

## Psychosocial factors affecting healthy aging in Birjand South of Khorasan, Iran: A cross - sectional study

Marjan Farzad\*, AzadehE brahimzadeh, Gholamreza Sharifzadeh, Mahboubeh Saljoughi  
Birjand University of Medical Sciences, Iran

### Abstract

**Background:** Nowadays, due to high rise in life expectancy, the elderly constitute a significant percentage of the world population. This will greatly increase the health issues of this stratum. The study determines psychosocial factors affecting the elderly health in Birjand, South of khorasan, Iran.

**Methods:** In this descriptive- analytical study, 544 subjects aged  $\geq 60$  years, were included. Convenience sampling used to select the participants. Dimensions of the elderly health were investigated with "Healthy Aging Index" in the city of Birjand. Data analyzed by SPSS version 22 using Pearson correlation and independent t - test.

**Results:** Mean and standard deviation of the elderly health indices were  $3.04 \pm 0.29$ . The highest score of subjects was in the acceptance of aging ( $3.45 \pm 1.09$ ) and the lowest score was in the social participation ( $2.84 \pm 0.51$ ). There was significant difference between mean of total health score, social relationships, and physical activity in terms of gender ( $P < 0.05$ ). Most psychosocial factors affected healthy aging with self-efficacy ( $r = 0.69$ ,  $p < 0.0001$ ), social relationships ( $r = 0.68$ ,  $p < 0.0001$ ) and physical activity ( $r = 0.67$ ,  $p < 0.0001$ ), were highly correlated.

**Conclusion:** Enhancement of self-efficacy; social relationships and physical activity for healthy aging are important in the area. Barriers to the elders' participation in physical activity and having social relationship, especially for old women, should be considered by authorities.

**Keywords:** Elderly, Healthy aging, Psychosocial factors

### INTRODUCTION

Global expansion of the elderly population has become a major public health challenge (1); However, successful healthy aging has attracted lots of attention due to the attractiveness of the term and the importance of the issue of aging in today's modern world. This also is due to a growing reflection of the enormous opulence in the field of Gerontology. For example, there is a huge amount of knowledge regarding to non-manageable ability of the elderly and its potential to be changed. Therefore, discussion of successful aging involves looking at the factors or conditions that help us to have better understanding of getting old and the ways of healthy aging (2-3).

Nowadays, old people constitute a significant percentage of the world's population and it is expected to be increased globally due to the high rise in life expectancy (1-4). Contrary to the past, the concept of physical aging is not only affected by genes, but also elements of lifestyle have similar effects (5). This highlights the importance of individual's lifestyle. Naturally, As a result of aging, mental capacity of humans' decreases and they are prone to the variety of physical and mental illnesses. For this reason, people should not be treated in a way to feel inefficiency (4).

Senescence, like any other period of life, has its own social, economical, cultural and psychological issues. In order to achieve healthy aging, it is necessary to pay attention to all aspects of physical, mental, social, economical and spiritual health from the early stages of life, which can be traced in a healthy manner (6-7). However, in many countries, including Iran, the psychological and social dimensions of this vulnerable stratum are less taken into account (8). In general, each individual has a unique characteristic at each stage of

**Correspondence to:** Marjan Farzad, Birjand University of Medical Sciences, Iran. Email: mfarzad@bums.ac.ir

**Received:** April 20, 2021; **Accepted:** April 24, 2021; **Published:** May 24, 2021

**Citation:** Marjan Farzad, Psychosocial factors affecting healthy aging in Birjand South of Khorasan, Iran: A cross - sectional study. ISSN no. 2261-7434 Volume 10, Issue 3

**Copyright:** © 2021 Marjan Farzad, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

life with specific achievements which is interestingly influenced by the previous stage in the same way that it affects the next stage (9).

The quality of life in old age is influenced by the lifestyle of an individual during adulthood, and this preparation for the elderly has to be developed in adulthood and adolescence (10). However, since such preparation is important in determining the quality of life in the elderly and other attitudes related to health, quality of life plays substantial role in childhood. In this regard, it is important to detect the rightness of the process of recognizing successful aging and identify effective factors on healthy aging at each stage of life (11). Successful aging is a lifelong process of optimizing opportunities to improve physical, social and psychological well-being, independency and quality of life. In order to promote this successful process in life and its continuity, this definition should be included physical, psychological, social and spiritual matters in adults as well (10).

Individual's psychological resources such as self-esteem (4, 12-13), success (4, 8-9), and intellectual integrity (9) are also important psychological factors for successful aging. Many studies found that factors such as depression (9, 14), self-esteem (8, 9), self-efficacy, loneliness and isolation (8-9, 14-15) are effective on successful aging. In addition, many studies have shown that successful aging is defined as having a sense of happiness and satisfaction in life.(3).

Nowadays, the current trend shows that the elderly are not only satisfied by meeting basic needs of living proportionate to aging (that is, merely dealing with illness and disability), but also tend to participate in social and leisure activities (16). Undoubtedly, the strength and development of social health indicators for the elderly in each community will reduce the burden of physical and mental illnesses (8).

Due to the growing trend of aging as a consequence of demographic transmissions in both developed and developing countries, including Iran, and its consequences if not properly planned, it is necessary to consider the issues of this age group and the factors affect their health as an important part of the community. Therefore, this study designed to determine the psychosocial factors affecting the elderly health in Birjand city.

## METHODS

### Research design and setting

This descriptive- analytical study included 544 subjects aged  $\geq 60$  years, who were referred to surgical and internal (except psychiatric) departments of Birjand hospitals during the first 6 months of 2017. Convenience sampling used to select the participants.

### Selection criteria

Inclusion criteria: 1) Age category of 60 years old and over, 2) being volunteer, 3) located in Birjand

Exclusion criteria: 1) History of psychiatric illnesses including depression and dementia, 2) under psychiatric medication

### Data collection

After explaining the study objectives, informed written consent was obtained when they felt free to participate in the study. A standard scale of "Healthy Aging Index" was used to collect data. This scale has 35 items on a 5 – point likert – scale, examining different dimensions of healthy aging including self-efficacy, coping with stress, social relationships, making good deeds, self-care, physical activity, cognitive activity, participation in social activities, and acceptance of aging. A higher score indicates a higher level of healthy aging. Self-efficacy was related to items 22-26, coping with stress to 31-35, social relationships to 12-15, making good deeds to 27-30 items, self-care to 16-19, physical activity to 2-5, thought and cognitive ability to 1 and 6-8, participation in social activities to 9-11, and acceptance of aging to 20-21 in the scale. HAI (Healthy aging Index) is a standard scale used frequently in previous studies. The internal consistency of the scale was determined as cronbach's alpha (0.71 - 0.80) and its total reliability was confirmed by Cronbach's alpha of 0.88 (17). The reliability in the present study was Cronbach's  $\alpha = .86$ .

### Statistical analysis

Data analyzed by SPSS version 22 using Pearson correlation and independent t - test. P- values of less than 0.05 were considered significant.

### Research ethics

This study was conducted by the approval of the ethics committee of Birjand University of Medical Sciences (Ref: IR.BUMS.1396.105), which was gained by disclosing the research method and objectives, and after obtaining informed written consent from all participants.

## RESULTS

The study was conducted on 544 subjects. The mean age of participants was  $76.88 \pm 7.46$  years, a minimum age of 65 and a maximum of 97 years old. 47.1% were male and 52.9% were female. The mean and standard deviation of the elderly health indices were  $3.04 \pm 0.29$ . The highest score of subjects was in the acceptance of aging ( $3.45 \pm 1.09$ ) and the lowest score was in social participation ( $2.84 \pm 0.51$ ). The results are presented in table 1. There was a significant difference between mean of total health scores, social relationships, and physical activity in terms of gender. Men scored higher in all the three variables ( $P < 0.05$ ) Table 2.

The results showed that the elderly health is significantly and directly related to self-efficacy ( $r = 0.69$ ,  $p = 0.0001$ ), social relationships ( $r = 0.68$ ,  $p = 0.0001$ ), physical activity ( $r = 0.67$ ,  $p = 0.0001$ ), acceptance of aging ( $r = 0.64$ ,  $p = 0.0001$ ), making good deeds ( $r = 0.61$ ,  $p = 0.0001$ ), coping with stress ( $r = 0.48$ ,  $p = 0.0001$ ), self-care ( $r = 0.40$ ,  $p = 0.0001$ ), cognitive activity ( $r = 0.31$ ,  $p = 0.0001$ ), and participation in social activities ( $r = 0.26$ ,  $p = 0.0001$ ) Table 3.

Table1. Distribution of the central indices of the variables

Variable	Min	Max	Mean	SD
Age	65	97	76.9	7.5
Self-efficacy	1.60	4.80	3.2	0.58
The ability to cope with stress	1.60	4.20	2.95	0.41
Social relations	1.50	5	3.1	0.64
Helping other	1.50	4.25	2.99	0.47
Self-care	1.50	4.50	2.97	0.46
Physical activity	1.75	4.50	3.13	0.49
Thinking power	1.75	4.50	2.95	0.46
Participation in the social activities	1.33	4.67	2.84	0.51
Acceptance of aging	1	5	3.45	1.1
Total score	2.40	3.80	3.04	0.29

Table2. Distribution of central indicators of the variables on the basis of gender

Variable	Group	M	SD	P-value
Self-efficacy	Men	3.22	0.55	0.179
	Women	3.13	0.59	
The ability to cope with stress	Men	2.98	0.42	0.173
	Women	2.92	0.39	
Social relations	Men	3.16	0.63	*0.042
	Women	3.02	0.64	
Helping others	Men	3.02	0.46	0.287
	Women	2.96	0.48	
Self-care	Men	2.99	0.44	0.335
	Women	2.95	0.47	
Physical activity	Men	3.19	0.51	*0.021
	Women	3.1	0.46	

Thinking power	Men	2.98	0.44	0.295
	Women	2.92	0.46	
Participation in social activity	Men	2.83	0.51	0.653
	Women	2.85	0.52	
Acceptance of aging	Men	3.51	1.126	0.329
	Women	3.4	1.059	
Total score	Men	3.1	0.29	*0.022
	Women	3.0	0.29	

Independent T - test

Table3. Correlation coefficients between healthy aging and variables

Healthy aging	Self - efficacy	Coping stress	Social relations	Making good deeds	Self care	Physical activity	Cognitively active	Social activity	Acceptance of aging	
Healthy aging	1.000									
Self - efficacy	0.066	1.000								
Coping stress	0.014	0.262	1.000							
Social relations	0.061	0.366	0.185	1.000						
Making good deeds	-0.008	0.332	0.328	0.305	1.000					
Self care	-0.009	0.162	0.110	0.190	0.152	1.000				
Physical activity	-0.020	0.422	0.142	0.383	0.337	0.337	1.000			
Cognitively active	-0.008	-0.021	0.004	0.141	0.083	0.127	0.251	1.000		
Social activity	-0.010	0.022	0.058	0.030	0.065	0.119	0.121	0.177	1.000	
Acceptance of aging	0.019	0.476	0.219	0.486	0.354	0.007	0.333	-0.078	0.010	1.000
Total score	0.034	*0.694	*0.481	*0.683	*0.609	*0.402	*0.673	*0.303	*0.246	*0.636

\*: P < 0.0001

## DISCUSSION

The purpose of the present study was to determine psychosocial factors affect the elderly health in Birjand, South of khorasan, Iran to prepare successful aging, a socially issue due to the rapid growth of the elderly population. For this reason, we selected psychosocial factors of healthy aging suggested by previous study and examined them in the area (17). Further, considering various dimensions of aging may facilitates the elders' participation in activities, being loyal to medical and psychological services given to the elderly to accept aging and accompanying changes and adaptation to new conditions, providing information for facing successful and healthy aging.

As we analyzed, we found that sex difference was influential on two dimensions (social activity and physical activity) of healthy aging. The social and cultural environment play an important roles in directing the thoughts, gender behaviors, social relationships, and many differences between men and women (18). In addition, gender differences may be one of the predictors of social health. The World Health Organization (19) has identified gender as one of the social determinants of health and has emphasized that gender roles and norms affect the access of women and men to health services and health systems. Also, many studies have shown that better health and performance in old age is affected by factors such as social interactions, attitudes to life and individual physical activity levels (3, 20). However, in the study of Han et al. sex difference was not an influential factor on healthy aging (9).

Most psychosocial factors selected in the present study affected healthy aging according to the results. Analysis showed self efficacy was a factor with greatest positive influence on healthy aging in the area. Self efficacy according to psychologists is a personal judgment of how well one can execute courses of action required to deal with prospective situations. As self-efficacy increases verbal communication and social participation, it can be impressive in all aspects of individual's life (9, 21-22). Similar to previous studies, Social relationship and participation in social activities positively influence the elderly health (9, 23-24). Consistently to our results, active life style, exercising and physical activity can delay the aging process, and active elders' are healthier and vital. It should also be acknowledged that healthy aging is a product of ongoing activity. Several studies have confirmed the positive effects of physical activity on old age health (9, 14, 25-27). In addition, regular physical activity is effective on mental health and can relieve stress, as psychological factors are the factors that contribute to successful and healthy aging (9, 28-30).

A limitation of the study is that the difference or alteration of psychosocial factors according to other socio demographic factors such as: age, education level, religion, marital status, income, socioeconomic status, avocation, was not assessed. Although this study examines the significant correlation between influential psychosocial factors and healthy aging, there are limitations to make strong causal conclusions.

## CONCLUSIONS

The present study was designed to determine the psychosocial factors affect the elderly health in Birjand city. Self-efficacy, social relationships and physical activity were the factors with greatest positive influence on healthy aging in the area. Acceptance of aging, making good deeds, managing stress, self-care, being cognitively active and participation in social activity were also influential on healthy aging as beneficial factors. Finally, our findings make a step towards recognizing the existence of barriers in the presence of old women in social relationship, social and physical activities as well.

### Acknowledgments

The authors would like to thank the Research Deputy of Birjand University of Medical Sciences, Clinical Research Center at Birjand University of Medical Sciences and all participants, without whom this study would not have been possible.

### Funding

Birjand University of Medical Sciences

### Conflict of interest

There is no conflict of interest to be declared.

### Author's contribution

Marjan Farzad and Azadeh Ebrahimzadeh: Designing the Study and Writing the Manuscript up

Gholamreza Sharifzadeh: Data Analysis

Mahboubeh Saljoughi: Tables Preparation

## REFERENCES

1. Song P, Chen Y. Public policy response, aging in place, and big data platforms: Creating an effective collaborative system to cope with aging of the population. *Bioscience trends*. 2015;9(1):1-6.
2. Heckhausen J, Wrosch C, Schulz R. A motivational theory of life-span development. *Psychological review*. 2010;117(1):32.
3. Aguilar-Vafaie ME, Shahi H, Besharat M. Aguilar-Vafaie MES, Besharat, M.A. Prediction of Successful Aging based on Life Management Strategies. *Journal Psychology and Aging*. 2015;1(2):57-71
4. Fani M. Aging and mental health. *Journal of Reaserch on Religion & Health*. 2016;2(3):1- 3.
5. Arabzadeh M. Meta-analysis of Effective Factors in Mental health of older people *Journal of Research in Psychological Health*. 2016;10(2):42-52.
6. Pahlevanzadeh F, Jarollahi O. A on the effect of social factors on mental health of rural elderlies *Journal of Community Development*. 2011;3(1):4.
7. Moffitt TE, Belsky DW, Danese A, Poulton R, Caspi A. The longitudinal study of aging in human young adults: knowledge gaps and research agenda. *The Journals of Gerontology: Series A*. 2017;72(2):210-5.
8. ZahediAsl M, DervishiFred A. Social Factors Influencing The Social Health of The Elderlyin Kouhdasht. *Social Development and Welfare Planning*. 2016;7(26):1-24.
9. Han K, Lee Y, Gu J, Oh H, Han J, Kim K. Psychosocial factors for influencing healthy aging in adults in Korea. *Health Qual Life Outcomes*. 2015;13(1):1.
10. Kim M-R. Factors of successful aging affecting the life satisfaction of older women. *Journal of the Korean Gerontological Society*. 2008;28(1):33-48.
11. Choi S-J, Jang I-H. Social welfare for older persons in aging society. Seoul: Seoul National University Press (Korean Edition 2010).
12. Navabinejad S., DokaneheeFard F, Shirzadi S. The Effects of Family Factors on Psychological Health of the Elderly in District 13 of Tehran Municipality. *Educational Administration Research Quarterly*. 2013;5(1):191-31.
13. Brar R, Kaur J, Sharma I. Mental Health Of Elderly as Related To Their Well Being And Self Esteem. *International Journal of Humanities and Social Science Invention*. 2013;2(11):54-7.
14. Mortazavi SS, Ardebili HE, Eshaghi SR, Beni RD, Shahsiah M, Botlani S. The Effectiveness of Regular Physical Activity on Mental Health in Elderly. *Journal of Isfahan Medical School*. 2012;29(161):1-10
15. Singh AP, Shukla A, Singh PA. Perceived self efficacy and mental health among elderly. *Delhi Psychiatry Journal*. 2010;13(2):314-21.
16. Kim HK. Factors affecting successful aging among male elders in Korea. *Journal of Convergence Information Technology*. 2013;8(14):341.
17. Thiamwong L, Maneesriwongul W, Malathum P, Jitapunkul S, Vorapongsathom T, Stewart A L. Development and Psychometric Testing of the Healthy Aging Instrument. 2008; 12(4):285-96
18. Zare S, Solimani Z. A Study Of Gender Setreotypes Among Yazd University Students. *Social Welfare*. 2011;11(41):369 - 98.
19. WorldHealthOrganization. Global recommendations on Physical Activity for health: World Health Organization. 2010.
20. Salesi M, Jowkar B. Effects of exercise and physical activity on happiness of postmenopausal female. *Iranian Journal of Ageing*. 2011;6(2):7-14
21. Salahshoori A, Harooni J, Salahshouri S, Hassanzadeh A, Mostafavi F, Molaei M. Investigation on association between self-efficacy, perceived barriers and social supports with health promoting behaviors in elderly in Dena city. *Health System Research* 2015;11(1):30-42.
22. Torki Y, Hajikazemi E, Bastani F, Haghani H. General Self Efficacy in Elderly Living in Rest-Homes. *Iran Journal of Nursing* 2011;24(73).
23. Demura S, Sato S. Relationships between depression, lifestyle and quality of life in thecommunity dwelling elderly: a comparison between gender and age groups. *Journal of physiological anthropology and applied human science*. 2003;22(3):159-66.
24. Fiori KL, Denckla CA. Social support and mental health in middle-aged men and women: a multidimensional approach. *Journal of Aging and Health*. 2012;24(3):407-38.
25. Mortazavi S, Eftekhari A, Mohamad K, Dorali B. Assessing the mental health status of elderly in Shahrekord and relationship with sociodemographic factors. *Payesh, Journal of The IranianInstitute For Health Sciences Research*. 2012;10(4):485-92.
26. Perera B, Watt M, Ostbye T, Rajapakse H, Ranabahu S, Maselko J. Perceptions of successful ageing in Sri Lankan older people: A qualitative study. *Asian J Gerontol Geriatr*. 2015;10(1):22-30.
27. Baltes PB, Baltes MM. Psychological perspectives on successful aging: The model of selective optimization with compensation. *Successful aging: Perspectives from the behavioral sciences*. 1990;1(1):1-34.
28. Louise Bell S, Audrey S, Gunnel D, Cooper A, Campbell R. The relationship between physical activity, mental wellbeing and symptoms of mental health disorder in adolescents: a cohort study. *International Journal of Behavioral Nutrition and Physical Activity*. 2019;16:138.
29. VBlack S, Cooper R, Martin KR, S B, Kuh D, Stafford M. Physical Activity and Mental Well - being in Cohort Aged 60-64 Years. *Am J Prev Med*. 2015;49(2):127-80.
30. De olivia L, Souza EC, Andrade Silvia Rodrigues K, Fett C, BiaginiPiva A. The effects of physical activity on anxiety< depression and quality of life in elderly people living in the community. *Trends Psychiatry Psychother*. 2019;41(1):36-42