means±SD      | Minimum-maximum |
|---------------------------------|---------------|-----------------|
| Family support                  | 26.02±4.32    | 14-28           |
| Friend support                  | 21.70±2.86    | 16-32           |
| Others, support                 | 25.52±3.23    | 16-32           |
| Total social support            | 73.25±9.18    | 46-92           |
| Quality of life                 | 34.67±7.06    | 16-48           |

SD=Standard deviation
results of the studies conducted by Seyfzadeh (2016), who found that more than half of the elderly had high levels of social support,[19] and Soltani et al. (2015).[20] Ibrahim et al. (2013)[21] found high levels of social support in the elderly and attributed it to funding from farms, children, and government, which is in accordance with the results of this study, while in Sharoni et al.’s study, the overall mean of the social support scale was moderate,[22] which this difference could be attributed to differences in the target group and cultural conditions.

In the present study, the mean score of the quality of life in the elderly was at a moderate level, which is in line with the results of the studies conducted by Khaje-Bishak et al. (2014),[23] Sahin (2019),[24] Aryankhesal et al. (2019),[25] and Azadi et al. (2016).[26] However, Izadi et al. (2013)[27] and Miranda et al. (2016)[28] reported that the mean quality of life in the elderly was at a desirable level. This difference could be due to the differences in living environment, economic, and social conditions.

The results of this study showed that a significant and direct relationship was found between the mean score of social support and quality of life in the elderly. In a study conducted on Malaysian rural elderly by Ibrahim et al., emotional and information support had a major impact on the quality of life of the elderly.[21] Rimaz et al. reported that although the relationship between social support dimensions and total score of quality of life was not statistically significant, social support dimensions had a significant relationship with physical, mental, and social function components of quality of life, indicating the effect of social support on the quality of life.[9] In the studies conducted by Saber and Nosratabadi,[7] Chen et al.,[29] Larocca and Scogin,[30] Sahin et al.,[24] and Ajh et al.,[31] it was found that with increasing the social support of the elderly, the quality of life would be higher that is in accordance with the results of this study. In general, the problems of the elderly increase with increasing their age, so it requires comprehensive cooperation of the family and responsible authorities. Given the important role of social support in promoting the quality of life of the older adults in different areas, it can be considered as an important factor in providing a good quality of life for individuals, which, in turn, will result in an increased sense of self-worth.

One limitation of this study, which may have led to limited generalizability of the findings of this study, was the small size of the population and conducting it only in the Eastern cities of Guilan Therefore, it is recommended to conduct future studies with a larger sample size in the whole province. Furthermore, cross-sectional nature of the study and dependency of the elderly’s answers to their psychological condition and time and place of answering the questions were other limitations of the present study. To overcome these problems, the researchers invited the participants and discussed with them on their interesting subject and postponed the interview for the desired time of the elderly.

### Conclusions

The results of this study revealed that paying attention to different types of social support in the elderly can be considered as one of the inexpensive resources and as a source for generating social capital to improve the quality of life and mental health of the elderly. If we define the aging period after the transition from childhood and adolescence, we will need proper planning to maximize the use of supportive resources to facilitate entering into aging with the least concern and with a high quality of life and peace of mind. When the elderly in a community are confident that they are supported socially, they can have a good quality of life and life expectancy in the whole community will be higher. Based on the findings of the study, increasing social support for the elderly can have a significant impact on their quality of life, so it is imperative that the needs and social support of the elderly must be taken into account in macro-country planning, and nurses are educated to assess the quality of social support in the elderly.

### Acknowledgments

This study was derived from a master’s thesis in the elderly nursing. It was approved by the research deputy of Guilan University of Medical Sciences in Rasht, Iran (No. 96022300 and Ethics code: IR.GUMS.REC.1396.59). Hereby, the authors would like to thank their financial support and also appreciate all elderly who participated in this study.

### Financial support and sponsorship

This project was funded by Research and Technology Deputy of Guilan University of Medical Sciences (No. 96022300).

### Conflicts of interest

There are no conflicts of interest.

---

Table 3: Correlation between social support and its subscales and quality of life in the elderly under the study

| Statistical relationship | Total social support | Family support | Friend support | Others’ support |
|--------------------------|----------------------|----------------|---------------|----------------|
| Pearson correlation coefficient | 0.294 | 0.308 | 0.248 | 0.203 |
| $P$ | <0.0001 | <0.001 | <0.001 | <0.001 |

---
References

1. Rezvani M, Mansouriyan H, Ahmadabadi H, Ahmadabadi F, Parvai Here-Dasht SH. An assessment on factors affecting the quality of life the elderly in rural areas: Case study: Neishabour county (Persian). J Rural Res 2014;4:301-26.

2. Shaheen HM, Saleh EA. Comparative study between elderly with medical problems living in end welling houses and with families in Banha City. Menoufia Med J 2012;30:44-50.

3. GhanbarihashehMabadi B, Mojarradkhahani A, GhanbarihashehMabadi M. The relationship between other people’s mental health with their family support and psychosocial well. Being Res Rehabil Sci 2013;8:1122-31.

4. World Health Organization. 10 Facts on Ageing and the Life Course. World Health Organization; 2015.

5. World Health Organization. Data and Statistics. URL Available from: http://www.who.int/topics/ageing/en/. [Last accessed on 2013 Aug 01].

6. Iranian Statistic Center. Selected Findings of the 2016 National Population and Housing Census. Iranian Statistic Center Web Site. Available from: https://www.amar.org.ir/en/Population-and-Housing-Censuses. [Last accessed on 2017 Aug 10].

7. Saber M, Nosratabadi M. Social support and health-related quality of life in elderly people covered by the Welfare organization of Kerman city. J Health Develop 2014;3:189-99.

8. Pernambuco CS, Rodrigues BM, Bezerra JC, Carrielo A, Fernandes A, Vale R, et al. Quality of life, elderly and physical activity. Health 2012;4:88-93.

9. Rimaz S, Abolghasemi J, Seraji S. The relationship of different dimensions of social support with older adults’ quality of life in the 8th district of Tehran in 2013. J Educ Community Health 2015;2:29-37.

10. Panaghi L, Abarashi Z, Mansoori N, Dehghani M. Quality of life, elderly and related demographic factor of the elderly in Tehran. Iran J Ageing 2010;4:77-87.

11. Safavi S. Comparing quality of life, social support and depression among elderly living at home and nursing home residents. JGN 2015;1:34-46.

12. Afzali S. Relationship Between Quality of Life and Perceived Social Support and Life Expectancy among People with Disabilities and Amputations. Thesis for the MD Degree. The Islamic University of Marvdasht. 2012. p. 121.

13. Kasprzak E. Perceived social support and life-satisfaction. Polish Psychol Bulletin 2010;41:144-54.

14. Niknam F, Homayouni A, Mohammadi AK. Relationship among social support, quality of life and loneliness of the elderly. Int J Adv Biotechnol Res 2016;7:1365-73.

15. Zarinnejad G, Saberi Noghabi E, Delshad Noghabi A, Koshyar H. The Relationship between social support and morale of elderly people in Mashhad in 2012. J Rafsanjan Univ Med Sci 2014;13:3-12.

16. Lerner JA, Julayanont P, Phillips N, Chertkow H, Nasreddine Z. Cognitive Screening Instruments. Switzerland, Springer; 2017. p. 67-108.

17. Asl AM, Meh dizadeh M, Roudbari PR, Habibi SA, Khatoon JN, Taghizadeh G. Reliability and Validity of the Persian version of the Clock Drawing Test in Iranian Patients with Idiopathic Parkinson’s Disease. J Clin Phys Res 2018;3:78-81.

18. Sadeghipour Roodsari M, Akbari Kamrani AA, Foroughan M, Mohammadi F, Karimloo M. Quality of life and reliability of the clock drawing test in older people. Iran J Ageing 2013;8:48-58.

19. Seyfzadeh A. The relationship between perceived social support and health in the elderly adults case study: Azarshahr. J Gerontol 2016;1:40-7.

20. Soliani T, Morowats Ghahrahlabad M, Falahzadeh H, Jafari A. Social support and its relation with daily activities among elderly people of Yazd. J Community Health Res 2015;3:270-7.

21. Ibrahim N, Din NC, Ahmad M, Ghazali SE, Said Z, Shahar S, et al. Relationships between social support and depression, and quality of life of the elderly in a rural community in Malaysia. Asia-Pacific Psych 2013;5:59-66.

22. Ahmad Sharoni SK, Shdaifat EA, Mohd Abd Majid HA, Shohor NA, Ahmad F, Zakaria Z. Social support and self-care activities among the elderly patients with diabetes in Kelantan. Malasy Fam Physician 2015;10:34-43.

23. Khaje-Bishak Y, Payahoo L, Pourghasem B, Jafarabadi MA. Assessing the quality of life in elderly people and related factors in Tabriz, Iran. J Caring Sci 2014;3:257.

24. Şahin DS, Özer Ö, Yanardag MZ. Perceived social support, quality of life and satisfaction with life in elderly people. Educ Gerontol 2019;45:69-77.

25. Larner A, Julayanont P, Phillips N, Chertkow H, Nasreddine Z. Cognitive Screening Instruments. Switzerland, Springer; 2017. p. 67-108.

26. Asl AM, Meh dizadeh M, Roudbari PR, Habibi SA, Khatoon JN, Taghizadeh G. Reliability and Validity of the Persian version of the Clock Drawing Test in Iranian Patients with Idiopathic Parkinson’s Disease. J Clin Phys Res 2018;3:78-81.

27. Sadeghipour Roodsari M, Akbari Kamrani AA, Foroughan M, Mohammadi F, Karimloo M. Quality of life and reliability of the clock drawing test in older people. Iran J Ageing 2013;8:48-58.

28. Seyfzadeh A. The relationship between perceived social support and health in the elderly adults case study: Azarshahr. J Gerontol 2016;1:40-7.

29. Soliani T, Morowats Ghahrahlabad M, Falahzadeh H, Jafari A. Social support and its relation with daily activities among elderly people of Yazd. J Community Health Res 2015;3:270-7.

30. Ibrahim N, Din NC, Ahmad M, Ghazali SE, Said Z, Shahar S, et al. Relationships between social support and depression, and quality of life of the elderly in a rural community in Malaysia. Asia-Pacific Psych 2013;5:59-66.

31. Ahmad Sharoni SK, Shdaifat EA, Mohd Abd Majid HA, Shohor NA, Ahmad F, Zakaria Z. Social support and self-care activities among the elderly patients with diabetes in Kelantan. Malasy Fam Physician 2015;10:34-43.

32. Khaje-Bishak Y, Payahoo L, Pourghasem B, Jafarabadi MA. Assessing the quality of life in elderly people and related factors in Tabriz, Iran. J Caring Sci 2014;3:257.

33. Şahin DS, Özer Ö, Yanardag MZ. Perceived social support, quality of life and satisfaction with life in elderly people. Educ Gerontol 2019;45:69-77.

34. Aryankhesal A, Niknam N, Hasmani M, Mengelizadeh N, Aghaei N, Ghae chukamei Z, et al. Determining the relationship between health literacy level and quality of life among the elderly living in nursing homes. J Educ Health Promot 2019;8:225.

35. Azadi A, Taghineghad H, Azizi M, Mahmidi Y, Jamalaldin H. Scrutiny the quality of life elderly in Ilam and its related factors in 2015. Sci J Nurs Midwifery Paramed Fac 2016;2:29-37.

36. Izadi S, Khamehvar A, Aram SS, Yazdanpanah Nozari A. Social support and quality of life of elderly people admitted to rehabilitation centers. J Mazandaran Univ Med Sci 2013;23:101-9.

37. Miranda LC, Soares SM, Silva PA. Quality of life and associated factors in elderly people at a Reference Center. Cien Saude Colet 2016;21:3533-44.

38. Chen Y, Hanks A, While AE. Quality of life and related factors: A questionnaire survey of older people living alone in Mainland China. Qual Life Res 2014;23:1593-602.

39. LaRocca MA, Scogin FR. The Effect of Social Support on Quality of Life in Older Adults Receiving Cognitive Behavioral Therapy. Clin Gerontol 2015;38:131-48.

40. Aghaei N, Ghaedchukamei Z, et al. Relationships between social support and depression, and quality of life of the elderly in a rural community in Malaysia. Asia-Pacific Psych 2013;5:59-66.

41. Ahmad Sharoni SK, Shdaifat EA, Mohd Abd Majid HA, Shohor NA, Ahmad F, Zakaria Z. Social support and self-care activities among the elderly patients with diabetes in Kelantan. Malasy Fam Physician 2015;10:34-43.

42. Khaje-Bishak Y, Payahoo L, Pourghasem B, Jafarabadi MA. Assessing the quality of life in elderly people and related factors in Tabriz, Iran. J Caring Sci 2014;3:257.

43. Şahin DS, Özer Ö, Yanardag MZ. Perceived social support, quality of life and satisfaction with life in elderly people. Educ Gerontol 2019;45:69-77.

44. Aryankhesal A, Niknam N, Hasmani M, Mengelizadeh N, Aghaei N, Ghaechukamei Z, et al. Determining the relationship between health literacy level and quality of life among the elderly living in nursing homes. J Educ Health Promot 2019;8:225.

45. Azadi A, Taghineghad H, Azizi M, Mahmidi Y, Jamalaldin H. Scrutiny the quality of life elderly in Ilam and its related factors in 2015. Sci J Nurs Midwifery Paramed Fac 2016;2:29-37.

46. Izadi S, Khamehvar A, Aram SS, Yazdanpanah Nozari A. Social support and quality of life of elderly people admitted to rehabilitation centers. J Mazandaran Univ Med Sci 2013;23:101-9.

47. Miranda LC, Soares SM, Silva PA. Quality of life and associated factors in elderly people at a Reference Center. Cien Saude Colet 2016;21:3533-44.

48. Chen Y, Hanks A, While AE. Quality of life and related factors: A questionnaire survey of older people living alone in Mainland China. Qual Life Res 2014;23:1593-602.