



## Original Article

### Loneliness and Its Related Factors among Elderly People in Yazd

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#### ABSTRACT

##### Article history

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**Introduction:** Old people appear to be most prone to loneliness and depression perhaps because of decrease in their ability in daily livings, increase in morbidity, loss of close ties caused by loss of friends and spouses. This study was conducted for investigation of the loneliness and its related factors in elderly people in Yazd.

**Methods:** In this cross sectional study, 200 old people (over 60 years old) from three zone; health centers, nursing home and retirement center by convenient sampling method. Data was collected by UCLA Loneliness Scale that was consisting of 20 items for loneliness measurement. Scores 41 and more defined as loneliness. Collected data was analyzed by proper statistical tests with SPSS software.

**Results:** Results showed that 71 % of subjects had Not Feel Lonely, 24 % moderate and 5 % severe feeling of loneliness. Factors such as level of education, marital status, numbers of daughter and sons, previous job, residence site, current job status, living in nursing home, insufficient income, place of praying, sleep quantity and quality of sleep and feeling of healthy were associated with loneliness status ( $p < 0.05$ ).

**Conclusion:** Our findings showed loneliness is common in elderly that support needs for more investigations and attention to loneliness related factors, educational courses conduction for family to take care of their elders, preparing of recreational measures and social support groups to decrease the loneliness in old people and so they spend this period by good and healthy sensation.

**Keywords:** Loneliness, Risk Factors, Elderly, Iran

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#### Introduction

Loneliness is a subjective sense and described as a feeling of isolation so “people can live rather solitary lives and not feel lonely, or they can have many social relationships and still feel lonely” (1). Loneliness has also been described as the distress due to the individual’s quantity and/or quality of social relationships below the ideal level (2) which, in turn has a great impact on health and the quality of life (3). Persistent loneliness and being very lonely are destructive to the well-being of an individual. Loneliness is found to be a precursor to psychological disorders, mental health problems, depression, and even suicide (4-7).

Studies found that sociodemographic factors such as age and marital status, living arrangement and

place of residence (whether one stays in urban or rural areas) influence loneliness (7). Older persons with low educational attainment and income and the unemployed are likely to feel lonely as compared to those with higher education and income and who are working (1, 8). Loneliness is also strongly associated with poor health. Loneliness increases with reduced cognitive function (9), reduced social activities, and higher physical limitations (10). Older persons with chronic stress (1), chronic diseases (11), and visual impairments (12) are also more likely to feel lonely as compared to those who do not have these conditions. Elderly people themselves reported own sickness, death of spouse, family matters, meaningless life, lack

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of a friend, absence of relative and living conditions were causes of feeling lonely (13).

A part from spouse, adult children provide the most important support and social contact in old age. Adult children's more frequent contact, care and affection may lessen the feelings of loneliness among older persons (14). Friends and neighbors may also provide emotional support and assistance in tasks such as transportation and the running of errands (15). Older persons who are close with family members and have many friends are psychologically well-adjusted than those without these networks (7). Although loneliness may occur in all age groups, this phenomenon is more peculiar to older people and loneliness is prevalent among them (16).

One of the major demographic changes in the world in the last 50 years has been an increase in older persons. Increasing numbers of older persons is associated with the tendency for more people to live alone and increased loneliness in later life.

Owing to a lack of a nation-wide formal old-age social protection system in Iran, older persons who live alone face multiple health complications. For example, lack of a household companion or helper implies difficulty in accessing fresh fruit, vegetables and safe foods. In the event of sickness, older persons in solitary living are hardly encouraged to seek health care. In situations of conflicts and emergencies, older persons living alone tend to be left behind where they become victims of disease or disasters. These and other implications of solitary living gradually translate into worry and feelings of loneliness. There is rising concern about the psycho-social health of older persons in general and those who experience loneliness in particular (17). The aim of this study was to investigate loneliness in elderly people and its associated factors in Yazd.

## Methods

### *Procedure and sampling*

The cross-sectional study recruited 200 subjects older than 60 who were selected from three zone in Yazd; 4 health centers, 2 nursing home and 1 retirement center by a convenient sampling method. The inclusion criteria were being capable of verbal communication along with the absence of chronic mental and physical illnesses which would limit the individual's cooperation and having informed consent to participate in the study.

### *Measures*

Data were collected using a two-part questionnaire. The first part assessed demographic characteristics of the participants and loneliness-related factors. The second part was the 20-item University of California, Los Angeles, Loneliness Scale (UCLALS) developed by Russel et al. in 1980. The UCLALS items are responded through descriptive phrases or multiple choices including never, rarely, sometimes, and often,

accordingly, loneliness score is 20-80: 20-40 as Normal, Moderate loneliness; 41-60 and severe loneliness felling 60-80 (18). Sodani et al confirmed UCLA LS's reliability by obtaining Cronbach's alpha equal to 0.81 (19).

### *Ethical considerations*

The institutional review board in Shahid Sadoughi University of Medical Sciences, Yazd, Iran, approved the study (IR.SSU.MEDICINE.1395.171). After explaining the aims of the study, the participants informed consent was obtained verbally.

### *Data analysis*

Data were collected by face to face interviews. Statistical analysis was performed by using the SPSS software version 16.0. Descriptive statistics (frequency and percentage) was used to describe the research strata and Chi-square test ( $\chi^2$ ) was applied to analyze variables. A value of  $p < 0.05$  was considered as statistically significant.

## Results

This cross-sectional study assesses prevalence and correlates of feeling lonely among 200 old persons. In this study, the majority of participants were males (64 %) and 35 % were above 70 years old, 24 % were illiterate, and 34 % had primary school education. Eighty-seven percent were living in urban area, 8 % changed their residency site in last year, 13 % lived alone and 14 % in nursing home. Seventy-nine percent did not work and only 13 % stated that they could afford their lives well. Commuting less than 5 people by a week was 58 % and 41 % went for praying to mosque. History of chronic diseases was 59 % prevalent, 54 % regularly used medication, 67 % of participants stated that they have sufficient sleep, 61 % had feeling of healthy and 29 % of participants felt lonely, by UCLALS.

Level of education, marital status, number of children and their gender, previous job, residence site, current job status, living in nursing home, insufficient income, place of praying, sleep quantity, quality of sleep and feeling of healthy were associated with loneliness status ( $p < 0.05$ ) (Table 1).

## Discussion

The World Health Organization defines active aging as a process that uses security, participation and sustainable health opportunities in a manner to improve life quality of individuals (20). The results of this study showed the prevalence of moderate and severe levels of loneliness among elderly (age  $\geq 60$  years) 24 % and 5 % respectively.

Table 1. Characteristics of participants and relations with the UCLALS loneliness scores

|                             |                     | No Feel Lonely | Lonely feeling% | N   | p     |
|-----------------------------|---------------------|----------------|-----------------|-----|-------|
| Age group                   | 60-64               | 69.0           | 31.0            | 84  | 0.837 |
|                             | 65-69               | 73.9           | 26.1            | 46  |       |
|                             | 70 +                | 71.4           | 28.6            | 70  |       |
| Gender                      | Female              | 63.9           | 36.1            | 72  | 0.096 |
|                             | Male                | 75.0           | 25.0            | 128 |       |
| Education level             | No education        | 53.8           | 46.2            | 52  | 0.010 |
|                             | Primary school      | 73.5           | 26.5            | 68  |       |
|                             | Secondary school    | 76.2           | 26.5            | 42  |       |
|                             | University          | 84.2           | 15.8            | 38  |       |
| Marital statues             | Married             | 78.6           | 21.4            | 140 | 0.001 |
|                             | Never married       | 25.0           | 75.0            | 8   |       |
|                             | Widowed or divorced | 57.7           | 42.3            | 52  |       |
| Number of daughters         | 0                   | 36.4           | 63.6            | 44  | 0.001 |
|                             | 1                   | 79.2           | 20.8            | 48  |       |
|                             | 2                   | 81.8           | 18.2            | 66  |       |
|                             | 3 and more          | 81.0           | 19.0            | 42  |       |
| Number of sons              | 0                   | 59.1           | 40.9            | 44  | 0.026 |
|                             | 1                   | 60.0           | 40.0            | 40  |       |
|                             | 2                   | 79.2           | 20.8            | 48  |       |
|                             | 3 and more          | 79.4           | 20.6            | 68  |       |
| Job status                  | Housekeeper         | 57.1           | 42.9            | 56  | 0.026 |
|                             | Retired staff       | 76.2           | 23.8            | 126 |       |
|                             | Other               | 77.8           | 22.2            | 18  |       |
| Residence                   | Urban               | 75.9           | 24.1            | 174 | 0.001 |
|                             | Rural               | 38.5           | 61.5            | 26  |       |
| Recent change residency     | Yes                 | 50.0           | 50.0            | 16  | 0.062 |
|                             | No                  | 72.2           | 27.8            | 180 |       |
| Living arrangement          | Alone               | 92.3           | 7.7             | 26  | 0.001 |
|                             | Nursing home        | 28.6           | 71.4            | 28  |       |
|                             | With spouse         | 77.6           | 22.4            | 134 |       |
|                             | With children       | 50.0           | 50.0            | 12  |       |
| Current employment          | Yes                 | 85.7           | 14.3            | 42  | 0.018 |
|                             | No                  | 67.1           | 32.9            | 158 |       |
| People who commuting a week | Less than 5         | 67.2           | 32.8            | 116 | 0.244 |
|                             | 5-9                 | 71.4           | 28.6            | 42  |       |
|                             | 10 or more          | 81             | 19              | 42  |       |
| Sickness                    | Yes                 | 66.1           | 33.9            | 118 | 0.067 |
|                             | No                  | 78             | 22              | 82  |       |
| Regular use of medication   | Yes                 | 66.7           | 33.3            | 108 | 0.143 |
|                             | No                  | 76.1           | 23.9            | 92  |       |
| Financial income            | Poor                | 00.0           | 100.0           | 22  | 0.001 |
|                             | Intermediate        | 76.3           | 23.7            | 152 |       |
|                             | Good                | 100.0          | 00.0            | 26  |       |
| Place of praying            | Mosque              | 85.4           | 14.6            | 82  | 0.001 |
|                             | Home                | 56.6           | 43.4            | 106 |       |
| Sleep time                  | Less than 5 hour    | 57.1           | 42.9            | 42  | 0.002 |
|                             | 5-6 hour            | 61.8           | 38.2            | 68  |       |
|                             | 7-8 hour            | 82.6           | 17.4            | 46  |       |
|                             | Over 8 hour         | 86.4           | 13.6            | 44  |       |
| How is your sleep quality   | Good                | 83.6           | 16.4            | 134 | 0.001 |
|                             | Bad                 | 45.5           | 54.5            | 66  |       |
| Healthy feeling             | Yes                 | 83.6           | 16.4            | 122 | 0.001 |
|                             | No                  | 51.3           | 48.7            | 78  |       |

The prevalence of loneliness reported in other studies is however contradictory; 89.8 % in elderly women in Gonabad (21), 15.4 % in Rasht (18), 27 % in Sweden (22), 7 % in Britain (23), 19 % in the USA (24) and 39 % in Finland (13). This discrepancy may represent cultural, economic, social, and geographic differences (11). Social activities in the framework of active aging programs and opportunities to use autonomy are also different in various countries. On the other hand, loneliness is a subjective experience and may result from dissatisfaction in human relationships and unmet close relationships or social needs. Therefore, it is rather hard to provide comparisons between societies about specific factors that cause loneliness. It is observed that loneliness prevalence is lesser in societies where social relationships and traditional structures are preserved but individuals' perceptions of the quality of their relationships may cause the existence of loneliness in different dimensions.

Our results showed that age, gender, recent change in residency site, number of people commuting a week, having sickness and regular use of medication did not affect loneliness. Similar to other studies, elderly patients with physical illness had felt more loneliness although statistically not significant (25). Our findings suggest that loneliness in rural areas is more prevalent than urban. The differences between feeling alone in terms of residency have also been reported in other studies (26).

However, in present study loneliness in female, participants who have recently changed their residency, commuting less people, people suffering from a disease and using medication was more prevalent than their contrasts. Probably low sample size caused no significant association in analysis. The relationship between age and loneliness was not significant. The findings of Khosravan et al. (21) and Koochaki et al. (27) were consistent with ours. In contrast, in a study on 348 individuals, Hazer and Boylu observed a significant relationship between age and feeling of loneliness (16) and also in 1791 Malaysian aged people (7). Probably the different sample distribution of the participants caused no relation with the age and loneliness.

Among socioeconomic indicators; higher education attainment, more income, previous job and current employment were associated with less loneliness. It may be due to this fact that better socioeconomic status and work engagement would contribute to reduced loneliness as the elder subjects would be interacting with coworkers. On the other hand, gender can be a confounder variable in association between job and loneliness as subgroup analysis didn't show any association in this case. An inverse relationship between level of education and loneliness, is also seen in other studies (28), although some studies have reported the opposite (29) that this controversy need more investigation.

Never married and widowed or divorced, in contrast to married, and who live in nursing home in contrast to those living with spouse or children had expectantly more feeling of loneliness. The reason

why having a spouse is a factor that prevents individuals from loneliness can be explained by Weiss's attachment theory. Lack of a secure attachment figure in one's life such as a spouse may cause emotional loneliness (13, 30).

Results showed loneliness is more prevalent in elders who have no children specially a daughter. Older people have trouble in adapting to the process of ageing due to physiological changes experienced in this period. Children can help their parents to cope with this situation and solve their problems. Children are also positively effective in living arrangement, financial support and communication of their parents.

Sleep quality and quantity was related to loneliness but this may be a natural consequence of sleep disruption. Our result also revealed that older people who had healthy feeling had lesser loneliness. It is known that there is a negative relationship between loneliness and physical health and psychosocial well-being (6, 20).

## Conclusion

In this study, loneliness was found to be a common health problem among older people. In order to decrease loneliness of in the aged population and increased psychological well-being of the elderly, social support systems must be taken into account, the elderly should be encouraged to participate in social activities and family should be encouraged to avoid one-child strategy. Adult children provide physical, financial, and emotional support to their parents and this idea must be emphasized that "it is the responsibility of the families to take care of their elders".

## Study limitations

Non-random sampling and not considered sex ratio of participants were limitations of this study so that the results cannot be generalized to the entire elderly in Yazd.

## Conflict of interest

The authors declare that there is no conflict of interests.

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## References

- Hawkley LC, Hughes ME, Waite LJ, Masi CM, Thisted RA, Cacioppo JT. From social structural factors to perceptions of relationship quality and loneliness: the Chicago health, aging, and social relations study. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. 2008; 63(6): S375-S84.
- Victor CR, Scambler SJ, Marston L, Bond J, Bowling A. Older people's experiences of loneliness in the UK: does gender matter?. *Social Policy and Society*. 2006; 5(01): 27-38.
- Karnick PM. Feeling lonely: theoretical perspectives. *Nursing Science Quarterly*. 2005; 18(1): 7-12.
- VanderWeele TJ, Hawkley LC, Cacioppo JT. On the reciprocal association between loneliness and subjective well-being. *American Journal of Epidemiology*. 2012; 176(9): 777-84.
- Park NS, Jang Y, Lee BS, Haley WE, Chiriboga DA. The mediating role of loneliness in the relation between social engagement and depressive symptoms among older Korean Americans: do men and women differ? *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. 2013; 68(2): 193-201.
- Alpass FM, Neville S. Loneliness, health and depression in older males. *Aging & Mental Health*. 2003; 7(3): 212-6.
- Teh JKL, Tey NP, Ng ST. Family support and loneliness among older persons in multiethnic Malaysia. *The Scientific World Journal*. 2014; 2014.
- Lauder W, Sharkey S, Mummery K. A community survey of loneliness. *Journal of Advanced Nursing*. 2004; 46(1): 88-94.
- Perissinotto CM, Cenzer IS, Covinsky KE. Loneliness in older persons: a predictor of functional decline and death. *Archives of Internal Medicine*. 2012; 172(14): 1078-84.
- Aartsen M, Jylhä M. Onset of loneliness in older adults: results of a 28 year prospective study. *European Journal of Ageing*. 2011; 8(1): 31-8.
- Hacıhasanoğlu R, Yildirim A, Karakurt P. Loneliness in elderly individuals, level of dependence in activities of daily living (ADL) and influential factors. *Archives of Gerontology and Geriatrics*. 2012; 54(1): 61-6.
- Alma MA, Van der Mei SF, Feitsma WN, Groothoff JW, Van Tilburg TG, Suurmeijer TP. Loneliness and self-management abilities in the visually impaired elderly. *Journal of Aging and Health*. 2011; 23(5): 843-61.
- Savikko N, Routasalo P, Tilvis RS, Strandberg TE, Pitkälä KH. Predictors and subjective causes of loneliness in an aged population. *Archives of Gerontology and Geriatrics*. 2005; 41(3): 223-33.
- Deindl C, Brandt M. Financial support and practical help between older parents and their middle-aged children in Europe. *Ageing and Society*. 2011; 31(04): 645-62.
- Lai D, Thomson C. The impact of perceived adequacy of social support on caregiving burden of family caregivers. *Families in Society: The Journal of Contemporary Social Services*. 2011; 92(1): 99-106.
- Hazer O, Boylu AA. The examination of the factors affecting the feeling of loneliness of the elderly. *Procedia-Social and Behavioral Sciences*. 2010; 9: 2083-9.
- Nzabona A, Ntozi J, Rutaremwa G. Loneliness among older persons in Uganda: examining social, economic and demographic risk factors. *Ageing and Society*. 2016; 36(04): 860-88.
- Sheikholeslami F, Masouleh SR, Khodadadi N, Yazdani M. Loneliness and general health of elderly. *Journal of Holistic Nursing and Midwifery*. 2011; 21(66): 28-34. [Persian]
- Sodani M, Shogaeyan M, Neysi A. The effect of group logo-therapy on loneliness in retired men. *Research in Cognitive and Behavioral Sciences*. 2012; 2(2): 43-54.
- Arslantaş H, Adana F, Ergin FA, Kayar D, Acar G. Loneliness in elderly people, associated factors and its correlation with quality of life: A field study from Western Turkey. *Iranian Journal of Public Health*. 2015; 44(1): 43.
- Khosravan S, Alavian M, Alami A, Tavakolizadeh J. Epidemiology of loneliness in elderly women. *Journal of Research & Health*. 2014; 4: 871-7.
- Jakobsson U, Hallberg IR. Loneliness, fear, and quality of life among elderly in Sweden. *Aging Clinical Experimental Research*. 2005; 17(6): 494-501.
- Victor CR, Scambler SJ, Bowling A, Bond J. The prevalence of, and risk factors for, loneliness in later life: a survey of older people in Great Britain. *Ageing and Society*. 2005; 25(06): 357-75.
- Theeke LA. Predictors of loneliness in US adults over age sixty-five. *Archives of Psychiatric Nursing*. 2009; 23(5): 387-96.
- Mushtaq R, Shoib S, Shah T, Mushtaq S. Relationship between loneliness, psychiatric disorders and physical health? A review on the psychological aspects of loneliness. *Journal of Clinical and Diagnostic Research*. 2014; 8(9): WE01.
- Walters K, Breeze E, Wilkinson P, Price GM, Bulpitt CJ, Fletcher A. Local area deprivation and urban-rural differences in anxiety and depression among people older than 75 years in Britain. *American Journal of Public Health*. 2004; 94(10): 1768-74.
- Koochaki G, Hojjati H, Sanagoo A. The relationship between loneliness and life satisfaction of the elderly in Gorgan and Gonbad cities. *Journal of Research Development in Nursing & Midwifery*. 2012; 9(1): 61-8. [Persian]
- Zhang XJ, Sun L, Yu YL, Shen Q. Correlation between loneliness, family function and social support among elderly people. *Chinese Journal of Clinical Psychology*. 2010; 18: 109-11.

29. Chen Y, Hicks A, While AE. Loneliness and social support of older people in China: a systematic literature review. *Health & Social Care in the Community*. 2014; 22(2): 113-23.
30. Chalise HN, Saito T, Takahashi M, Kai I. Relationship specialization amongst sources and receivers of social support and its correlations with loneliness and subjective well-being: A cross sectional study of Nepalese older adults. *Archives of Gerontology and Geriatrics*. 2007; 44(3): 299-314.