Social support and health-related quality of life among older adults: a descriptive study

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Abstract： **Background:** Social support is presently receiving increased attention in health care. Many few studies investigated about the association of social support and health among elderly people in Iran. The purpose of the study was to ascertain if a relationship exists between social support and health-related quality of life of older adults. **Methods:** This was a cross sectional study. The study participants were 180 elders aged 60 years and over living in Tehran, Iran. In addition to demographic information the Social Support Scale (SSS) and the Short Form Health Survey (SF-36) were used to collect data. The data were analyzed in a descriptive fashion. **Results:** The findings showed a high level of perceived social support among older adults. The highest and lowest aspects of health-related quality of life derived from the SF-36 were social functioning and physical functioning, respectively. Furthermore the results from Spearman test indicated that there were significant correlation between social support and all aspects of the SF-36. The correlation between social support and vitality was the highest. **Conclusion:** The findings suggest that social support could play an important role in improving health-related quality of life of older adults.
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Background

The population of older adults is increasing at a rapid rate. In 2025, there will be about 1.2 billion people over the age of 60; of which 80% will be living in developing countries [Kuhirunyaratn,2007].

However, while considerable decline appear in the health of the elderly, their ability to obtain their health needs seems getting worse [Tajvar M, 2008& Suely Caribe de Araujo S,2006]. Thus, providing other resources, such as social support, is essential for maintaining and improving health among elderly populations.

Social support improves people's health and well-being. Studies have shown that higher levels of social support are associated with better health and well-being among older adults [Ashida S, 2008]. There are two main pathways through which social support might influences well being. One is the direct or main effect of social support. The perceived availability of social support can be a source of general positive effect, enhanced self-esteem, and feeling of belonging and security. In turn, these positive psychological states may result in improved neuroendocrine and immune function as well as greater motivation to engage in health behaviors. The second way that social support influences the well-being of individuals is by buffering the adverse effects of stressful life events [Cohen S, 1985]. According to this stress-buffering model from Cohen, the adverse effect of the stressor on well-being can be reduced if an individual feels that others in the social network will provide the resources or assistance necessary to cope with the stressor [Ashida S, 2008].

Although Iran still has a relatively young population, the country has started to experience the population ageing too. The proportion of elderly is projected to double in less than 20 years [Tajvar M, 2008]. In eastern societies including Iran elderly people are considered wise and respected by the younger generation. In Iran the elderly are treated very respectfully and they are privileged by a high position among the family members and are supported by their family for all their needs. As such we aimed to ascertain if a relationship exists between social support and health-related quality of life of older adults. Many few studies investigated about the association of social support and health among elderly people in Iran.

Methods

Study design and data collection

This was a descriptive study in order to determine the correlation between social support and health among elderly people living in selected areas of Tehran. Eligible participants consisted of all 60-years-old citizens and over attending the 'cultural homes' affiliated to Tehran municipality located at district 5 and 6. Participants were excluded if they had history of psychological disorders. The data was collected by a three-part questionnaire.

The questionnaire

The study questionnaire consisted of three parts:

1. Socio-demographic information including recording of age, gender material status, living arrangement, educational level and employment.

2. The Short Form Health Survey (SF-36) in order to collect data on health-related quality of life. The scale consists of eight subscales: Physical functioning (PF), Role limitations due to physical problems (RP), Bodily pain (BP), General health perception (GH), Vitality (VT), Social functioning (SF), Role limitations due to emotional problems (RE), and Mental health (MH). Scores rang from 0 to 100 for each subscale with higher scores indicating a better condition. Psychometric properties of the Iranian version are well documented [Motazeri A, 2005].

3. Social support: 36 items were adapted from the Multidimensional Scale of Perceived Social Support (MSPSS) [Zimet GD, 1988], the Duke-UNC Functional Social Support Questionnaire (SSQB) [9], the Social Support Questionnaire (SSQ) [10] and the Norbeck Social Support Questionnaire (NSSQ) [11] in order to measure perceived emotional, instrumental, informational, and appraisal social support. Each item is rated on a 5-point Likert scale ranging from 5 = strongly agree to 1 = strongly disagree. The Cronbach's $\alpha = 0.91$ and intraclass correlation coefficient ICC = 0.88 indicated a desirable reliability for the scale [12]. For the analysis purpose we categorized social support into three categories: family support, support from friends, and support from specific sources (non-governmental organizations, mosques, etc.).

Data analysis

Descriptive statistics were used to explore the data. Mann-Whitney U test and Kruskal-Wallis analysis were performed to compare mean scores. Spearman correlation was used to assess associations between social support and the SF-36 score.

Ethics

The Ethics Committee for Research in Nursing & Midwifery, Shahid Beheshti University of Medical Sciences, approved the study. All participants gave their consent.

Result

In all 180 older adults were encoded in the study. Of these 106 participants were male (58.9%) and 74 (41.1%) were female. The mean age of participants was 74 (SD = 7.2) years and most participants were married (73.3%). The characteristics of the study sample are presented in Table 1.

The descriptive statistics for the SF-36 subscales and the social support are presented in Table 2. The highest score on the SF-36 was for the social functioning (82.5±20.6) and the lowest score was for the physical functioning (68.7±22.1). We divided the total social support score into three subcategories to further examine the association between sources of social support and the SF-36 subscales. Thus, Table 2 presents social support dimensions as measured by the social support scale. The highest dimension of social support was the family support (87.5±22.1), while the lowest dimension was the support received from specific sources (55.6±15.1).

Correlation between participants' socio-demographic characteristics and social support are shown in Table 3. There were no significant associations between social support and gender, employment and education. However, there was significant correlation between age and receiving support from specific sources. Additionally we found no significant associations between family support and material status and living condition.

Correlation between the SF-36 and social support are shown in Table 4. Family support had significant correlation with the SF-36 subscales except for the physical functioning. The maximum correlation was observed for the mental health (r =0.376, P <0.001). There was significant correlation between support received from friends and all dimensions of the SF-36. The maximum correlation was observed for the vitality (r = 0.397, P < 0.001). Furthermore support received from specific sources had just significant correlation with physical functioning (r = 0.243, P < 0.001) and there were no significant correlation between support received from specific sources and the rest of health-related quality of life dimensions.

Table 1: Socio-demographic characteristics of the participants (n = 180)

		No	%
Sex			
	Female	74	58.9
	Male	106	41.1
Age group			
	65-69	54	30.0
	70-74	47	26.1
	75-79	27	15.0
	80-84	32	17.8
	85-89	16	8.9
	≥90	4	2.2
Marital status			
	Single	3	1.7
	Married	132	73.3
	Widowed	45	25.0
Education			
	Illiterate	31	17.2
	Primary	60	33.3
	Secondary	58	32.3
	Higher	31	17.2
Employment status			
	Retired	115	63.9
	House wife	50	27.8
	Employed	15	8.3
Living condition			
	Alone	34	18.9
	With husband/wife	104	57.8
	Relative	28	15.6
	Children	13	7.1
	Caretaker	1	0.6

Table 2: The SF-36 and social support scores

	Mean	±SD
The SF-36 subscales		
Physical functioning	68.7	22.1
Role physical	75.7	39.2
Bodily pain	71.2	22.6
General health	74.3	18.8
Vitality	74.4	20.3
Social functioning	82.5	20.6
Role emotional	77.4	39.3
Mental health	82.2	18.0
Social support		
Family support	87.5	22.1
Support from friends	68.3	23.5
Support from specific sources	55.6	15.1

Table 3. Relationship between social support and socio-demographic

		Family support	Support from friends	Support from specific sources
		Mean (SD)	Mean (SD)	Mean (SD)
Gender				
	Male	88.3(21.4)	69.2(24)	56.1(15.7)
	Female	87(23.3)	67.1(23.1)	55.3(14.3)
	P	*0.717*	*0.277*	*0.730*
Age group				
	65-69	83.8 (26.1)	71.2 (24.7)	59.1(18)
	70-74	87.1 (24.6)	73.5 (21)	54.9 (15.3)
	75-79	90.9 (16.9)	67.7 (18.8)	52 (6)
	80-84	91.1 (15.1)	59.9 (23)	52.2 (11.2)
	85-89	87.4 (21.5)	59.4 (32.4)	60.9 (20.3)
	≥90	93.7 (12.5)	75 (5.9)	50 (0.0)
	P	*0.160*	*0.010**	*0.035**
Marital status				
	Married	90.6 (19.3)	69.1 (24.2)	56.2 (15.6)
	Widowed	80.4 (24.8)	65.8 (21.6)	55.7 (11.9)
	P	0.001*	0.227	0.947
Education				
	Illiterate	86.1 (25.8)	60.1 (29)	55.7 (18.4)
	Primary	89.9 (17.4)	69.6 (22)	53.7 (9.6)
	Secondary	89.3 (16.9)	61.9 (24)	49.2 (7.2)
	Higher	87.6 (24.2)	72.2 (19.9)	58.8 (16.8)
	P	*0.781*	*0.139*	*0.148*
Employment status				
	Retired	86.9 (23.6)	65.9 (25.9)	55.2 (16.4)
	House wife	86.8 (22.9)	70.2 (18.8)	55 (11.1)
	Employed	90.6 (11.9)	71.7 (23.4)	60.7 (17.3)
	P	*0.852*	*0.571*	*0.416*
Living condition				
	Alone	76.4 (26.8)	68.1 (21.7)	52.8 (13.2)
	With husband/wife	93.6 (14.8)	70.3 (23.4)	56.1 (15)
	Relative	83.3 (27)	64.2 (27.4)	58.6 (14.3)
	With children	77 (30.9)	63.8 (22.3)	53.8 (22.4)
	P	*< 0.0001**	*0.306*	*0.315*

* Significant findings

Table 4: Correlation between the SF-36 and social support

	Family support		Support from friends		Support from specific sources	
	r	P	r	P	r	P
Physical functioning	0.061	0.41	0.255**	< 0.001	0.243**	0.001
Role physical	0.249**	0.001	0.296**	< 0.001	0.058	0.44
Bodily pain	0.243**	< 0.001	0.216**	0.004	0.109	0.14
General health	0.301**	< 0.001	0.282**	< 0.001	0.061	0.42
Vitality	0.289**	< 0.001	0.397**	< 0.001	0.138	0.06
Social functioning	0.296**	< 0.001	0.186*	0.01	0.079	0.29
Role emotional	0.245**	0.001	0.184*	0.01	0.062	0.40
Mental health	0.376**	< 0.001	0.272**	< 0.001	0.002	0.97

* Correlation is significant at the 0.05 levels.
** Correlation is significant at the 0.01 levels.

Discussion

This study examined the correlation between social support and health-related quality of life in an urban Iranian population. Such information would be useful since there is limited understanding about the relationship between social support and health in Iran. According to the latest Iranian census the elderly population aged 60 and above account for 9% of the whole population and the census bureau predicted that the elderly population aged over 60 will rise to 8.5 million in 2020 and 10.5 million in [13].

We found no relationship between social support and educational level. On the contrary, Cornman et al. stated that the elderly who had a higher education were more likely to have consistently positive perceptions about available support [1].

The present study showed that family support had a strong association with marital status and living arrangement. Yet, a study indicated that being head of the family without the presence of a spouse does not necessarily mean poor health [14]. The absence of a spouse may be compensated by the support of other family members, such as older parents, children and relatives. However, studies have shown that perceived availability of companionship and loneliness are only moderately correlated with social support and individuals can feel socially disconnected while being surrounded by support providers [4].

We found that family was the most frequent important source of support for elderly. In Iran, the cultural and religious background is not in favor of leaving elderly people alone [2]. It is well accepted that family members are the most important source of help and support one might receive from informal networks [4]. According to Bowling et al. poor psycho-social health and feelings of loneliness has been seen among those living alone due to lack of emotional support within the household, and an absence of practical support [15]. In fact having more contacts with members of one's formal and informal networks is associated with higher perceived availability of social support [16]. In general, social networks play an essential role in health and wellbeing in later life [1, 4, 17] and its absence is linked to a variety of disease states and may increase the incidence of illnesses [18].

Efforts to enhance older adults' perceived social support can be focused on developing networks of friends and companions that allow them to feel socially engaged and in turn would promote the health and longevity of older adults [4]. There is considerable evidence from previous research that subjective assessment of social support is more persistently and more powerfully related to health and well being than are objective measures [1], and also perceived support exerts strongest effects on health and well-being in old age [16].

Limitations

This study had some limitations. Firstly, the respondents in this study were from a particular urban community with a low proportion of minority residents. Therefore, the findings may not be generalized to all older adults with different socioeconomic and cultural backgrounds. Because of the limited sample size, conducting further studies with a large number of older adults from different communities with diverse cultural background would help to increase the overall understanding of correlation between the social support and health of older adults. Secondly, our study was based on self-reports, which may have been subject to recall bias and thus limiting the findings.

Conclusion

We found that social support in all forms had correlation with health-related quality of life dimensions. This is consistent with findings of past literature where it was found that the quality and not quantity of social support was the main factor that affected health in older adults. As suggested, understanding how social support may influence the health and well being of older adults can help health professionals to improve current strategies on providing support forever increasing aging population.

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Competing interests

The authors declare that they have no competing interests.

Authors' contributions

MDH was the main investigator and wrote the first draft. MH supervised the study. HAM, FY and SEV contributed to the study design, and analysis. AM contributed to the analysis, critically reviewed the paper and wrote the final draft. All authors read and approved the manuscript.

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