An evaluation of social support and its influencing factors in the elderly of Bandar Abbas in 2013-2014

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Abstract: Social support is considered as one of the most important factors in creating successful aging. It can be counted as an effective factor in provision of old people's physical and mental health. **Objectives:** The present study was aimed at evaluating the rate of social support and its influencing factors in the elderly of Bandar Abbas in 2013-2014. **Materials and Method:** This research is a descriptive cross-sectional study where 525 elderly individuals who lived in Bandar Abbas were selected through cluster sampling. Data collection was conducted by applying a 23-item Phillips Social Support questionnaire and a demographic one. Collected data were analyzed through descriptive and analytical tests using SPSS 16.0 software. **Results:** Out of the 525 studied subjects, 55.2% (290 subjects) were male and the rest were female. Mean age of the subjects was 65.60 ± 6.27 year. Mean total score of social support was 65.06 ± 14.07 . Pearson correlation coefficient between age and total score of social support was not significant (p=0.653). Moreover there was no significant correlation between number of children and social support (p=0.020). **Conclusion:** Social support in the elderly of Bandar Abbas was average; therefore, it is highly recommended that social support as an invaluable source should be enhanced through appropriate plans and programs.

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Keywords: social support; the elderly; Phillips Social Support Questionnaire

Introduction

Improvements in medical and health conditions in the last half of the 20th century have caused a rise in human lifespan, whereby elderly population has increased [1]. The elderly account for 600 million of the world population. It is predicted that this number reaches 1.2 and 2 billion in 2025 and 2050, respectively [2]. Iran is no exception. It is predicted that the elderly population in Iran will rise from 7.2 million individuals in 2006 and reach 10 million in 2019 [3]. Aging and physiological changes in this period can reduce the individual's abilities in most functional areas on the one hand and on the other hand social events such as retirement, income decrease, loss of social roles, spouse's death, living alone cause the elderly to need more social support compared to other age groups [4 & 5]. Supporting the elderly can have different forms the most important of which include instrumental support (purchasing and providing different goods and needed things), emotional support (physical care and affection), and informational support (consultation and guidance) [6]. Social support has a wide range of meanings and there are different definitions for it. However, it is normally defined as provision of support, affection, companionship, care respect, attention, and help for an

individual by other individuals or groups like family and friends [7] which is done to protect the individual against life difficulties in critical conditions in which health can be endangered [8]. Combining social networks and relationships content are other aspects of social threats. Social integration is concerned with social relationships such as marital status, family, close friends, participation in social communities, religious organizations, and relationship content, and it deals with the quality and status of relationships [6]. Studies have shown that the elderly who are provided with appropriate social support believe that they are more liked and respected and considered as valuable parts of the society compared to other elderly people [9]. Numerous studies have shown that social support is really advantageous to health improvement and reduction of physical and mental risks [8]. In a study, Luttik et al have shown that social support has a protective effect in cardiac patients against stress and improves autonomic system performance [6]. Moreover, the results of the study conducted by Rodriguez et al have shown that lack of social support increases blood pressure and left ventricular hypertrophy in non-Hispanic blacks [10]. In addition, studies have shown that by influencing health behaviors, social support helps patients recover and reduces the probability of being re-hospitalized [6 & 10]. Social support especially for those elderly people who need help to conduct their daily activities (ADL) can enhance interpersonal trust and improve emotional status. Lack of social networks in the elderly people's lives is one of the most important reasons for misuse and as a result their depression and anxiety [8]. Moreover, it has been proved that social support has positive effect on performance of families who take care of the elderly with Alzheimer's and dementia [11]. Alipour has stated that social support can be considered as an important resource, which is cheap and easily accessible, and utilized to deal with the elderly people's psychological and physical problems [9]. Various studies have shown that the level of social support in the elderly is different in different regions in the world. In this regard, Melchiorre et al have investigated mean score of elderly people's social support in 7 European countries, whose results showed that the highest level of social support was related to Lithuania and the lowest level belonged to Portugal [8]. The study conducted in Isfahan by Khalili et al showed that the social support in the elderly was at moderate level [12]. Numerous studies have shown that social support is reliant on different social, economic, cultural geographic factors. features and demographics [6 & 8]. The most important demographic characteristics influencing social support are gender, education, number of children, underlying conditions, and employment status. Melchiorre has reported that elderly women are provided with a higher rate of social support; however, some other studies have reported that social networks and social support have more advantages for men [8]. All in all, regarding social support there is no agreement between the results of different studies on differences between men and women: some have shown a significant difference between men and women [13] and others have reported that there is no significant relationship between gender and social support [14]. Due to the importance of social support and its role in successful aging [15], contradictions that exist in this area, differences between Iranian culture and its social networks and those of other countries, and lack of research, the present study was aimed to evaluate the level of social support and its influencing factors in the elderly of Bandar Abbas in 2013-2014.

Method

This research is a descriptive cross-sectional study conducted in the third quarter of 2013 on 525 elderly individuals who lived in Bandar Abbas. According the formula of $n = \left[\frac{2\alpha_c + 2\beta_c}{c}\right]^2 + 3$ and the results of the study conducted by Zhang Hong (2013) who reported the correlation coefficient between

family performance and social support as r=0.23, sample size was first specified as 350 individuals, and since cluster sampling was utilized, coefficient of 1.5 was applied on the sample and the final sample size was considered as 525 individuals. Sampling was carried out in two phases. In the first phase, cluster sampling was applied in order to select 7 health centers out of the 14 ones in Bandar Abbas. Then, in the second phase, according to number of elderly people covered by each center, a special quota was allotted to each center. Data collection instrument was a two-section questionnaire: a demographic section aimed at collecting information like age, gender, education, number of children (boy and girl), income, marital status, current and former job(s), underlying conditions, type of abode, and companions; and a section was Phillips Social Support questionnaire that was constructed by Phillips et al (1977). Its reliability and validity in Iran was checked by Pasha (Cronbach's alpha=084). This questionnaire is composed of 23 items and three family subscales (items of 2, 4, 7, 11, 13, 18, and 22), subscales for friends (items of 1, 6, 9, 10, 15, 16, 19, and 23), and subscales of others items of 3, 5, 8, 12, 14, 17, 20, and 21). Its rating method is a 5-choice Likert (ranging from quite disagree=0 to quite agree=4). Minimum and maximum score gained in this questionnaire is between 0-92, the higher the score, the higher social support will be [14]. Criteria to enter the study included age of 60 and more, residency in Bandar Abbas, lack of known mental and cognitive illnesses, lack of hearing and speech impairment, and informed consent. After informed consent of the selected elderly was gained, data collecting instrument was distributed and filled out by them. In case where a subject wanted or was illiterate, the questionnaire was completed by the researcher through interviewing. Ethical considerations of the study were confirmed by the Ethics Committee of Kashan University of Medical Sciences and required permission was received from related authorities to conduct the study in Bandar Abbas. Moreover, the research group is committed to keep the individuals' information confidential during the study and publishing its results.

SPSS 16.0 was used to analyze collected data through descriptive and analytic tests (Independent ttest to check the difference between mean scores of social support based on sex, current job, and underlying conditions; ANOVA to check the difference between mean scores of social support based on education, income, marital status, former job(s), type of abode, and life companions; Pearson correlation coefficient to check the correlation of social support mean scores with age and number of children (daughters and sons); backward model regression to check effective factors in social support;

			0 1		
Variables	Sub groups	NO $(\%)$	social assists (Total score)		
variables	Sub groups	NO. (70)	Mean±SD	P value	
Gandar	Male	290 (55.2)	65.96±12.71	*0.104	
Gender	Female	235 (44.8)	63.95±15.53	0.104	
	Illiterate	202 (38.5)	63.26±14.81		
	Elementary	106 (20.2)	64.63±15.12		
Education	Secondary	63 (12.0)	65.79±11.76	**0.095	
	Diploma	101 (19.2)	67.35±13.96		
	Upper	53 (10.1)	67.55±10.73		
	≥500	218 (41.5)	61.84±15.72		
income	500-1000	295(56.2)	67.31±12.39	**0.001	
	≤1000	12(2.3)	68.33±9.66		
	Single	21(4.0)	53.81±22.45		
Manital status	Married	425(81.0)	66.34±12.34	**0.001	
Marital status	Widowed	74(14.1)	62.24±16.60	***0.001	
	Divorced	5(1.0)	45.40±27.57		
Commential	Yes	123(23.4)	68.69±11.32	*0.001	
Current job	No	402(76.6)	63.95±14.64	*0.001	
	Homemaker	138(26.3)	62.39±17.10		
	Unemployed	132(25.1)	62.92±13.39		
Former jobs	Manual worker	93(17.7)	67.63±11.67	**0.00	
·	Official worker	114(21.7)	66.75±12.14		
	Teacher	48(9.1)	69.62±12.57		
Underlying	Yes	262(49.9)	63.69±15.56	*0.020	
conditions	No	263(50.1)	66.43±12.28	*0.026	
	Personal	397(75.6)	66.80±12.43		
Type of abode	Leased	100(19.0)	61.75±15.77	**0.026	
	Children	28(5.3)	52.14±20.10		
Living with	Wife	97(18.5)	66.80±11.49		
	Child	65(12.4)	60.45±18.53		
	Child and Wife	Child and Wife 328(62.5) 66.22=		**0.001	
U	Alone 29(5.5) 60.45±14.77		60.45±14.77		
	Polativas	6(1.1)	45 50+24 70	1	

and step-by-step model regression check subscales of

Table 1. Social support scores according to demographic information

social support.

			Micun±0D	i value	
Candan	Male	290 (55.2)	65.96±12.71	*0.104	
Gender	Female	235 (44.8)	63.95±15.53	0.104	
	Illiterate	202 (38.5)	63.26±14.81		
	Elementary	106 (20.2)	64.63±15.12	-	
Education	Secondary	63 (12.0)	65.79±11.76	**0.095	
	Diploma	101 (19.2)	67.35±13.96	-	
	Upper	53 (10.1)	67.55±10.73	-	
	≥500	218 (41.5)	61.84±15.72		
income	500-1000	295(56.2)	67.31±12.39	**0.001	
	≤1000	12(2.3)	68.33±9.66	-	
	Single	21(4.0)	53.81±22.45		
Manital status	Married	425(81.0)	66.34±12.34	**0.001	
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	Wife	97(18.5)	66.80±11.49		
	Child	65(12.4)	60.45±18.53	-	
Living with	Child and Wife	328(62.5)	66.22±12.60	**0.001	
-	Alone	29(5.5)	60.45±14.77		
	Relatives	6(1.1)	45.50±34.70		
*independ * * ANO	lent t test VA	0(1.1)	10.00-01.70	1	

Results

Out of the 525 studied subjects, 55.2% (290 subjects) were male and the rest were female. Subjects aged from 60 to 89 with a mean of 65.60±6.27 year. Independent sample T-test showed a significant difference between the women's age (64.46 ± 5.74) and the men's (66.29 ± 6.41) (t=2.536, p=0.020). Pearson correlation coefficient showed no significant association between age and social support (r=0.020, p=0.653). Moreover, there was no significant correlation between number of children and social support (r=0.074, p=0.092). However, there was a significant correlation between number of daughters and social support (r=0.102, p=0.020). On the contrary, there was not a significant correlation

between number of sons and social support (r=0.008, p=0859). Mean total score of social support was 65.06±14.07. Among subscales of social support, family subscale (r=0.099, p=0.023) and subscale of others (r=0.101, p=0.021) and number of daughters had a positive and significant relationship with social support. There was no significant difference between mean total score of social support and subscales of friends and others based on gender (p>0.05). However, there was a significant difference between mean score of family subscale in men and women, such that this rate was higher in men than women (r=-2.920, p=0.004) (See Table 2). In order to more precisely examine the relationship between demographic variables and their effect on social

	Total (Mean±SD)	Men (Mean±SD)	Women (Mean±SD)	Т	Р
Total social support	65.06±14.07	65.96±12.71	63.95±15.53	-1.630	0.104
Family's social	20.07±4.55	20.59±4.03	19.43±5.05	-2.920	0.004
support					
Friends' social	22.84±5.55	23.06±5.36	22.56±5.77	-1.034	0.302
support					
Others' social support	21.97±5.46	22.08±4.72	21.83±6.26	516	0.606

Table 2. Mean score of social support and its subscales based on sex

Coefficients ^a	Model	Unstandardized Coefficients		Standardized Coefficients	Т	Sig.
		В	Std. Error	Beta		
a. Dependent Variable: total social support	Number of daughters	1.277	.387	.143	3.296	.001
	Income	4.056	1.191	.154	3.404	.001
	Current job	-4.370	1.390	132	-3.145	.002
	Type of abode	-5.414	1.074	216	-5.039	.000
	Living with	-1.147	.659	072	-1.742	.082
R=0.349				$R^2 = 0.122$		

Table 3. Backward model regression to check factors affecting social support

Table 4. Stepwise regression analysis for predicting the role of social support subscales in the total score of social support

		Unstandardized Coefficients		Standardized Coefficients	t	Sig	R	R^2
		В	Std. Error	Beta		_		
Phase 1	Others	2.390	.042	.928	57.078	.000	.928	.862
Phase 2	Others	1.470	.033	.571	44.373	.000	.981	.962
	Friends	1.210	.033	.478	37.116	.000		
Phase 3	Other	1.104	.018	.429	60.993	.000		
	Friends	1.052	.016	.415	65.611	.000	.996	.991
	Family	.798	.019	.258	41.951	.000		

support, all of the demographic variables were analyzed through backward model regression. The results presented in Table 3 show that demographic variables to an extent of 12% play a role in predicting the rate of social support. Among the demographic variables, on five of them including number of daughters, income, current job, type of abode, and life companion had effect on social support, and other variables like gender, age, number of children, number of sons, marital status, former job, and underlying conditions had no significant relationship with social support. The later variables were crossed out of the model after 8 phases of regression (See Table 3). In order to investigate the rate and the manner in which subscales of social support influenced social support, regression test was applied in a step-by-step model. The results of this test showed that 86.2% of social support is could be predicted by support revived from others (See Table 4).

Discussion

The present study was aimed at evaluating the rate of social support and its influencing factors in the elderly of Bandar Abbas in 2013-2014. The results of the study showed that the mean of social support in the elderly of Bandar Abbas was 65.06±14.07. In fact, the studied subjects had gained 70.71% of social support score. In the study conducted by Khalili et al, the subject gained 71.16% of social support score, and they reported that their subjects' social support is moderate [12]; therefore, it can be concluded that social support in the present study is moderate. However, since Islam has put great emphasis on visiting relatives and respecting the elderly and because Iran's cultural make is in a way that there is still support in close communications and among relatives; it was supposed that the elderly people's social support would be higher. Another result of the study is that there was no significant difference between mean total score of social support and variables, friends and others and gender. However, regarding family, there was a significant difference between elderly men and women. Pasha et al have

also reported that sex cannot be a differing factor for receiving higher rate of social support in men and women [14]. In studies conducted by Alipour and Melchiorre; however, rate of social support was reported to be higher in men than women, on the contrary, Cornwell has reported a higher rate of social support in women than men, all of which are not in line with the results of the present study [8, 9, & 16]. Cornwell believes that higher rate of social support in elderly women is due to their ability to establish and maintain social relationships and networks [16]. In most studies, although gender differences have not been taken into consideration, there are conceptual reasons why sex is an important variable in elderly people's social support [8]. Lack of independent income can be considered as another reason for low social support in elderly women in Bandar Abbas. Moreover, cultural variables special to southern regions of Iran can affect this issue. Another reason for different social support rates between men and women can be this hypothesis that men and women have different ideas about what social support is while filling out the questionnaire and they might have given the same response to different items. In the present study there was no significant relation between social support and the subjects' age while Melchiorre has concluded that the score for social support in the elderly bellow 70, especially those below 60, is higher than others [8]. As age increases, the elderly people's daily functioning decreases, and because of spouse's death they need more help with carrying out their activities; therefore, rate of social support increases as the elderly grow older [17 & 18]. There was no significant relation between number of children and social support. However, in a study conducted in 7 European countries, a significant relation between social support and family aspect [8]. It seems that the quality of children's training and level of their dependence on their families are more effective than number of children in social support. Despite the fact that Islam and Iranian culture put great emphasis on supporting family and respecting the elderly, unfortunately one of the problems in today's Iranian society is the issue of changing extended families into nuclear ones, which has caused emotional distance between parents and children. There was a positive and significant relation between number of daughters and social support. However, there was no significant relation between number of sons and social support. Among subscales of social support, just number of daughters, family, and others had a significant relationship with social support. This result may imply that all of the gained social support score is not related to children because the elderly who live in their children's homes receive lower

social support compared to those living with other relatives. The highest social support score was related to those elderly people who were living with their spouse. There was a positive and significant relation between marital status and social support, so social support rate was higher in married subjects compared to other groups. These findings are in line with those of the study conducted by Miguel [19]. Family's social support can reduce stress and feeling of loneliness; moreover, it increases level of access to health care and is a key to address the problems of aging [20]. There was a significant relation between income and social support rate, such that the higher the income, the higher rate of social support was observed, which is in line with the results of the study conducted by Miguel [19]. The researchers believe that social support is more needed by low income elderly people because they are more exposed to threatening factors such as inappropriate and insecure family circumstances, misbehavior, and malnutrition. Therefore, lack of social support can cause negative effects on health in low income elderly people while high income ones can afford their healthcare, have proper diet, take trips, and plan their lives. As a result, the elderly with suitable income can compensate for lack of social support by employing others to do their chores around the house.

In the present study, there was no significant relationship between education and social support while in Melchiorre's study, it was concluded that the elderly with higher education had received more social support [8]. The researchers believe that there is still strong emotional relationship in Iranian society and the elderly people's social support is not affected by their level of education. However, in developed societies because of lifestyle and different social situations, the strongest source of social support lies in participating in social activities; therefore elderly people with higher education will receive higher rates of social support. Finally, there was an inverse significant relation between underlying conditions and social support; that is there were fewer cases of underlying conditions in the elderly with higher social support, which is in agreement with the results of other studies [6 & 8]. It seems that by influencing health behaviors of the elderly and creating positive mental and emotional effects, social support can enhance self-confident and life quality and reduce mental and physical diseases.

Conclusion

The results of the present study showed that social support rate is Bandar Abbas is moderate. Therefore, since number of the elderly is increasing, their life quality should be allotted more attention, and their physical and mental health needs to be maintained as they are dependent on other in their everyday lives, it is recommended that appropriate arrangements should be made in order to enhance their social support. In this regard, understanding physical and mental needs of the elderly is highly important in order to improve their life quality. Help provided by various fields of study is needed to achieve this goal. In addition, it is suggested that major economic, social, and cultural planning should be conducted in a way that the elderly people's needs should be taken into consideration. Therefore, establishing centers that provide inhibitory and medical services, conducting psychological studies on the elderly, addressing the living conditions of the elderly, and handing them out of loneliness through training their friends and families can be effective undertakings in this regard. It is recommended that further studies should be conducted on the issue of social support in the elderly. Limitations of the study include conducting the study in Bandar Abbas, which restricts generalizability of the results; therefore, it is suggested that more extensive studies should be conducted in other cities that have with different cultural and ethnic circumstances. Another limitation of the study was the subjects' bias; therefore, it is recommended that social support to be measured through qualitative methods and not questionnaires.

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