Elderly Health Journal 2016; 2(1): 21-26.
Shahid Sadoughi University of Medical Sciences, Yazd, Iran
Journal Website : http://ehj.ssu.ac.ir

Original Article

Relationship between Abuse Experience and General Health among Older Adults in Yazd City- Iran

Hassan Rezaeipandari[1], Mohammad Ali Morowatisharifabad[2], Vali Bahrevar[3], Zohreh Rahaei[3*] Ali Hakimzadeh[4]

[1.] Elderly Health Research Center, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
[2.] Department of Ageing Health, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
[3.] Department of Health Services, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
[4.] Department of Counseling, School of Humanities Sciences, Yazd Branch, Islamic Azad University, Yazd, Iran

A B S T R A C T

Article history
Received 10 Feb 2016
Accepted 21 Apr 2016

Introduction: Elder abuse may increase the vulnerability of ageing people to disease and decrease their general health status, so addressing the issue is essential for promoting elderly quality of life. The study aimed to examine the relation between abuse experience and general health among elderly people in Yazd city- Iran.

Methods: The cross-sectional study carried out on 250 community-dwelling seniors in the city of Yazd who were selected with cluster random sampling. Data collection tools included, Iranian Domestic Elder Abuse Questionnaire and Persian version of the General Health Questionnaire 28. Data were analyzed using Spearman correlation coefficient and linear regression tests.

Results: Mean scores of abuse experience and general health among the elders were 11.84 ± 12.70 (range 0-100) and 21.82 ± 10.84 (range 0-84) respectively. General health status was more undesirable among elders who had experienced abuse than those who had not. Elder abuse subscales accounted for 17.2% changes in general health, which had only care neglect and physical abuse subscales with significant prediction effect.

Conclusion: Abuse experience has negative effects on older adults' general health. care neglect and physical abuse play a more important role.

Keywords: Elder Abuse, General Health, Ageing

Citation: Rezaeipandari H, Morowatisharifabad MA, Bahrevar V, Rahaei Z, Hakimzadeh A. Relationship between abuse experience and general health among older adults in Yazd city- Iran. Elderly Health Journal. 2016; 2(1): 21-26.

Introduction

Mental health is the state that a person is aware of his/her abilities and is able to cope with life regular stresses and also is able to work and communicate with the community (1). It is an important indicator of health status in ageing and also is very important in achieving successful ageing and good quality of life in this stage of living (2).

A lot of social, demographic, psychological, and biological factors contribute to a person's mental health status and all these factors are particularly pertinent amongst elderly peoples. Factors such as, social isolation, poverty, dependency and loneliness, may affect mental health and general health. Elderly people are more likely to experience events such as bereavements or physical disability that affect emotional well-being and can result in poorer mental health. They may also be exposed to maltreatment at home and in care institutions (3).

The studies showed that the prevalence of mental disorders among older adults is more than 30 % (4, 5).

[*] **Corresponding Author:** Department of Health Services, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran**. Tel:** +983538209100, **Email address:** z.rahaei@ssu.ac.ir

[DOR: 20.1001.1.24236179.2016.2.1.4.4]

Mostly common mental problems among elders are depression, anxiety and dementia (6) and the mostly reported mental symptoms among Iranian elderly people particularly retired seniors are depression, anxiety, psychosomatic symptoms, frustration and social isolation (7). Among the mental problems, depression is the most common problem and in a study in Iran the prevalence was found 23.5% in elders (8). In a review the prevalence of major depression ranges from 0.9% to 9.4% in private households, 14% to 42% in institutional living, and 1% to 16% among elderly living in private households or in institutions; but overall clinically relevant depressive symptom 'cases' in similar settings vary between 7.2% and 49% (9).

Previous studies revealed that age, gender, marriage status, education level, living location, socioeconomic status, physical health status, presence of chronic disease, family relationship, membership or active participation in a civic or social group and living with children in home, influence mental health of elders (10-13). In addition to these factors, elder abuse is an important challenge that may affect mental health. Abuse experience is a health problem that will increase from the beginning of ageing period (14). According to WHO definition, elder abuse can be defined as "a single, or repeated act, or lack of appropriate action, occurring within any relationship where there is an expectation of trust which causes harm or distress to an older person" (15).

WHO has estimated the prevalence of elder abuse between 4 to 6%. On the other hand, some studies proved underdetermined abuse cases so that only one in 10 cases is reported (16). Some studies revealed that elder abuse is a health problem among Iranian elders too (17-20) while emotional neglect is the mostly reported, and rejection and physical abuse are the least reported abuse type (20). Several studies have shown that elder abuse can cause psychiatric disorders such as depression, anxiety and reduced quality of life (21-24). In addition, Cooper showed that increasing symptoms of depression and anxiety predicts increased risk of abuse (25). The global burden of disease attributable to mental disorders is projected to increase from 10.5 percent in 1996 to 15 percent in 2020 (26), and also the importance of elder abuse and shortage of studies in this regard, the study aimed to determine the relation between abuse experience and general health among elders in Yazd city- Iran.

Methods

Participants and procedures

The cross-sectional study was conducted on 250 elders (60 years and older) in Yazd in 2014-2015. Required sample size was estimated 250 individuals considering 95%confidence interval, elder abuse ratio of 0.7 (27), and the study design effect. A clustered random sampling was used for selecting the participants; 10 geographic clusters in Yazd; 25 individuals for each. Two trained interviewers at participants homes filled out the questionnaires in a 20 to 30 minutes interview. Elders who were able to answer the questions were eligible to enter the study while those who were suffering from mental disorders and hearing problem, based on the elders' caregiver report, were excluded from the study. Participation in the study was voluntarily and oral informed consent was taken before the interviews.

Instrument

Data collection tool was a questionnaire including three following sections:

1- Demographic information included participants' age, gender, marital status, house ownership status, education level and retirement status.

2- Persian version of General Health Questionnaire 28 (GHQ_28) for measuring the general Health status. The GHQ-28 was developed as a screening tool to detect those likely to have or to be at risk of developing psychiatric disorders. It is a 28-item measure of emotional distress in medical settings. The GHQ-28 has been divided into four subscales: somatic symptoms (items 1–7); anxiety/insomnia (items 8–14); social dysfunction (items 15–21), and severe depression (items 22–28) (28). It is scored from 0 to 3 for each response with a total possible score on the ranging from 0 to 84. Using this method, a total score of 23 is the threshold for the presence of distress. The validity and reliability of the Persian version is examined and approved in several previous studies (29-31).

3- Iranian Domestic Elder Abuse Questionnaire consists of 49 items divided into eight subscales including care neglect (11 items), psychological abuse (8 items), physical abuse (4 items), financial abuse (6 items), authority deprivation (10 items), rejection (4 items), financial neglect (4 items), and emotional neglect (2 items). The possible answers to the questions are "Yes", "No", and "No relevance". The choice "No relevance" applies when the item has no relevance to the respondent's living conditions. The possible score range is from 0 to 100 and higher scores represent more symptoms of abuse. The psychometric indices of the instrument is reported by developers of the scale and found as having face, content, and construct validity. They also reported a Cronbach's alpha of 0.9 to 0.975 for the subscales (32).This instrument is appropriate for investigating family elder abuse in Iran because of some characteristics such as development based on perceptions and conceptions of abuse and abuse-related life experiences among Iran's elderly population, explanation of a wide variety of family elder abuse, easy scoring, acceptable reliability and validity, and application in different situations (33, 34).

Data analysis

The data were analyzed using descriptive statistics, the frequency distribution of the variables, central and

[DOR: 20.1001.1.24236179.2016.2.1.4.4]

dispersion indicators were calculated. Spearman correlation coefficient and linear regression analysis were used for inferential analysis. Since GHQ score was not normally distributed, the logarithm of scores was used in regression analysis.

Results

Totally 250 seniors with mean age of 73.93 ± 8.20 years participated in the study. About fifty percent were women, 67.6% married, 50.8% illiterate, 35.7% retired, and 88.8% living in their houses.

The Mean of total GHQ score of the elders was 21.82±10.45 and 39.6% acquired a score of >23 which means their general health was in undesirable level. (Table 1)

The mean score of total elder abuse was 11.84 ± 12.70 (possible range 0-100), which mostly was emotional neglect (mean 51.40 ± 47.71. More details on elder abuse status among the elders had been published elsewhere (35). There was a statistically significant positive correlation between total elder abuse score and all GHQ subscales. In other words, elders who had experienced abuse in any way had more undesirable general health level. Regarding the correlation between elder abuse subscales and GHQ subscales, care neglect, financial neglect, authority deprivation, and physical abuse were significantly associated with all subscales of GHQ and GHQ total score. Rejection subscale showed a statistically significant correlation with all GHQ subscales except anxiety/insomnia. Psychological abuse, however, did not show such the significant correlation with anxiety/insomnia and severe depression subscales. Emotional neglect had also statistically significant correlation with somatic symptoms subscale while financial abuse showed significant correlation with none of GHQ subscales and also GHQ total score. (Table2)

A multiple regression analysis conducted with elder abuse subscales scores as independent variables and logarithm of GHQ score as the dependent variable revealed that 17.2 percent of variation in GHQ score is predicted by elder abuse subscales scores in which only care neglect and physical abuse were statistically significant predictors.

Table 1. Distribution of min, max, median, mean and SD of GHQ score and its subscales

Subscales	Min	Max	Median	Mean	SD
Somatic symptoms	0	19	6	6.70	3.71
Anxiety/ insomnia	0	18	6	6.13	3.54
Social dysfunction	1	21	7	7.64	2.78
Severe depression	0	18	0	1.33	2.69
GHQ total	4	68	20	21.82	10.48

Table 2. Spearman correlation coefficients between abuse and GHQ subscales

	Somatic symptoms	Anxiety/insomnia	Social dysfunction	Severe depression	GHQ total
Emotional neglect	0.231**	0.108	0.113	0.094	0.198**
Care neglect	0.331**	0.168**	0.206**	0.127*	0.295**
Financial neglect	0.211**	0.164**	0.220**	0.154*	0.253**
Authority deprivation	0.239**	0.138*	0.216**	0.275**	0.271**
Psychological abuse	0.098	0.038	0.180**	-0.004	0.103
Physical abuse	0.162*	0.162*	0.182**	0.274**	0.210**
Financial abuse	-0.043	-0.021	-0.005	-0.059	-0.044
Rejection	0.149*	0.042	0.181**	0.112	0.129*
Abuse total	0.322**	0.192**	0.243**	0.144*	0.315**

**Correlation is significant at the 0.01 level.

* Correlation is significant at the 0.05 level.

Table 3. Multiple regression analysis of GHQ score elder abuse subscales

	β	T	p	R2
Constant		65.28	0.000	0.172
Emotional neglect	-0.002	-0.032	0.975	
Care neglect	0.281	3.342	0.001	
Financial neglect	-0.027	-0.330	0.742	
Authority Deprivation	0.153	1.900	0.059	
Psychological abuse	0.003	0.042	0.966	
Physical abuse	0.248	3.965	0.000	
Financial abuse	0.011	0.176	0.861	
Rejection	-0.057	-0.833	0.406	
Dependent Variable: logarithm of GHQ score				

[DOR: 20.1001.1.24236179.2016.2.1.4.4]

Discussion

The study carried out with the aim of determining the relation between abuse experience and general health among elders, revealed that about 40% of the elders suffer from undesirable general health level which is consistent with previous studies (36-40) and the worse subscale was social dysfunction. Some other previous studies (27, 37, 41) also revealed that social dysfunction is mostly common health problem among elders in comparison of other general health subscales, which is consistent with our results. Lack of adequate social support among elders may be one of main reasons for elders' social dysfunction.

The majority of elders had experienced some kinds of abuse, especially emotional neglect which is consistent with the results of previous studies (33, 42-45). It is probably due to the fact that the family and relatives of elderly people, mostly attend to physical needs and medical care and hardly attend to their emotional needs. This can lead to misinterpretation of the seniors such as feeling of worthlessness, being unlovable, emptiness and futility, followed by mental disorders such as depression.

Care neglect, financial neglect, authority deprivation and physical abuse, were significantly correlated with all GHQ subscale and total GHQ scores. But the rejection scale did not show significant correlation with anxiety, that may attributed to low rate of rejection among the participants and the fact that elders who were rejected by their relatives, as a coping strategy, promote their self-esteem. Psychological abuse was significantly correlated with somatic symptoms and social dysfunction subscales. This means that Insulting and threatening the elderly, as Comijs et al. (46) concluded too, independently predict deteriorating their social role and communication.

Emotional neglect also was significantly correlated with only somatic symptoms subscale which is consistent with the results of some previous studies (42, 47). It is obvious that emotional neglect and lack of attention to seniors make the physical needs ignored and elders who are more emotionally neglected would have lower general health level.

Financial abuse subscale was significantly correlated with none of GHQ subscale and total GHQ score. In Yazd society, it is not, while, uncommon that rich elders financially supports their children and relatives, they usually are, not only, comfortable with it, but such forgiveness seems also give them a sense of usefulness.

As about 17% of changes in general health scores was predicted by abuse subscales, indicates the importance of abuse experience in threating the health status of the seniors. Care neglect and physical abuse were significant predictors which means, by controlling the effect of other abuse types, what deteriorate the health level of the elders are those that have physical aspect as found in other studies (48-50). In addition, it should also be noted that these findings provide evidence indicating that providing the financial expenses of the elderly people is not able to respond to all their needs, particularly in health issue and their financing don't ensure their health but by ignoring other dimensions, due to lack of awareness of their importance, can lead to psychological damages that which are more costly than physical problems. Therefore, following control of other abuse subscale, financial neglect had lowest predictive power in general health level.

Conclusion:

Abuse experience among elders may decrease their general health status. Care neglect and physical abuse play a more important role in threatening the elder's health status than other abuse types. Interventional programs based on the findings of the study seem necessary.

Study limitations

Self-report nature of the measures which is subject to response bias and also the special cultural characteristics of the participants should be addressed applying the results of the study.

Conflict of interest

Authors declare that there is not conflict of interest.

Acknowledgment

The Authors thank all seniors who participated in this study and Elderly Health Research Center, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran because of financial support of the research project (grant no. 3415)

References

1. World Health Organization. Geneva. Department of Mental Health and Substance Abuse Promoting Mental Health.
2. Han K, Lee Y, Gu J, Oh H, Han J, Kim K. Psychosocial factors for influencing healthy aging in adults in Korea. Health and Quality of Life Outcomes. 2015; 13: 31.
3. Yasamy MT, Dua T, Harper M, Saxena S. Mental health of older adults, addressing a growing concern. World Health Organization, Department of Mental Health and Substance Abuse.
4. Olafsdóttir M, Marcusson J, Skoog I. Mental disorders among elderly people in primary care: the Linköping study. Acta psychiatrica Scandinavica. 2001; 104(1): 12-8.
5. Slade T, Johnston A, Oakley Browne MA, Andrews G, Whiteford H. 2007 National survey of mental health and wellbeing: methods and key

[DOR: 20.1001.1.24236179.2016.2.1.4.4]

findings. The Australian and New Zealand journal of psychiatry. 2009; 43(7): 594-605.
6. WHO. Mental health and older adults. Fact sheet. Updated April 2016. Available from: http://www.who.int/mediacentre/factsheets/fs381/en/ Accessed at 18 Nov 2015.
7. Saberian M, Haji Agajai S, Ghorbani R. Study of the mental status of the elderly and its relationship with leisure time activities. Journal of Sabzevar University of Medical Sciences (Asrar). 2009; 10(4): 12-19. [Persian]
8. Majdi MR, Ghayour-Mobarhan M, Salek M, Shakeri MT, Mokhber N. Prevalence of depression in an elderly population: A population-based study in Iran. Iranian Journal of Psychiatry and Behavioral Sciences. 2011; 5(1): 17-21.
9. Djernes JK. Prevalence and predictors of depression in populations of elderly: a review. Acta psychiatrica Scandinavica. 2006; 113(5): 372-87.
10. Negahban Z, Arab M, Tajvar M, Rahimi Frooshani A, Rshidian A. Elderly mental health survey in Tehran and its relationship with social capital. Journal of Health Care Management. 2015; 6(1): 79-88. [Persian]
11. Mortazavi SS, Eftekhar Ardabili H, Mohammad K, Dorali R. Elderly mental health and its relation to demographic and social factors in Shahrekord. Payesh Journal. 2011; 10(4): 485-92. [Persian]
12. WHO. Determinants of mental and behavioral disorders. Available from: http://www.who.int/whr/2001/chapter2/en/index7.html. Accessed at 1 Nov 2015.
13. Suwanmanee S, Nanthamongkolchai S, Munsawaengsub C, Taechaboonsermsak P. Factors influencing the mental health of the elderly in Songkhla, Thailand. Journal of the Medical Association of Thailand. 2012; 95(6): 8-15.
14. Pérez–Rojo G, Izal M, Montorio I, Penhale B. Risk factors of elder abuse in a community dwelling Spanish sample. Archives of Gerontology and Geriatrics. 2009; 49(1): 17–21.
15. WHO. Elder abuse. Available from: http://www.who.int/ageing/projects/elder_abuse/en/ Accessed at 18 Nov 2015.
16. WHO. Elder abuse. Available from; http://www.who.int/mediacentre/factsheets/fs357/en/ Accessed at 1 Nov 2015.
17. Karimi M, Elahi N. Elderly abuse in Ahwaz city and its relationship with individual and social characteristics. Iranian Journal of Ageing. 2008; 3(7): 42–7. [Persian]
18. Amirsadri A, Soleimani H. Elderly phenomena and its outcomes in Iran. Journal of Hygiene and Health. 2005; 1(2): 19–35. [Persian]
19. Manouchehri H, Ghorbi B, Hosseini M, Nasiri Oskuyee N, Karbakhsh M. Degree and types of domestic abuse in the elderly referring to parks of Tehran. Faculty of Nursing of Midwifery Quarterly. 2009; 18(63): 39-45. [Persian]
20. Heravi-Karimooi M. Elder abuse rates family in members of senior social clubs in Tehran city. Iranian Journal of Ageing. 2012; 6(4): 37-50. [Persian]
21. Dong XO, Simon MA, Beck TT, Farran C, McCann JJ, Mendes de Leon C, et al. Elder abuse and mortality: The role of psychological and social wellbeing. Gerontology. 2010; 57(6): 549–58.
22. Wu L, Chen H, Hu Y, Xiang H, Yu X, Zhang T, et al. Prevalence and associated factors of elder mistreatment in a rural community in people's republic of China: A cross–sectional study. PloS One. 2012; 7(3):e33857.
23. Wang JJ. Psychological abuse and its characteristic correlates among elderly Taiwanese. Archives of Gerontology and Geriatrics. 2006; 42(3): 307–18.
24. Dong X, Simon MA, Evans D. Cross–sectional study of the characteristics of reported elder self–neglect in a community– dwelling population: findings from a population–based cohort. Gerontology. 2009; 56(3): 325–34.
25. Cooper C, Blanchard M, Selwood A, Walker Z, Livingston G. Family carers' distress and abusive behavior: Longitudinal study. British Journal of Psychiatry. 2010; 196(6): 480–5.
26. Martin P, Vikram P, Shekhar S, Mario M, Joanna M. No health without mental health. The Lancet 2007; 370: 19.
27. Barati M, Fathi Y, Soltanian A.R, Moeini B. Mental health condition and health promoting behaviors among elders in Hamadan. Scientific Journal of Hamadan Nursing & Midwifery Faculty. 2012; 20 (3): 12-22. [Persian]
28. Goldberg D, Williams P. General health questionnaire (GHQ). Swindon, Wiltshire, UK: nferNelson. 1988.
29. Malakooti SK, Mirabzadeh A, Fathollahi P, Salavati M, Kahali SH, Afkham Ebrahimi A, et al. Reliability, validity and factor analysis and GHQ 28 items in the Iranian elderly. Iranian Journal of Aging. 2006; 1(1): 11-21. [Persian]
30. Noorbala AA, Bagheri Yazdi SA, Kazem M. The validation of general health questionnaire- 28 as a psychiatric screening tool in Tehran. Hakim Journal. 2008; 11(4): 47-53. [Persian]
31. Hashemi Nazari SS, Khosravi J, Faghihzadeh S, Etemadzadeh SH. A survey of mental health among fire department employees by GHQ-28 questionnaire in 2005, Tehran-Iran. Hakim. 2007; 10(2): 56-64. [Persian]
32. Heravi-Karimooi M, Anoosheh M, Foroughan M, Sheykhi M, Hajizadeh E. Designing and determining psychometric properties of the domestic elder abuse questionnaire. Iranian Journal of Ageing. 2010; 5 (1): 7-21. [Persian]
33. Heravi-Karimooi M, Rejeh N, Montazeri A. Health-related quality of life among abused and non-abused elderly people: a comparative study. Payesh. 2013; 12(5): 479-88. [Persian]
34. Nori A, Rajabi A, Esmailzadeh F. Prevalence of elder misbehavior in northern Iran. Journal of

[DOR: 20.1001.1.24236179.2016.2.1.4.4]

Gorgan University of Medical Sciences. 2015; 16(4): 93-8. [Persian]
35. Morowatisharifabad MA, Rezaeipandari H, Dehghani A, Zeinali A. Domestic elder abuse status in Yazd, Iran. Health Promotion Perspectives. 2016; 6(2): 104-10.
36. Zare N, Sharif F, Dehesh T, Moradi F. General health in the elderly and younger adults of rural areas in Fars province, Iran. International Journal of Community Based Nursing and Midwifery. 2015; 3(1): 60-6.
37. Momeni K, Karimi H. The comparison of general health of the residents/nonresidents in the elder house. Iranian Journal of Ageing. 2010; 5 (3): 23-9. [Persian]
38. Barua A, Ghosh MK, Kar N, Basilio MA. Prevalence of depressive disorders in the elderly. Annals of Saudi Medicine. 2011; 31(6): 620-24.
39. Martens PJ, Fransoo R, Burland E, Burchill C, Prior HJ, Ekuma O, et al. Prevalence of mental illness and its impact on the use of home care and nursing homes: a population-based study of older adults in Manitoba. Canadian Journal of Psychiatry. 2007; 52(9): 581–90.
40. Nair SS, Raghunath P, Nair SS. Prevalence of psychiatric disorders among the rural geriatric population: a pilot study in Karnataka, India. Central Asian Journal of Global Health, 2015; 4(1).
41. Rashedi V, Gharib M, Yazdani AA. Social participation and mental health among older adults in Iran. Iranian Rehabilitation Journal. 2014; 12 (1): 9-13.
42. Acierno R, Hernandez MA, Amstadter AB, Resnick HS, Steve K, Muzzy W, et al. Prevalence and correlates of emotional, physical, sexual, and financial abuse and potential neglect in the United States: the national elder mistreatment study. American Journal of Public Health. 2010; 100(2): 292-7.
43. Oh J, Kim HS, Martins D, Kim H. A study of elder abuse in Korea. International Journal of Nursing Studies. 2006; 43(2): 203-14.
44. Tsukada N, Saito Y, Tatara T. Japanese older people's perception of elder abuse. Journal of Elder Abuse and Neglect. 2001; 13(1): 71-89.
45. Keyghobadi F, Moghaddam Hosseini V, Keyghobadi F, Rakhshani MH. Prevalence of elder abuse against women and associated factors. Journal of Mazandaran University of Medical Sciences. 2014; 24(117): 125-32. [Persian]
46. Comijs HC, Pot AM, Smit JH, Bouter LM, Jonker C. Elder abuse in the community: prevalence and consequences. Journal of the American Geriatrics Society. 1998; 46(7): 885-8.
47. Pillemer K, Prescott D. Psychological effects of elder abuse: a research note. Journal of Elder Abuse & Neglect. 1988; 1(1): 65-73.
48. Bowling A, Seetai S, Morris R, Ebrahim S. Quality of life among older people with poor functioning. The influence of perceived control over life. Age and Ageing. 2007: 36(3): 310-5.
49. Lang FR, Heckhausen J. Perceived control over development and subjective well-being: differential benefits across adulthood. Journal of Personality and Social Psychology. 2001; 81(3): 509-23.
50. Windsor TD, Anstey KJ, Butterworth P, Luszcz MA, Andrews GR. The role of perceived control in explaining depressive symptoms associated with driving cessation in a longitudinal study. The Gerontologist. 2007; 47(2): 215-23.

[DOR: 20.1001.1.24236179.2016.2.1.4.4]