



Social Support among the Elderly Living in Shahroud, Iran

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Abstract

Background: Social support is one of the key aspects of social health among the elderly, significantly affecting other aspects of health. This study attempted to explore the extent to which the elderly benefit from social support and the contributing factors among the elderly living in Shahroud, northeastern Iran.

Methods: During 2015-2016, a total of 496 elderly residents of Shahroud were selected through random cluster sampling method. Data were collected by a questionnaire for capturing demographic variables (age, sex, marital status, educational level, number of children and grandchildren, economic status, health status, diseases) and Lubben Social Network Scale (LSNS). The data were analyzed through independent t-test, simple and multiple linear regressions, and ANOVA.

Results: Of the 496 elderly participants in the study, 273 (55.3%) were female with a mean age of 67.9 ± 7.84 years old. The mean score of social support achieved by the elderly was 9.0, ranging from 8.19-9.81 at the confidence interval of 95%. There was no significant relationship between age and social support ($P=0.9$). However, there was a significant relationship between social support and marital status. The difference in the average score of social support in married elderly was significantly less than that of single, widow(er), and divorced elderly ($P<0.001$).

Conclusions: The elderly in Shahroud were poorly covered by social support. In order to improve this situation, it is crucial to devise appropriate plans on family to population scale.

Keywords: Social support, Elderly, Iran.

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categorized in different ways, including emotional support (offering of empathy, concern, affection, love, trust, acceptance, intimacy, encouragement or caring),⁶ tangible support (provision of financial assistance, material goods or services),⁷ informational support (provision of advice, guidance, suggestions, or useful information to someone)⁶ and companionship support (a type of support that gives someone a sense of social belonging).⁷ According to the results of previous studies, social support is particularly important for several reasons. The elderly find social support as a factor bringing about positive experiences and subsequently a sense of self-worth as well as anxiety reduction.⁸ Furthermore, effective and timely social support can curtail the likelihood of frequent hospital admissions⁹ and mortality rate,¹⁰ improve the quality of life,¹¹ reduce depression¹² improve self-efficacy with self-care,¹³ and promote the mental health and morale among the elderly.¹⁴ It also protects the elderly against loneliness, harmful health conditions, and morbidity.¹⁵ Despite the importance of this issue in the vulnerable elderly community, social support decreases with age.¹⁶ An overview of results suggests that limited number of studies have focused on the extent to which social support is available particularly to social groups with special needs and situations, including the elderly.

Although a few studies have investigated the association between social support and other outcomes¹⁷⁻²⁰ in Iran, to the best of our knowledge, there was only one study that evaluated social support in elderly which concluded that social support was moderate in Bandar-Abbas.²¹

This study intended to explore the status of social support and its contributing factors in a sample of urban elderly in Iran. We previously published the main result of this study as a letter to editor;²² here we present the full article.

Materials and Methods

This was a descriptive-analytical, cross-sectional research, where the target population comprised all women and men over 60 years of age living in Shahroud, northeast Iran during 2016. The participants were selected through random cluster sampling (33 clusters with 15 people). Initially, 33 random locations were selected as cluster heads based on the census list of Shahroud in 2015. From these points on, visits were made to surrounding house doors from the right side until there were 15 participants per cluster. The inclusion criteria were: age over 60, residence in Shahroud, ability to answer questions, and willingness to participate in the research. The exclusion criteria were current hospitalization, residence in sanatorium, psychological problems, or a significant reduction in cognitive ability. Having been briefed on the goals and methods, all

Introduction

Nowadays, aging is one of the phenomena discussed in the realm of global healthcare, as the elderly population is growing due to an expansion in life expectancy. According to World health organization (WHO), it has been estimated that between 2015 and 2050, the proportion of the world's population over 60 years will nearly double from 12% to 22%.¹ Iran is a country with a population of about 79 million, of which people aged 60 and over make up about 8%.² Given the definition of health provided by WHO, health refers to "complete physical, mental, and social well-being, not merely negatively as the absence of disease or infirmity".³ Under this definition, social health is one of the important aspects of health. Helgeson⁴ argued that social support involves the assistance provided by members of social networks to an individual. Cobb⁵ described social support as a concept, where the elderly feel valuable and loved by social networks and are mutually committed. Social support can be

participants in the research (496 elderly) signed written informed consent. The data collection tools in this study included demographic questionnaire and Lubben Social Network Scale (LSNS).²³ The LSNS is a questionnaire which can assess the level of social support among the elderly. It consists of 10 items, of which 3 are related to family support network, 3 deal with friend's support network, 2 are related to confidential relations, 1 is associated with assisting others, and 1 addresses life management. LSNS contains 10 questions each of which is scored from 0 to 5. The final score ranged from a minimum of 0 and a maximum of 50, with higher scores implying greater social support. Depending on the extent of social support, the elderly was divided into four groups:

- Severely limited on social network support: Scores less than 20
- Subjects at high risk of social isolation: Scores between 21 and 25
- Subjects at moderate risk of social isolation: Scores between 26 and 30
- Subjects at low risk of social isolation: Scores above and equal to 31

The Persian version of this questionnaire was verified by Dadgari et al. (unpublished paper).

The demographic questionnaire included: age, sex, marital status, educational level, number of children and grandchildren, economic status, diseases, weight and height of the participants. Data were analyzed through independent t-test, analysis of variance, and linear regressions. The participants' economic status was determined by inquiring their home assets. Then, using principal component analysis a new variable which divided participants to economic groups was constructed. The participants were then divided into three categories: low, medium, and high economic status. The effect of cluster sampling was considered in calculating confidence level and significance intervals of 0.05 used in all tests.

This study was approved by ethics committee of Shahrood University of Medical Sciences (Ethics code: IR.SHMU.REC.1394.175). All participants signed informed consent.

Results

The study included 496 elderly people, of whom 273 (55.3%) were female. The age range of participants was 60-94

years old with an average age of 67.9 and a standard deviation of 7.8. The mean total score for social support was 9.0 (95% CI: 8.2 - 9.8), ranged between 0 and 23. The social support score was 8.8 in men and 9.1 in women which is not statistically different ($P=0.411$). Table 1 describes social support score by different demographic variables. The mean score of social support in married elderly was significantly less than that of single, widow(er) and divorced elderly ($P<0.001$). This score did not differ significantly in other subgroups of variables under study.

Table 1. Social support scores according to demographic variables, Shahrood, Iran, 2016

Variables	Mean (95% CI)	P.V
Gender		
– Male	8.82 (7.78-9.86)	0.411*
– Female	9.14 (8.41-9.87)	
Age Groups		
– 60-69	9.05 (8.07-10.02)	0.893**
– 70-79	8.78 (7.72-9.84)	
– 80-89	8.96 (7.45-10.46)	
– ≥ 90	9.66 (7.38-11.95)	
Marital status		
– Married	8.64 (7.72-9.55)	<0.001*
– Divorced, Single, Widowed	10.57 (9.52-11.63)	
Diabetes		
– Yes	8.9 (8.14-9.99)	0.771*
– No	9.03 (8.59-9.48)	
Hypertension		
– Yes	8.89 (8.06-9.73)	0.396*
– No	9.25 (8.16-10.35)	
History of CVD		
– Yes	8.42 (7.64-9.19)	0.127*
– No	9.14 (8.7-9.58)	
Education		
– Illiterate	9.42 (8.62-10.22)	0.721**
– Elementary	8.91 (7.99-9.83)	
– Secondary	8.79 (7.39-10.18)	
– Diploma and Upper	8.94 (6.37-11.51)	
Economic Status		
– Low	9.14 (8.49-9.79)	0.063**
– Moderate	9.49 (8.42-10.56)	
– High	8.37 (7.20-9.53)	

* Independent t-test; ** ANOVA

Linear regression models revealed that except for marital status, other investigated variables did not have any association with social support in elderly. In multiple linear regression, social support score was 1.82 higher in unmarried (divorced, single, widowed) participants (table 2).

Table 2. The association of independent variables and social support score, Shahrood, Iran, 2016.

Independent variables	Simple linear regression			Multiple linear regression		
	Coefficients	95%CI	P.V	Coefficients	95%CI	P.V
Age	-0.00	-0.07 to 0.06	0.958			
Gender (Male=0, Female=1)	0.32	-0.36 to 1.00	0.341			
Marital Status (Married=0, Other=1)	1.94	0.72 to 3.16	0.003	1.82	0.51 to 3.13	0.008
History of Diabetes	-0.20	-1.11 to 0.71	0.654			
Hypertension	-0.36	-1.32 to 0.60	0.448			
History of CVD	0.32	-0.48 to 1.13	0.411			
Education	0.01	-0.14 to 0.15	0.906			
Economic Status						
– Low	Reference	-	-			
– Moderate	0.35	-0.67 to 1.37	0.484			
– High	-0.78	-1.95 to 0.40	0.186			
Body Mass Index	0.09	0.00 to 0.18	0.045	0.09	-0.00 to 0.17	0.052

Discussion

According to the results, the mean score of social support in the elderly was 9.0. This indicated that social support was very poor in this community. This finding is inconsistent with another study,²¹ which reported that social support for elderly was moderate. In another study, Khalili et al.²⁴ found that the mean score for perceived social support was 71.16. These two studies used different tools for measuring social support. Note that LSNS is exclusive for the elderly, while other tools have focused on almost all ages and are not suitable to measure social support in the elderly. Nonetheless, Crook et al.²⁵ assessed the extent to which the elderly benefited from social support based on LSNS, where the results were moderate.

This study demonstrated that social support is not significantly correlated with age. Apparently, the most important reason for this finding is the very low score of social support in elderly under study. This is consistent with the results obtained by Hosseinian et al.²¹ Meanwhile, Melillo et al.²⁶ argued that the elder's daily performance diminished with age. They often need more help because of the death of a spouse. Hence, social support decreases at older ages.

There was a significant relationship between marital status and social support. Indeed, married people had less social support than other marital groups did. Nevertheless, Salinero et al.²⁷ stated that married seniors have higher social protection than other groups. According to the results of the present study, widow(er)s and divorced people seem to have been more concerned as a vulnerable community by family members and other social networks.

In this study, there was no significant relationship between gender and social support. Pasha et al.²⁸ also reported that gender cannot be an effective factor in the extent of social support for men and women. Alipour et al.²⁹ reported a greater level of social support among men than among women, which was contradictory in another study by Cornwell et al.³⁰ Cornell believed that women enjoyed higher social support owing to their greater capability to maintain social relations. Melchiorre et al.¹⁵ also stated that women had lower social support than men did due to the lack of independent source of income for women. We believe that in this study, however, the elderly's level of social support, whether male or female, was so poor that the difference between the two genders was proved insignificant.

In this study, social support was not significantly correlated with level of education. Nonetheless, Mackinnon et al.³¹ found a significantly positive correlation between social support and level of education. Indeed, higher level of education led to higher social support. Conversely, Hosseinian et al. in 2013²¹ argued there was no significant relationship between social support and level of education, which is in line with the results of this study. Researchers believe that social support for the elderly is not affected by level of education due to strong emotional relationships in Iranian societies.^{9,15} In developed societies, however, the elderly enjoy high social support owing to their ability to work and participate in social activities given their different lifestyles and cultures. Therefore, the educated elderly tend to have higher social support.^{9,15}

In this study, there was no significant relationship between social support and number of children and grandchildren. This was consistent with the findings of Hosseinian et al.²¹ that the findings suggested there was no significant relationship between social support and economic status. This finding is inconsistent with the results obtained by Hosseinian et al. Indeed, they observed that the elderly possessing higher the income and economic status had a greater social support.²¹ Low income was strongly associated with lack social support.³² Indeed, it is believed that social support is more essential for low income elderly, as they are more subject to threatening factors such as malnutrition and abuse. However, people with high income and high economic status can afford their healthcare, have proper diet, take trips, and plan their lives. The causes of inconsistency between the results of the current study and those of similar studies may be very low social support in the entire sample and different methods for measuring economic status. In previous studies, the economic status was determined merely as family income, which is not a suitable method in developing countries, while in the current study according to the recommendation of the World Bank,³³ the economic status of households was determined more precisely.

The current study included only urban population of Shahroud which is a limitation of this research. Therefore, it is recommended that more in-depth studies both in urban and rural residents be conducted on various societies with different cultures and races. The Persian version of LSNS questionnaire has not yet been published which may be considered as another limitation.

The results suggested that social support in elderly people in Shahroud city was very poor especially in married individuals. Considering the rising number elderly, it is critical to plan new interventions for promotion of social support in elderly.

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Conflict of Interest

The authors declared that they have no conflict of interest.

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