Epidemiology and Health System Journal
doi:10.34172/ehsj.2023.20 2023Summer;10(3):126-130 http://ehsj.skums.ac.ir

Original Article

The Association Between the Perception of Aging and Hope in Older People of Gorgan, Iran

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Abstract

Background and aims: Aging is one of the life stages of all human beings, but people's understanding of this issue is highly different. This study aimed to determine the association between the perception of aging and hope in older people.

Methods: Using stratified random sampling, this cross-sectional study was performed on 300 older people referring to Gorgan's comprehensive urban health service centers from 2021 to 2022. The Aging Perceptions Questionnaire and Schneider's Hope Questionnaire were completed by older people. The Pearson correlation coefficient was estimated finally.

Results: The mean total hope score in older women and men was 39.78±5.61 and 40.93±5.58, respectively. There is no statistically significant relationship between the total hope score and understanding of aging. The highest negative correlation was related to the emotional representation subscale of perception of aging with a total hope score (r=-0.42, $P<0.0001$). The aging perception score was higher in older people whose number of children was less than equal to 3. In addition, the total hope score was better in older people who lived with their spouses and had a higher education, housing, and better economic status.

Conclusion: In this study, the perceptions of aging and hope in older people had a high level. Although overall hope was not related to perceptions of aging, hope was associated with the emotional representation subscale of perception of aging.

Keywords: Older people, Hope, Perceptions of aging

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Received: May 31, 2023
Accepted: August 15, 2023
ePublished: September 29, 2023

Introduction

According to the World Health Organization report, by 2030, 1 in 6 people will be 60 years or older. Between 2015 and 2050, the proportion of the world's population over 60 years will nearly double from 12% to 22%.[1] According to the United Nations Development Program forecast, Iran's older population will make up over 30% of the total by 2050, making the Islamic Republic home to the largest older people's population in the Middle East.[2] Although aging is one of the life stages of all human beings, people's understanding of this issue is extremely different at the biological, psychological, and social levels.[3] Further, awareness of their health status and well-being is of fundamental importance in her perception of aging.[4] The perception of aging measures each older adult's satisfaction with his aging status and reflects adaptation to aging-related changes.[5] Perception of aging differs in each society compared to another culture and can change over time in communities.[6] A negative perception of aging is also related to decreased physical performance.[7] A review study reported that factors affecting the perception of aging include individual characteristics such as the type of attitude, subjective age, health status, economic status, marital status, religion, awareness and knowledge in the field of aging, the level of satisfaction with aging, the level of belief in internal control, and social factors such as age discrimination, modernity, social, and family relations.[8]

Hope is one factor that plays a positive role in older people.[9] Not having hope puts more senior people in a passive state that cannot measure their different situations and make decisions about them. Despair makes older people defenseless and trapped against stressors.[10] Over time, a person loses all hope and is replaced by deep depression. His thinking has an inflexible all-or-nothing attitude that prevents problem-solving.[11] So far, no study has estimated the prevalence of hope in older Iranian people. A cross-sectional study by Yaghoobzadeh et al conducted on 504 older people living in Qazvin, Iran, demonstrated that hope was the most critical factor affecting aging perception. The results indicated a positive significant correlation between hope and aging perception.[12].Therefore, the state of happiness and aging perception plays a central role in the experience of healthy aging by older people. Thus, the present study was performed to determine the relationship between the perception of aging and hope in older people under the

comprehensive health centers of Golestan province in 2022.

Methods

This cross-sectional study was conducted on older adults referred to comprehensive urban health service centers in Gorgan from 2021 to 2022. There are eight comprehensive urban health service centers in Gorgan, and the total number of older adults over 60 years old covered by them is 207 454 people. In this study, 300 older adults were selected among the older people referring to comprehensive health centers in Gorgan. The sampling method of the first stage was stratified and proportionate, and sampling was performed in a convenience sampling way in each stratum.

The demographic and clinical information of all people covered by the comprehensive urban health center has been registered in NAB (Health information software); people being over 60 years old and not suffering from psychiatric disorders, vision, and hearing disorders were included in the study.

Questionnaire

Demographic information forms and standardized questionnaires on perceptions of aging and hope were used to collect data.

The perception of the aging questionnaire by Barker et al was employed in this study.[13] This questionnaire has 17 questions that evaluate the dimensions of progressive aging, positive consequences, control positive, effects and control, as well as adverse and emotional representation. Higher perceptions of aging scores indicate a higher level of this variable status. Miremadi et al[14] investigated this questionnaire for the Iranian population, and Crohn's alpha coefficient for the dimensions and the whole questionnaire was reported in the range of 0.64-0.81. The intracluster correlation coefficient was between 0.65 and 0.96 at a two-week interval.

Furthermore, to evaluate the hope of older people, Schneider's hope scale[15] was used, with 12 Likert-type questions, and its dimensions included pathways thinking and agency thinking. The range of scores is 12-60, and higher hope scores represent a higher level of hope in older people. Kermani et al[16] reported that the psychometric properties of Schneider's hope scale in the older people on Cronbach's alpha was in the range of 0.71-0.74.

Statistics

The quantitative and qualitative data are presented as mean values (standard deviation [SD]) and frequency (percentage), respectively. The Pearson correlation coefficient test assessed the correlations between the research variables. Stata version 12 (STATA Corp., College Station, TX, USA) was applied for all statistical analyses.

Results

The findings showed that out of 300 older adults participating in the research with a mean age of 74.74 ± 5.58 years (in the range of 60-93 years), 58.3% were men. Most older people (72.67%) lived with their spouses and were under diplomas (33.34%). In terms of employment status, 26% had a job. Regarding housing status, 85% had housing, and 69.34% of older people reported their economic situation as moderate. Based on data in Table 1, the mean total perception of aging score in the older women and men participating in the study was 52.41 ± 4.52 and 52.76 ± 4.13, respectively, which was not statistically significant. However, the mean scores of subscales of negative control consequences ($P = 0.04$) and emotional representation ($P = 0.03$) between women and men had a considerable difference. The mean total hope score in older women and men was 39.78 ± 5.61 and 40.93 ± 5.58, respectively. This difference was not statistically significant ($P = 0.08$).

As reported in Table 2, although the correlation between the total perception of aging score and the total hope score was not significant, all the subscales of the perception of aging had a significant correlation with the total hope score. The highest negative correlation was related to the emotional representation subscale of perception of aging with a total hope score of r = -0.42 ($P < 0.0001$). In other words, for an increase in the score of the emotional representation subscale, a 0.42 score is reduced from the total hope score. Based on data in Table 3, among the demographic indicators, only the number of children has a statistically significant association with the whole perception of aging score ($P = 0.04$). Thus, the aging perception score was higher in older people whose number of children was < 3. In addition, older people who lived with their spouses ($P = 0.01$) had a higher level of

Table 1. Perceptions of Aging and Hope in Male and Female Older People (Female = 125, Male = 175)

Subscale of Questionnaire	Gender	Mean	Std. Deviation	*P* Value
Pathways thinking	Female	14.91	2.88	0.40
	Male	15.17	2.60	
Agency thinking	Female	14.37	2.50	0.35
	Male	14.64	2.43	
Total hope score	Female	39.78	5.61	0.08
	Male	40.93	5.58	
Progressive aging	Female	9.14	1.72	0.23
	Male	8.90	1.66	
Positive consequences	Female	9.84	1.72	0.11
	Male	10.16	1.61	
Positive control	Female	9.89	2.28	0.41
	Male	10.12	2.38	
Negative control consequences	Female	17.05	2.74	0.04
	Male	16.67	2.30	
Emotional representation	Female	7.47	2.50	0.03
	Male	6.89	2.28	
Total perception of aging score	Female	52.41	4.52	0.49
	Male	52.76	4.13	

Note. Std. deviation: Standard deviation.

education ($P<0.001$), had housing ($P<0.001$), and had a better economic status ($P<0.001$), and their total hope score was better.

Discussion

This study aimed to determine the association between the perception of aging and hope in older people. The present study's findings demonstrated that although the hope score of older people was lower in women than in men, this difference was not statistically significant. Further, the perception score of aging was almost equal in men and women, but consequences, negative control, and emotional representation were significantly higher in women. Schafer et al concluded that women feel less in control of their conditions in old age and are more concerned about their dependencies and hope than men.[17] Another study reported that women's feelings about aging are repeated periodically in most seniors, but in men, this feeling is perceived as a chronic and stable condition.[16] In explaining this difference, it can be pointed out that the understanding of aging in older people differs according to their vision of aging, how they perceive it, and the cultural and value characteristics of each society.[8]

Although there was no significant correlation between the total scores of perceptions of aging and hope in older people, there was a significant correlation between different dimensions of perception of aging and the hope score. More precisely, the higher score of the dimensions of perception of aging led to a higher score of hope. Yaghoobzadeh et al found that hope most substantially impacted aging perception in Iranian elders.[12] Moraitou et al[18] indicated that hope, as pathways thought, predicted all factors of adaptation, whereas hope, as agency thinking, predicted only "General adaptation" and "Self-control." There were also some effects of gender, education, marital status, place of residence, and health status on adaptation to old age. In our study, the highest negative correlation was correlated to the emotional representation subscale of perception of aging with a total hope score. In other words, for one score increase in the dynamic representation subscale score, a 0.42 score is reduced from the total hope score.

The number of children is statistically associated with the total perception of aging score. Therefore, the aging perception score was higher in older people whose number of children was < 3. Moreover, older people who lived with their spouses had a higher education, housing, and better economic status; their total hope score was better. In this regard, in some cultures such as the American culture, young people expect more support from their parents, while in Japan, parents expect help from their children. It is also reported that the number of children is related

Table 2. The Association Between Perception of Aging and Hope in Older People (Pearson Correlation)

Subscale	Pathways Thinking	Agency Thinking	Total Hope Score
Progressive aging	r=-0.07 $P=0.21$	r=0.24 $P<0.0001$	r=-0.14 $P=0.01$
Positive consequences	r=0.24 $P<0.0001$	r=0.18 $P=0.002$	r=0.21 $P<0.0001$
Positive control	r=0.29 $P<0.0001$	r=0.14 $P=0.001$	r=0.20 $P<0.0001$
Consequences and negative control	r=0.20 $P<0.0001$	r=0.28 $P<0.0001$	r=0.32 $P<0.0001$
Emotional representation	r=-0.30 $P<0.0001$	r=-0.36 $P<0.0001$	r=-0.42 $P<0.0001$
Total perception of aging score	r=0.18 $P=0.002$	r=0.07 $P=0.22$	r=0.09 $P=0.09$

Table 3. Association Between Demographic Characteristics and Scores of Aging Perception and Hope in Older People

Demographic Characteristics		Total Perception of Aging Score	*P* Value	Total Hope Score	*P* Value
Marital status	Living spouse (n=218)	52.93±4.40	0.06	41.00±5.50	0.01
	The widow (n=82)	51.93±3.99		39.28±5.71	
Education status	Illiterate (n=84)	52.51±4.35	0.46	38.11±6.24	<0.001
	Under diploma (n=100)	52.19±4.19		39.97±5.38	
	Diploma (n=83)	52.92±3.88		41.95±4.22	
	University Degree (n=33)	53.39±5.35		44.09±4.86	
Children number	<=3 (n=78)	53.83±4.37	0.04	41.48±5.15	0.60
	>3 (n=222)	52.54±4.27		40.09±5.73	
Occupation	Yes (n=78)	52.63±4.36	0.94	40.45±5.40	0.99
	No (n=222)	52.60±4.25		40.45±5.80	
Health insurance	Yes (n=78)	52.56±4.20	0.22	40.59±5.63	0.56
	No (n=222)	53.00±4.95		39.38±5.48	
Accommodation	Yes (n=257)	52.72±4.30	0.27	41.00±5.34	<0.001
	No (n=43)	51.95±4.21		37.16±6.11	
Self-report economic status	Low (n=40)	51.35±4.76	0.11	35.72±7.39	<0.001
	Moderate (n=208)	52.74±4.30		40.72±4.79	
	High (n=52)	53.07±3.75		43.00±5.03	

to the quality of communication, understanding of aging, and feeling supported and encouraged in old ages.[17,19] The findings of Yaghoobi et al demonstrated that hope had a statistically significant difference with the housing and economic status of older people, and older people who had their own house or had a good and high financial status had a higher mean of hope.[20] Based on the findings of Moghadam et al, skills of happiness could increase hope, and the effect of happiness training on hope was consistent in the follow-up stage.[21]

Limitations

The primary source of biases and limitations in cross-sectional studies is the temporal relationship between the exposure and outcome variables.[22] Therefore, we could not determine if a lower perception of the aging score was present before the onset of the unfavorable state of hope or vice versa. However, cross-sectional studies can evaluate the possible risk factors for the outcome of interest. Cohort or population-based case-control studies can be conducted to ascertain the temporal order of exposure and disease. Another limitation of the present study was the small sample size, thus highlighting caution in generalizing the results to the study population.

Conclusion

The findings indicated that the perception of aging and hope for life in older people is favorable. In addition, there was an association between factors such as marital status, education status, accommodation, and economic status with hope in older people. Therefore, in developing programs to improve the health of older people, it is necessary to consider the individual and demographic characteristics of older people in the medical and health staff, which may maintain the level of perception of aging and hope in older people.

Authors' Contribution

Conceptualization: Ghanbar Roohi, Zahra Sabzi.
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Writing–review & editing: Hadi Savari, Ghanbar Roohi, Zahra Sabzi, Fatemeh Mehravar.

Competing Interests

The authors declare that they have no competing interests.

Ethical Approval

Ethical approval for this study was obtained from the Ethics and Research Committee of Golestan University of Medical Sciences (IR.GOUMS.REC.1399.410). Before registration, all participants read and sign the informed written consent form. A copy of the signed consent form was given to the participant. The guidelines on research involving the use of human subjects (beneficence, non-maleficence, veracity, confidentiality, and voluntarism) were strictly adhered to according to the Helsinki Declaration. Participants did not incur any cost by participating in this study, and there was no financial inducement.

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