The Relationship between Aging Anxiety and Attitudes towards the Elderly among Health Care Providers in Mazandaran Province in 2018

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Abstract

Background: According to the World Health Organization, aging anxiety decrease life expectancy and causes disease in old age. Negative attitude towards the older adults is a major factor associated with aging anxiety. Therefore, the present study aimed to determine the relationship between attitudes towards the older adults and fear of aging in the health care providers of Social Security Organization's hospitals in Mazandaran province in 2018.
Methods: We conducted the present cross-sectional study on 232 health care providers of hospitals of Social Security Organization in Mazandaran province in 2018, selected them by stratified random sampling according to the job categories, and included them in the study. We utilized the Anxiety about Aging Scale (AAS) by Lasher and Faulkender and Kogan's Attitude toward Old People Scale (KAOPS) to collect data. We analyzed the data in SPSS16 using Pearson correlation, independent t-test, and one-way analysis of variance.
Results: The participants' mean age was 37.85 ± 6.40 years and the mean of aging anxiety was 67.90 ± 10.60. Among the four subscales of aging anxiety, the highest fear was related to "fear of loss" (23.7 ± 4.5) and then "fear of physical appearance" (21.25 ± 4.65), and the lowest was related to "fear of the older people " (10.12 ± 3.25). Despite the slightly higher mean aging anxiety among nursing and midwifery staff than medical staff, it was not statistically significant. Findings indicated that aging anxiety had a negative and significant relationship with attitudes towards the older adults in health care providers $(r=0.35, P=0.001)$.
Conclusion: Given the high aging anxiety in health care providers and its importance in providing services for the older adults as well as the quality of their old age, we suggest promoting the health care providers' positive attitudes towards the older adults through in-service training courses.

Introduction

Aging is a natural process and a stage of human growth and development. During this process, changes occur in individuals' physiological, psychological, and social dimensions. The aging process is gradual and progressive; and diet, environment, personal habits, and genetic factors can affect its severity and extent (1). Given the increasing population of the older adults and attention to their health, the point that has received more attention in recent years is that health in old age can be determined by the individuals' perception of old age and quality of life in youth and middle age. Aging anxiety is a factor which affects the individuals' lives before and during old age (2).

Aging evokes images of degeneration, disability, illness, death, and loss of many abilities, and these perceptions create aging anxiety, including thoughts, fears, and emotions associated with aging. Inappropriate relationship with the older adults, poor health (3), and age are positively associated with aging anxiety (4). It is a persistent or abnormal fear of aging and a special fear that can be caused by the individuals' worry about being alone and inability to take care of themselves (3). Aging anxiety is a general fear that affects both men and women. A person with this fear may be young and healthy. This fear includes fear of the future and needing others to do everyday affairs. Many people also fear losing their active roles in society when they get old. According to the World Health Organization, aging anxiety decrease life expectancy. These people develop disability earlier and live an average of 5 to 7 years less than those with positive attitude towards aging (5).

Numerous factors affect aging anxiety among which the negative attitude towards the older adults is the most important factor. Beliefs, attitudes, and respect for the older adults are different in various cultures (6). Attitude towards caring for the older adults is a determinant of the older adults caring behavior that affects the older adult's health (7). Negative attitudes towards the older adults are not only common among the general public, but also healthcare personnel are prone to this negative attitude due to long-term and constant contact with problems and issues of the older adults (8).

Studies have found that various demographic factors affect the attitudes of nurses and physicians towards the older adults as well as aging anxiety, such as age (9, 10), gender, living with elderly parents, work and contact with the older adults (11, 12), good previous relationships with the older adults, education and learning, personality and cognitive factors, occupational factors (12), physical appearance, and mental concerns (10), experience of living with the older adults (8), personal and religious beliefs, each individual's familial and professional experience, social culture (1), and low knowledge about aging that cause negative attitudes, followed by aging anxiety (5). Research and intervention about aging anxiety are very important because fear and anxiety of aging are associated with negative consequences such as lower life expectancy and cardiovascular problems, indicating that aging anxiety has a negative effect on the health and life satisfaction (3).

The aging population of Mazandaran province was about 11% according to the census of 2016. The percentage of the older adults was higher than the national average (9.3). Furthermore, more than 60% of the population of the province are covered by the social security insurance and use services of hospitals covered by Social Security Organization. Mazandaran province is one of the provinces with the highest proportion of the aging population in Iran and also many patients, who referred to hospitals of Social Security Organization, were older adults the present study aimed to determine the relationship between attitudes towards the older adults and fear of aging in the health care providers of Social Security Organization's hospitals in Mazandaran province in 2018.

Methods

The present cross-sectional study was conducted on health care providers employed in hospitals of Social Security Organization in Mazandaran in 2018. There were five hospitals of Social Security Organization in Mazandaran province. We obtained the sample size of 231 based on Cochran's formula with a power of 94% (according to the budget and research time) at a significant level of 5%. The sample size became 254 due to a 10% increase in the sample loss. We obtained the samples using the stratified random sampling based on the job categories, including the physicians (general, specialist, super specialist) and nursing and midwifery staff (nurse, assistant nurse and midwife) and the ratio of their number to the total number of health care providers in each hospital. Finally, 232 out of 254 distributed questionnaires were fully answered and analyzed. Inclusion criteria was working in hospitals of Social Security Organization as a health care providers and willingness to participate in study, and exclusion criteria were failure to completing the questionnaire questions completely.

Table 1. Relationship between demographic characteristics and aging anxiety among healthcare staff

		N	%	Mean ±SD	Statistic	P-value
Sex	Male	66	28.4	66.33±10.72	t= 1.431	0.154
	Female	166	71.6	68.53±10.51		
Age (Year)	30≤	30	12.9	69.80±9.27	F= 1.362	0.255
	31-40	117	50.4	68.43±9.86		
	41-49	78	33.6	66.93±11.70		
	50≥	7	3.1	62.00±13.95		
Marital status	Single	34	14.7	68.82±14.54	t= 0.543	0.587
	Married	198	85.3	67.75±9.80		
Job	Medical Staff	42	18.1	67.81±14.14	F=15.194	0.946
	Nursing and midwifery	190	81.9	67.93± 9.69		
Have certificate of gerontology courses	yes	42	18.1	65.35±12.94	t= 1.732	0.080*
	no	190	81.9	68.47±9.95		
Income (million Rials)*	20 <	14	6	69.07±7.38	F= 2.104	0.060*
	20-29	79	34.1	69.06±8.84		
	30-39	71	30.6	67.50±10.01		
	40-49	18	7.8	69.94±8.24		
	50-59	17	7.3	60.47±14.48		
	60 ≥	33	14.2	68.24±14.20		
living with older adults	Yes	43	18.5	65.86±12.09	t=1.407	0.161
	No	189	81.5	68.37±10.20		
Years of experience	10≤	79	34.1	68.95±9.82	F = 2.313	0.271
	11-19	139	59.9	67.04±10.55		
	20≥	14	6	70.64±14.60		

*According to the official rate of the Central Bank of Iran, each dollar in January 2021 is approximately equal to 250,000 Rials.

We collected data using the demographic information questionnaire (hospital of work, sex, age, marital status, job category, work experience, having certificate of gerontology courses, monthly income, and experience of living with an older adults), The Anxiety about Aging Scale (AAS) by Lasher and Faulkender, and Kogan's Attitude toward Old People Scale (KAOPS).

The Anxiety about Aging Scale (AAS) by Lasher and Faulkender includes 20 items on 4 subscales, namely fear of the older people, psychological anxiety, physical appearance, and fear of loss. The subscales contained five questions on a 5-point Likert scale from strongly agree (score 5) to strongly disagree (score 1). The range of aging anxiety status scores was from 20 to 100, and a higher score indicated a greater aging anxiety. Lasher and Faulkender (1993) confirmed the validity of the Anxiety about Aging Scale and reported its reliability using a Cronbach's alpha coefficient of 0.82 that indicated an acceptable reliability. Poorsattar-Bejeh (2011) translated the questionnaire into Persian in Iran and reported its reliability using a Cronbach's alpha coefficient of 0.76 (13).

Kogan's Attitude toward Old People Scale (KAOPS) has 34 items with two subscales of appreciation and prejudice, each of which subscale has 17 items on a 6-point Likert scale from strongly agree to strongly disagree with a score of 1 to 6. The score range of the questionnaire was from 34 to 204. In the questionnaire, a higher score indicated a more positive attitude. The questionnaire was translated into Persian in Iran by Rejeh et al. (2016), and its reliability was reported using a Cronbach's alpha coefficient of 0.8 (14). In the study, we used a demographic information form to collect contextual characteristics, including sex, age, job, work experience, marital status, monthly income, having certificate of gerontology courses, experience of living with an older adult.

After approving the present study in the ethics committee of the University of Social Welfare and Rehabilitation Sciences (IR.USWR.REC.1397.120) and obtaining permission from the treatment management of the Social Security Organization of Mazandaran Province, we selected the samples based on the list of health care providers in hospitals of Social Security Organization and the table of random numbers, and distributed the questionnaires among them after inviting the healthcare providers to study. We told the participants that the information remained confidential and they could complete the questionnaires if they wanted. We analyzed the data in SPSS statistics for windows, version 16.0 (SPSS Inc., Chicago, III., USA) using descriptive statistics (frequency, percentage, mean and standard deviation) and inferential statistics (Pearson correlation test for examining the relationship between attitudes about aging and aging anxiety, independent t-test, and one-way analysis of variance for examining the relationship between demographic variables and aging anxiety) by investigating the normality of data distribution through the Kolmogorov-Smirnov test. Significance level of the study was considered at a 5% error level.

Results

The results indicated that most of the participants were female (71.6%) and married (85.3%), in the age group of 30 to 40 years. The mean age of participants was 37.85±6.39 years. The majority of them were nursing and midwifery staff (81.9%) with an average work experience of 12 years. Also, most of the health

care providers (81.9%) had not passed the geriatric education course. 81.5% of the participants did not have the experience of living with elderly (Table 1).

No statistically significant difference was observed between characteristics variables and aging anxiety at an error level of less than 5% in examining the relationship between aging anxiety and demographic variables. However, there was a statistically significant relationship between aging anxiety and having certificate of gerontology courses (p=0.080) and monthly income (p=0.060) at an error level of less than 10%. Furthermore, the aging anxiety scores were higher in women, younger ages, singles, nursing-midwifery staff, lack of experience of living with the older adults and in people with higher experience, but no statistically significant difference was observed (Table 1).

Among the four components of aging anxiety scale, the highest mean fear belonged to "fear of loss" (23.71±4.5) and then "fear of physical appearance" (21.25±4.65), and the lowest mean belonged to the "fear of the older people" component (10.12± 3.25). Also, the mean of aging anxiety was 67.90±10.60 (Table 2).

The mean appreciation and prejudice of health care providers about the older adults were 70.71±8.20 and 53.85±10.59 respectively, and in general, the mean attitude about the older adults was 124.56± 12.96 (Table 2).

According to Pearson correlation test, there was a negative and significant relationship between attitudes toward the older adults and aging anxiety in healthcare providers of Social Security Organization in Mazandaran province (r= 0.35, P = 0.001). In other words, the better the views of health staff about the older adults, the less aging anxiety among them (r= 0.35, P= 0.001).

There was also a significant negative relationship between prejudice and aging anxiety, but there was no significant relationship between appreciation and aging anxiety (Table 3).

Table 2. Mean scores of aging anxiety and attitude about the elderly in health care providers

Variable	Mean±SD
Fear of aging	67.90±10.60
Fear of older people	10.12±3.25
Psychological concerns	13.35±3.10
Physical appearance	21.25±4.68
Fear of loss	23.17±4.15
Attitude toward older adults	12.96±124.56
Appreciation	8.20±70.71
Prejudice	10.59±53.85

Table 3. The correlation between attitudes about the elderly and aging anxiety in healthcare staff

	Fear of Aging		
	r	P-value	n
Attitude toward older adults	-0.345	0.001	232
Appreciation	-0.088	0.180	232
Prejudice	-0.354	0.001	232

Discussion

The research findings indicated that the status of aging anxiety was higher than average in the healthcare providers at hospitals of Social Security Organization in Mazandaran province, indicating a higher aging anxiety. Given that healthcare providers were in contact with a group of older people who were ill, they were more likely to be afraid and anxious about the aging. The finding was consistent with a study by Wells et al. (2004) who found that healthcare providers had higher aging anxiety (15). Observing the sick older adults by healthcare providers can increase the stereotype that the disease is associated with old age and leads to aging anxiety. It is also consistent with findings of a study by Branton and Scott (2015) who found that healthcare providers might have higher fear due to more exposure to negative aspects of aging.

Aging anxiety can be assessed in four dimensions: fear of the older people, fear of loss, loss of physical appearance, and psychological factors. In the present study, fear was greater in terms of physical appearance and loss of health and friends. In studies by Lasher and Faulkender (1993) and Branton and Scott (2015), fear of physical appearance was higher in women, and the result was consistent with the present study because most participants were women in our study. fear of loss was higher in our study, and it was inconsistent with studies by Lasher and Faulkender (1993) and Branton and Scott (2015) who found that fear of loss was more common in older adults because in our study the average age of participants was 37.85 years that was different from the average age of other studies probably because the healthcare providers see the sick older adults.

Fear of the older people is related to the individuals' perspective on the older adults and the phenomenon of aging. People, who have a negative attitude towards old age, suffer from aging anxiety. Different studies have different results, but negative attitudes toward aging is a big cause of ageism. Healthcare providers are more prone to aging anxiety due to more contact with negative aspects of aging (3). There was a negative and significant relationship between

attitudes toward the older adults and aging anxiety of healthcare providers at hospitals of Social Security Organization in Mazandaran province. In other words, the better the attitude of healthcare providers towards the older adults, the lower the fear of aging among them. A positive attitude towards aging decreases and the fear of aging increases probably due to social factors, such as over-valuation of positive characteristics of young people. Changing the social culture and knowledge about healthy and active aging in the media can increase a positive attitude towards aging and reduce the fear of aging. The findings were consistent with results of a research by Iceline Teresa (2016) who found that a positive attitude towards the older adults was associated with better mental health outcomes (16).

According to Erickson's theory of development in the field of eight stages of life, among eight stages of life, the last three stages (intimacy against isolation, fertility against recession, and cohesion against despair) played more effective roles in the creation of individuals' attitudes and views about the older adults. Old age is the accumulation of past periods of life, and youth and middle age affect attitudes and, consequently, the individual health in old age.

In the present study, there was no significant relationship between demographic variables such as gender, age, marital status, job, work experience, living with an older adults, having certificate of gerontology courses, and monthly income with fear of aging in healthcare providers of hospitals of Social Security Organization in Mazandaran province. The reason for the lack of relationship may be due to low variance between participants.

In the present study, there was only a statistically significant relationship between aging anxiety with having certificate of gerontology courses and monthly income at an error level of less than 10%. In a study by Sophia Kokoli et al. (2013), higher education and income were associated with less aging anxiety (17) and in a study by Wells et al. (2004), less knowledge was associated with greater fear of aging probably because greater knowledge about aging was associated with lifestyle modification, nutrition and exercise, and doing screening tests. Branton and Scott (2015) also noted that more health was associated with less aging anxiety.

Anxiety disorders are associated with lower quality of life, disruption of daily life activities, more chronic diseases, and a higher prevalence of pain in the older adults. Observations indicate that the older adults with fear and panic disorders are more prone to cardiovascular diseases, stroke, and death by suicide. It represents an important recognition of the anxiety disorders (19). Also, high fear and anxiety are associated with poor performance and less attention in performing tasks. Therefore, more education and higher knowledge of old age are associated with lower anxiety and better performance.

Conclusion

Due to the longer life expectancy and increase in the aging population and the importance of quality life in old age, managers and health officials of Mazandaran province are suggested promoting the healthcare providers attitude and knowledge about the phenomenon of aging by scientific and coherent planning, such as holding in-service training courses for healthcare providers to reduce their aging anxiety, and improve their attitude towards aging that also affect the quality of services for the older adults.

The mass media should focus on positive dimensions of aging, such as experience and wisdom, to reduce the aging anxiety and the negative attitude towards aging, and include concepts such as active aging, successful and healthy aging in staff training to reduce aging anxiety. Since the present study examined the relationship between aging anxiety and attitudes toward the older adults in healthcare providers, future studies are suggested examining the relationship between aging anxiety with healthcare providers and quality of care.

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Ethical statement

This study was approved by the ethics committee of the University of Social Welfare and Rehabilitation Sciences.

Conflict of interest

The authors declared no conflict of interest.

Author contributions

Conceptualization: Tayebeh Abdollahi, Nasibeh Zanjari and Yadollah Abolfathi Momtaz. Methodology, analysis, research a review: Tayebeh Abdollahi, Nasibeh Zanjari, Yadollah Abolfathi Momtaz and Ahmad Delbari. Writing- review and editing: Tayebeh Abdollahi, Nasibeh Zanjari, Yadollah Abolfathi Momtaz and Ahmad Delbari. Supervision: Nasibeh Zanjari, Yadollah Abolfathi Momtaz.

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