ORIGINAL ARTICLE

The Effectiveness of Social Participation Educational Program on the Feeling of Loneliness of Elderly People in Rural Areas of Baiza City (South of Fars Province)

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Abstract

Background: Decreasing and preventing isolation and social loneliness among the elderly are important fields for policymaking and action commitment in social health. Evidence shows that the nature and spectrum of an individual's social network including the quality and quantity of social relations and contact frequency can affect the old people's health considerably. Social participation leads to a decrease in mortality and depression and improves people's cognitive function. Since few interventions on assessment of the effect of social participation on old people's loneliness have been done, this study was conducted to determine the impact of the educational program of social participation on the feeling of loneliness.

Methods: This is a quasi-experimental study based on convenience sampling method, on 239 elderly people aged ≥60 years living in rural regions of Baiza. The intervention was held for the intervention group during five weeks through five 60-80 minute educational sessions. The data were collected by CCHS-SP and UCLA Loneliness Feeling Questionnaires before and after the intervention in the experiment and control groups. The data were analyzed using SPSS (version19).

Results: The significance level was assumed 0.05 in statistical analysis. After one month of educational intervention program, the mean score of social participation increased in the intervention group from 6.17±3.86 to 17.98±3.84 after the intervention. The findings showed a remarkable improvement in loneliness feeling scores of the mentioned group form 62.24±.7.53 to 28.86±6.88 after the intervention (P<0.001). The studied cases in the control group experienced no significant changes in the two mentioned variables.

Conclusion: This study revealed a reduction in the feeling of the elderly in rural areas by predicting, improving, and modifying behaviors related to social participation and forming self-help groups in rural communities.

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Introduction

In recent decades, prevention from loneliness and social isolation among the elderly has been an important issue in social health promotion.[1] While there is no experience that loneliness is unique to old age, it is common among

older adults, with 12% to 46% reporting at least some level of loneliness.[2] About one third or even half of the elderly suffer from loneliness and social isolation.[3] An investigation in Spain indicated that 23.1 percent of the elderly often suffered loneliness.[4] However, Khichadi reported that this amount was between 16 and 35 in this country.[5] In Iran, the rate of loneliness has been reported between 11% and 70% in various studies.[6, 7] Loneliness and social isolation affect the quality of life remarkably, so that it is comparable with the impacts of cigarette, obesity, inactivity, and hypertension.[8] Immune deficiency, infections, cognitive disorders, mental problems such as depression and dementia, high levels of disabling chronic diseases, lack of physical activity, and the possibility of death are more probable to happen among those people feeling lonely remarkably.[9-11] These consequences are clearly so important in making economic problems. Recently, numerous investigations have been done with different plans among the elderly to reduce loneliness and social isolation. However, the low quality of most of these studies and the high variety of the studied population in the mentioned studies make the generalization of their findings difficult since they are conducted in communities with different social, cultural and economic contexts.[12, 13] One way to improve the health of people, especially to reduce the loneliness in the elderly, is social participation. Social participation in itself is both a theoretical and a practical concept that has been shown to be related to health in many studies. Many people over the age of 65 are in a state of social isolation and this does not allow them to have a close and intimate relationship with others. This may be due to the negative view of society and the belief in the imminent death of the elderly, which hinders planning to improve their quality of life, while various studies indicate that having social contact and public personality with is related to life satisfaction in old age.[14] Nevertheless, recent findings emphasize the importance of social interactions and relations for improving and promoting mental health and also preventing social isolation and their consequences among the elderly.[13] Loneliness and social isolation among the elderly in rural regions is so important. The offspring leave home or move due to marriage or for occupational reasons, low economic status and literacy in these regions, limited access to health services, and social welfare, which makes the issue of elderly Loneliness and social isolation so critical.[15, 16] Lack of enough experimental evidence and the limitations of the conducted studies highlight the necessity of conducting more research regarding the programs which help decrease social loneliness isolation among the elderly in rural regions. Therefore, the goal of the present study was to determine the impact of Social Participation Educational Program on the loneliness of in old people in rural areas.

Methods

Participants

This is a quasi-experimental and interventional study with a control group that was conducted in Baiza rural region, 45 kilometers from Shiraz (An Iranian south –western city) in 2018. There are six rural health centers with a population of approximately 40,000, who are covered by these centers. Two centers that are easier to access were selected. Each of these two centers has 4-8 health houses. Of these, 4-8 health houses, two of which having a sufficient sample size, were selected and other health houses were excluded from the study. One of the two health houses was randomly selected for the intervention group and other for the control group. Given that the number of eligible elderly people in the two covered villages (whose numbers have already been prepared) was about 330 and considering the probability of exclusion, all were included in the study. Finally, 239 elderly people remained enrolled until the end of the study. The sample size based on previous studies[17] was determined 120 subjects in every group with about 0.05 percent of test error, 80 percent of test power, mean difference in the two groups ($\mu 1$-$\mu 2$) equal to 2.5, and standard deviation (σ) was determined in two groups equal to 5/00. The formulation was the specimen in order to estimate the effect of the feeling of loneliness. The inclusion criteria included having the ability to talk in the Persian language, hearing ability, lack of acute physical and motor disorders especially in walking, registration in the health center , age of sixty years old and older, and consent for participating in the study. The exclusion criteria included their tendency to quit the participation, absence in more than one session, experience of grief caused by their relative's death, and loss of their job within the intervention episode.

Statistical Analysis

The data were analyzed by SPSS (version 19). Also, analytic statistical tests such as Chi Square, T-paired, and T-independent and ANCOVA were used.

Measurements

The data collection method consisted of CCHS and UCLA questionnaires.

University of California Los Angeles (UCLA) Questionnaire: UCLA was invented by Russell et al. (1980). This questionnaire consists of 20 questions. The total score is the sum of all questions. The scoring method includes describing multi-option phrases which are selected by the studied cases. Never, seldom, sometimes, and often options are scored 1, 2, 3, 4, respectively. The scoring of this instrument is diverted in some cases. The least and most scores are, in turn, 20 and 80. Scores between 20-34 show slight loneliness equivalent with no loneliness. 35-48 and 48-80 score ranges are regarded average and severe levels of loneliness, respectively.[18] Sodani et al. reported the consistency of the Persian version of this scale as 0.89 using Cronbach Alpha.[19]

Canadian Community Health Survey Social Participation (CCHS) questionnaires: Questionnaire or scale includes demographic characteristics including sex, age, and marital status, number of children, occupation, and life composition of the elderly. Also, the first part of CCHS includes 8 items about community work, group religious activities, group sports, educational and cultural activities, community activities, community organizations, charities and group entertainment; the scores range from zero to four on a Likert scale and responses are zero (never), one (at least once a year), two (at least once a month), three (at least once a week), and four (at least once a day). The questionnaire also includes 15 statements about the barriers to social participation in the elderly which require yes or no answers. For calculation of the score in the first part of this questionnaire, the scores of all 8 questions must be summed. A score higher than the average in this part of the questionnaire indicates better social participation of the elderly. The second part of the questionnaire is also calculated based on the frequency of each of the barriers to social participation in the elderly. The reliability of this questionnaire was obtained by calculating Cronbach Alpha based on 30 old peoples' scores who participated in Darvishpoor et al.' s study (0.76).[20]

Intervention (Manipulation): (Performed in Five Weeks and in Five Sessions of 60-80 Minutes in 2018)

Five training sessions of 60 to 80 minutes each week were held for participants in the intervention group organized in groups of 20. In every intervention group, the studied participants were asked to introduce themselves in the first session. They were also welcomed and the reason for their invitation was described. The researcher, through verbal encouragement, emotional arousal, emotion-expressing techniques, previous successful experiences, used lecture and question-and-answer method in order to increase their innate interest and self-efficacy about definition, causes and clinical signs discussed. At last, a summary of all subjects was presented to them and they were asked to think about the following question up to the next session; "which tasks reduce their loneliness?"

In the second session, empowering people using emotion-expressing techniques and developing optimism and positive thinking were performed through verbal encouragement, emotional arousal, emotion-expressing techniques, and previous successful experiences to improve social relationships as an important factor in reducing loneliness through lecture and question-and-answer with teaching aids. At the end of the session, people shared their experiences to reduce the feeling of loneliness.

The third session was devoted to avoiding disturbing thoughts and prioritizing social participation through question-and-answer methods, and lectures along with teaching aids to increase participation in religious rituals (going to mosques, Friday prayers, pilgrimage sites, etc.). After this session, all group members went to a nearby religious place and performed their own religious ceremonies.

In the fourth session, with the aim of increasing social intimacy and skill and also "To be oneself` technique" (through verbal encouragement, substitution experiences), the participants were taken to a recreational places to acquaint them with public places and improve their social interactions. This program was accompanied by a morning walk which was ended by having breakfast with each other. It should be noted that this was possible to perform due to appropriate weather condition.

The fifth session was held outdoors. The studied old people exchanged their own experiences with each other associated with the goals and achievement of this program. At the same time, the researcher reviewed the conducted measures and the achieved advantages. She also shared with the old people to discuss the barriers and find the alternatives for them. Finally, the studied cases were appreciated for their participation in the present research and also they were given some gifts. One month after the last stage of the intervention, the research tools were completed in both groups through direct interview.

As a general process, in all sessions, we tried to engage the participants to come to a common understanding of the issue of loneliness, t form a common goal of confronting loneliness among them, and finally use their shared experiences and opportunities to to help each other, what is expected from the formation of self-help groups. Specifically designed to enhance learning about the causes and consequences of loneliness as a central concern of the sessions, and social participation as a suitable solution to it from interactive lecture, group discussion, description of personal experiences, and short recreational tours. The village and its closest neighbors were used. As facilitators, we tried to identify and discuss the contributing forms of participation and social activity that they could experience with each other in order to implement them as a plan on a gradual basis, use the experiences of the people in the sessions, and share ways to overcome obstacles and help each other. In addition, during the intervention, we encouraged any action to form group meetings and social participation verbally and with gifts. As facilitators, we tried to discuss about how to help and collaborate for a participation and social activity that they can experience together. It should be noted that there was no educational intervention in the control group, and the information of the intervention group, due to the distance between the two villages was not transferred to the control group.

Results

Their mean ages of the participants in the intervention and control groups were, respectively, for men 46±38.70 and 57±47.50 and for women 73±61.3 and 63±52.5. Also, in the intervention and control groups, the number of married people was 96±81.40 and 99±82.50, widows 22±18.60 and 21±17.50%, jobless 42±53.30 and 49±40.80, housewife 71±59.70 and 63±52.50, and employed 6±5.00 and 8±6.70. The results of demographic characteristics of the two intervention and control groups are shown in Table 1.

As shown in Table 2, in this study there was no significant relationship between age, gender, marital status, spouse, and occupation, number of children, family life and feeling of loneliness. Also, the social participation among men in the intervention group was higher significantly than the women (P<005). Further, the social participation among the employed and in married individuals was higher. (P<01, P<002).

Loneliness scores and participation are shown in Table 3. As shown in this Table, the mean score of loneliness in the intervention group showed a significant difference, in comparison with the control group after the study (P<0.001). Also, the mean scores of social participation demonstrate a significant difference after the intervention in the intervention group in comparison with the control group. (P<001)

According to Table 4, there was a statistically significant relationship between social participation and loneliness.

Table 1: Demographic characteristics of the elderly in control and intervention groups

Variable	Categories	Groups	
		Control group (n=120)	Intervention group (n=119)
		N (%)	N (%)
Sex	Male	57 (47.50)	46 (38.70)
	Female	63 (52.5)	73 (61.3)
Marital status	Married	99 (82.50)	96 (81.40)
	Widow	21 (17.50)	22 (18.60)
Living with	Alone	8 (6.70)	10 (8.40)
	Spouse	95 (79.20)	95 (79.80)
	Children	17 (14.20)	14 (11.80)
Job	Unemployed	49 (40.80)	42 (53.30)
	Housewife	63 (52.50)	71 (59.70)
	Employed	8 (6.70)	6 (5.00)

Table 2: The Mean (Standard Deviation) Score of the Feeling of Loneliness in the Intervention and Control Groups before and after the Intervention

Variable	Categories	Loneliness		Social participation	
		X±SD	P value	X±SD	P value
Sex	Male	55.50±12.46	0.79	6.93±3.77	0.005
	Female	55.92±12.60		5.72±2.36	
Marital status	Married	55.73±12.74	0.94	6.45±3.28	0.002
	Widow	55.58±11.65		5.27±1.92	
Living with	Alone	59.00±5.92	0.27	6.16±2.68	0.24
	Spouse	55.86±12.82		6.38±3.27	
	Children	53.12±13.20		5.38±2.01	
Job	Unemployed	56.28±13.23	0.98	6.85±3.88	0.01
	Housewife	55.70±12.58		5.73±2.38	
	Employed	55.71±12.45		7.07±2.89	

Table 3: Comparison of pre- and post-intervention mean (standard deviation) scores of perceived loneliness and social participation within and between groups

Variable	Time	Intervention group (mean±SD)	Control group (mean±SD)	Significance (independent samples t-test)
Loneliness	Pre-intervention	62.24±7.53	49.30±13.15	0.66
	Post-intervention	28.86±6.88	51.258±11.82	0.001
Significance (paired t-test)		0.001	0.07	
Social participation	Pre-intervention	6.17±3.86	6.30±2.11	0.74
	Post-intervention	17.98±3.87	6.00±2.64	0.001
Significance (paired t-test)		0.001	0.09	

Table 4: The correlation between social participation and loneliness scores

Constructs	Loneliness	Social participation	P value
	r	r	
Loneliness	1.00	-0.31	0.001
Social participation	-0.31	1.00	

Discussion

In the present study, most of the subjects were 60-70 years old. Most of them were married and housewives in both groups. In Gold's study, the mean age of the elderly was 73/3±6/6 (65-93) and nearly half of them were married (49/3%).[21] A range of factors may put older people at increased risk of social isolation and feelings of loneliness. They may lose important components of their social environment through retirement from the paid workforce, or geographic relocation of their significant others.[22] According to our findings, the mean score of feeling of loneliness in the intervention group decreased from 62.24±7.53 to 28.86±6.88, which reflects the impact of the social participation training program on their loneliness, Also, in the study of Alaviani et al., the average score of loneliness in the intervention group showed a significant difference, in comparison with the control group after the study (P<0.001), which is consistent with our study.[17] Moreover, in the present study, there was no statistically significant difference between men and women in terms of loneliness, while other studies have shown that women are lonelier than men.[23-25] On the other hand, loneliness is more likely to increase by moving away from the flow of life, increased age, work and home and family, marital status, living conditions, and living place (whether they reside in cities or villages).[26] Also, in the present study, the mean score of social participation in the intervention group after the implementation of the training program increased significantly, and by helping the participants to develop social communication, the loneliness score decreased simultaneously.[27] This shows the importance of this issue, and appropriate health care plans for this age group should be made and implemented according to the strong needs of the community. Social support is an important factor in maintaining and promoting physical and cognitive health related to participation in life,[28] and its absence leads to illness.[29] This study is consistent with previous studies. Also, in the present study, the social participation in men was more than that of women. Perhaps, one possible reason is the higher participation of men in society and their higher social relationships than women who were more housewives in the present study. Perhaps, one of the reasons for this is the cultural level of Iran, more access to men due to out-of-home activities and having a wider social network.[30-32] Also, relationships for men are more friendly, allowing them to forget their problems, and probably women more openly express their respect and compassion compared to men.[33] In this study, unemployed people had lower social participation. Probably, this is because of the feeling of disability and lack of social ability that induce a feeling of loneliness in one person. It can also induce this feeling, so that if communication is needed in social situations, they are not able to function well. This attitude leads to loss of one's own communication opportunities and, therefore, leads to feeling alone.[34] Elderly women are usually housewives, less educated, and earn less than men, all of which can be factors in reducing the women's participation. The married elderly had higher social participation than those with no spouse; Darvishpur's study also reached this relationship.[20] People whose quantity and quality of social networking relationships are insufficient have described loneliness as an unpleasant experience. An important element of this definition is that it is based on personal experience, which can be described as the difference between one's intended relationship and his/her actual relationship.[35,36] The findings of this study showed a significant relationship between social participation and the feeling of loneliness. However, divorce and widowhood lead to an increase in this feeling,[17, 37] but reciprocal concern for neighbor comfort and high level of dependency to local community, membership and participation in voluntary associations, more contact with the public entertainment centers, and the use of facilities, coherence, and sense of belonging to social networks protect the individuals against loneliness.[38, 39] It seems that having high levels of social participation is regarded as a part of social competence and enables the person to get involved in social activities and establish appropriate communication with others without any concern about his/her own abilities. Interventions also led to the formation of self-help groups in the intervention village.

This study had some limitations including prolonged time of the intervention process, use of convenience sampling method and also impossibility to generalize the findings to urban regions. Therefore, it is recommended to conduct other studies in different communities in order to clarify the factors causing loneliness among old people.

Conclusion

Social participation is a significant relationship regardless of the age, gender and marriage status. Educational program of social participation is a framework for planning interventions in order to use them for predicting, improving and modifying the behaviors related to the feeling of loneliness and also increasing old people`s social participation. Given these findings and the important effects of loneliness over physical and mental health, some measures can be taken for preventing the development or continuity of this

feeling and, consequently, increasing social participation in aging period. As a result, if threatening sources are identified and solved efficiently, it is possible to decline the feeling of loneliness, minimize its consequences, and promote old people's social participation.

Ethical Considerations

All the participants received verbal explanation about the study objectives and procedures and then signed written informed consents for taking part in the study. The participants were also reassured about the anonymity and confidentiality of their information. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments including informed consent and confidentiality of all personal information. Also, the ethics committee of the Shiraz University of Medical Sciences has approved the research with ethical N0: IR.sums.Rec1395.s308

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Patient Consent

Written and verbal consent of patients was obtained before participating the study.

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Conflict of Interest: None declared.

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