ORIGINAL ARTICLE

Examination of Successful Aging Conditions of Geriatric Home Health Patients

Neşe Kıskaç[1], Burcu Hacıoğlu[2], Meryem Güven[2], Mahruk Rashidi[1], Yalçın Hacıoğlu[3],
Funda Karaman[4], Muharrem Kıskaç[5]

[1]Department of Nursing, İstanbul Gelişim University Faculty of Health Sciences, İstanbul, Türkiye
[2]Department of Internal Medicine, Haseki Training and Research Hospital, İstanbul, Türkiye
[3]Department of Family Medicine, İstanbul Training and Research Hospital, İstanbul, Türkiye
[4]Department of Nursing, Biruni University Faculty of Health Sciences, İstanbul, Türkiye
[5]Department of Internal Medicine, Bezmialem Vakıf University Faculty of Medicine, İstanbul, Türkiye

Abstract

Introduction: The aim of this study was to examine the successful aging conditions of geriatric home health patients.

Methods: The design of this study is descriptive and cross-sectional. The study was conducted with 605 patients aged 60 and over who received service from the home health unit of a training and research hospital. IBM SPSS Statistics 22.0 program was used in the analysis of the data.

Results: The successful aging score of geriatric home health patients was found to be 32.46±12.74, which is considered low. A significant relationship was found between successful aging score and patients' age, marital status, education level, and chronic diseases such as hypertension, diabetes, and cancer (p<0.05). In addition, a significant relationship was found between the duration of the patients receiving service from the home health unit and their gender, as well as the presence of a patient's relative who looked after them (p<0.05).

Discussion and Conclusion: As a result, successful aging scores of geriatric home health patients are low. In order to ensure successful aging, home health units should work in coordination with preventive, curative, and rehabilitative health institutions and develop training modules to increase healthy life activities.

Keywords: Aging; Geriatrics; Health.

With the increase in technology in the world and in our country, and with the ease of access to health services, the expected life expectancy has extended, and the aging population has increased. According to the World Health Organization, it is stated that the number of people aged 60 and over in the world was 1 billion in 2019, and this number will increase to 2.1 billion in 2050[1]. When we look at the data of the Turkish Statistical Institute (TUIK), it is seen that while the population aged 65 and over was 7.1% of the general population in 2009, this rate increased to 9.9% in 2022[2]. This rapid increase in the elderly population globally has brought the concept of successful aging to the agenda. Rowe and Kahn (1987) used this term for the first time. Successful aging is defined as individuals' low risk of chronic disease and disability, high physical function, good mental health, and high social participation[3,4]. In the systematic review of Estebsari et al.[5] (2020) about this concept, some researchers have found that successful

aging includes physical activity, number of close friends[6,7], being sick and not disabled, communication, cognitive and physical functionality, productivity[6], age, not smoking, arthritis, diabetes[8,9], self-acceptance, autonomy, positive relationships with others, control over one's environment, having goals in life[10], having inner happiness, and satisfaction with the past[11], while some studies have found that gender, income, education, and marital status do not have an effect on successful aging[12].

When we look at these studies in the literature, we understand that successful aging can occur if individuals are well physically, socially, and psychologically. When we look at the patient group served by home health services, studies show that these units mostly serve the population over the age of 60[13,14]. Home health units, which generally serve the elderly population, have a great role in the successful aging of individuals. Looking at the literature, we can see that many studies have been conducted on successful aging[15-18]. However, we couldn't come across a study that evaluates the successful aging status of the patient group served by home health service units. Considering the aging population, we think that the results of this study will contribute to the updating of national and global health policies and the development of care protocols of home health service units. In this study, it was aimed to examine the successful aging status of geriatric home health patients.

Materials and Methods

Study Design

The study was conducted as descriptive and cross-sectional.

Sample of the Study

The sample of the study consists of 605 patients aged 60 and over, who received service from the Home Health Services Unit of a Training and Research Hospital in Türkiye, and who agreed to participate in the study. Since the Successful Aging Scale was developed for patients aged 60 and over, patients aged 60 and over were also included in this study. Patients with Alzheimer's, dementia, and psychiatric diagnoses and those with whom we could not communicate were excluded from the study because they could not answer the questionnaire questions properly.

Data Collection Method

Data were collected by face-to-face survey method between 11 February 2023 and 20 March 2023.

Data Collection

A form describing the personal characteristics of the patients and the Successful Aging Scale were used while collecting the data.

Personal Data Identification Form of Patients

The personal data identification form of the patients, which was created by scanning the literature, consists of 7 questions. This list of questions inquired about patients' age, marital status, gender, education level, chronic diseases (diabetes, hypertension, heart failure, chronic obstructive pulmonary disease (COPD), cardiovascular diseases, chronic kidney diseases, chronic liver diseases, cancer, other chronic diseases (cerebrovascular disease and Parkinson's)), whether the patient has a relative who takes care of them, and how many months they have been receiving service from the home health unit.

Successful Aging Scale

The Successful Aging Scale[19] is a 5-point Likert-type scale consisting of 19 items and a single factor. Scoring of the scale is done as Never=1, Rarely=2, Sometimes=3, Often=4, Always=5. There is no reverse item in the scale. The highest score that a person can get is 95, and the lowest score is 19. This scale was carried out on two different study groups for exploratory and confirmatory factor analysis studies. The study group formed for exploratory factor analysis consists of 521, and the group for confirmatory factor analysis consists of 243 elderly individuals. The Cronbach alpha internal consistency coefficient of the total score of the SAS was calculated as 0.96 in the first study group and 0.90 in the second study group. In this study, the Cronbach's alpha coefficient of the Successful Aging Scale was determined as 0.762[19].

Analysis of Data

IBM SPSS Statistics 22.0 program was used for statistical analysis in the study. While evaluating the study data, in addition to descriptive statistical methods (mean, standard deviation, frequency, percent), the Student T test was used to compare data with normal distribution, and the Mann-Whitney U test was used for comparison of data that did not show normal distribution. One-way ANOVA and Kruskal-Wallis tests were used to evaluate more than two normally and non-normally distributed variables, respectively. Pearson and Spearman correlation analysis were used to evaluate the correlation between variables. The results were evaluated at the 95% confidence interval and the significance level of $p < 0.05$.

Ethical Sspect of the Study

Before starting the study, permission was obtained from the Clinical Research Ethics Committee of University of Health Sciences Istanbul Training and Research Hospital, with the decision dated 10.02.2023 and numbered 36. This study was conducted in accordance with the Declaration of Helsinki. Participants who voluntarily agreed to participate in the study were informed about the research and their necessary rights, and "informed consent" was obtained before the research. All rights of the participants were respected, and the principles of voluntariness and confidentiality were taken into consideration.

Results

Personal data of 605 geriatric home health patients included in the study are shown in Table 1. Considering the personal data of these patients, 68.4% were women, 51.2% were married, 42.1% were illiterate, and 93.9% had a relative or spouse to care for them. Their mean age was 79.67±9.09, and the duration of receiving service from the home health unit was found to be 18.73±18.61 months (Table 1).

The total score of geriatric home health patients from the Successful Aging Scale is shown in Table 2. The mean total score obtained from the scale was found to be 32.46±12.74. We can evaluate this score as below the intermediate level (Table 2).

Since the mean age of the patients included in the study was 79.67±9.09 years, 79 years was taken as the limit. It was found that there was a significant relationship between age and successful aging score ($p < 0.05$), and participants younger than 79 years had higher successful aging scores (34.56±14.13).

There was a significant relationship between marital status and the duration of receiving service from the home health unit ($p < 0.05$). It was observed that those who were single received service from the home health unit longer than those who were married (20.38±19.83). There was a significant relationship between marital status and successful aging ($p < 0.05$). Successful aging scores of married people were higher than single people (34.32±14.22).

Table 1. Descriptive characteristics of geriatric home health patients (n=605)*

	n	%
Gender		
Female	414	68.4
Male	191	31.6
Age (average)	79.67±9.09	
Marital status		
The married	310	51.2
Single	295	48.8
Educational status		
Illiterate	255	42.1
Literate	181	29.9
Primary school	124	20.5
Middle School	23	3.8
High School	18	3
Bachelor degree	4	0.7
Existing chronic diseases		
Hypertension	373	61.7
Diabetes	196	32.4
Heart failure	86	14.2
COPD	38	6.3
Cardiovascular diseases	65	10.7
Chronic kidney disease	18	3.0
Cancer	30	5.0
Chronic liver disease	5	0.8
Other chronic diseases	253	41.8
The one with a relative that cares for them	568	93.9
Time of teceiving service from the home health unit (months)	18.73±18.61	

*: Descriptive statistical methods (mean, standard deviation, frequency, percent). COPD: Chronic obstructive pulmonary disease.

There was a significant relationship between gender and the duration of receiving service from the home health unit ($p < 0.05$). It was observed that women received service from the home health unit longer than men (20.72±19.72).

It was determined that there was a significant relationship between the status of the patient having a caregiver relative and the duration of receiving service from the home health unit ($p < 0.05$). The duration of receiving service from the home health service unit was longer for the patients who did not have relatives to care for them (26±23.82) (Table 3).

Table 2. Successful Aging Scale total scores in geriatric home health patients (n=605)*

|	Minimum and maximum scores that can be obtained	Minimum and maximum scores received	Scale mean scores
Successful Aging Scale total scores	19-95	19-75	32.46±12.74

*: Mean

Table 3. The effect of the personal characteristics of the patients on the total score of successful aging and the duration of receiving service from the home health unit (n=605)*

	n	Time of teceiving service from the home health unit (months)		Successful Aging Scale total scores	
		Mean	**p**	**Mean**	**p**
Age					
≥79	341	20.04±19.04	0.49	30.84±11.31	0.001
<79	264	17.05±17.94		34.56±14.13	
Marital status					
Married	310	17.19±17.29	0.03	34.32±14.22	0.001
Single	295	20.38±19.83		30.50±10.68	
Gender					
Female	414	20.72±19.72	0.001	31.93±12.62	0.12
Male	191	14.42±15.11		33.63±12.96	
The one with a relative that cares for them	568	18.30±18.16	0.01	32.39±12.72	0.85
The one who doesn't have a relative that cares for them	37	26±23.82		32.78±12.14	

*: Student T test. Mann-Whitney U test.

There was a significant relationship between the education levels of the patients and their successful aging scores (p=0.001). It was observed that as the educational status of the patients increased, the scores of successful aging also increased, except for the undergraduate level (Fig. 1). Looking at Table 1, it was seen that the number of patients who received undergraduate education who accepted to participate in the study was 4 people.

Successful aging scores of those with and without chronic disease are shown in Table 4. A significant correlation was found between the successful aging scores of patients with and without hypertension, diabetes, and cancer (p<0.05). Successful aging scores of patients with hypertension, diabetes, and cancer were found to be higher than those without (Table 4).
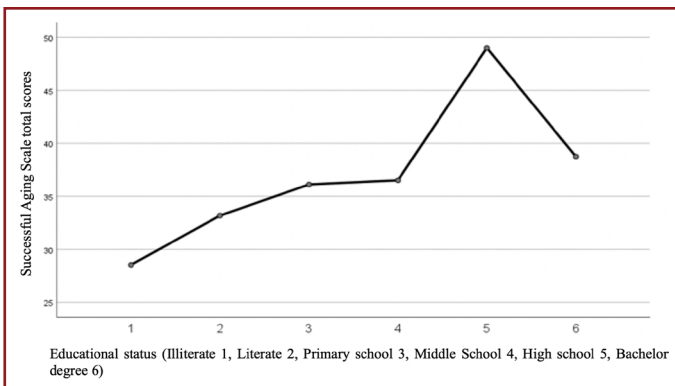
Figure 1. The relationship between the education levels of the patients and their successful aging status.

*: One-way ANOVA. ANOVA: Analysis of variance.

Table 4. Chronic diseases affecting successful aging score (n=605)*

	n	Successful aging score	p
Hypertension			
There is	373	33.35±12.55	0.02
There isn't	232	31.03±12.95	
Diabetes			
There is	196	34.22±13.30	0.01
There isn't	409	31.62±12.39	
Heart failure			
There is	86	33.94±13.40	0.2
There isn't	519	32.22±12.63	
COPD There is	38	30.82±10.26	0.3
There isn't	567	32.57±12.89	
Cardiovascular diseases			
There is	65	34.88±12.71	0.1
There isn't	540	32.17±12.73	
Chronic kidney disease			
There is	18	36.67±17.33	0.1
There isn't	587	32.34±12.57	
Cancer			
There is	30	35.77±16.17	0.01
There isn't	575	32.29±12.53	
Chronic liver disease			
There is	5	38.20±10.96	0.3
There isn't	600	32.42±12.75	

*: Student T test. Mann-Whitney U test. COPD: Chronic obstructive pulmonary disease.

Discussion

Successful aging status and influencing factors of geriatric home health patients were examined (Table 2-4, Fig. 1). The successful aging total score of the patients was found to be 32.46±12.74. This score was evaluated as a low level of successful aging. In the study conducted by Çakmak (2022)[20] on 97 elderly individuals, the successful aging score was 63.76±15.24, above the medium level. The scale score of Demir-Erbil and Hazer (2021)[21] was 60.13±9.37, also above the medium level in 500 elderly individuals. Furthermore, 232 patients aged 40 years and older had a score of 60.2±6.5 on the scale applied by Işık et al.[22] (2021). In the study by Jang (2020)[23], it was stated that successful aging was affected by variables such as age, gender, healthy living conditions, marital status, kinship relations, and mental status. Again, in literature studies, it is seen that physical, social, and demographic variables of individuals affect successful aging scores[20-22].

In this study, unlike the literature studies, geriatric home health patients were taken as a sample. It was thought that the fact that home health patients were the patient group with a high number of chronic diseases and average age in general, and who received support in providing their own self-care, affected the successful aging score. In the study, it is seen that there is a significant relationship between age, marital status, education level, and successful aging score, which supports the literature (p<0.05). Successful aging scores are higher for those younger than 79 years of age. It is thought that the score of successful aging increases as age decreases due to higher physical activity, more active social life, and the increase in diseases with age. The reason for the high successful aging scores of those who are married is that having spouses to care for them is seen as an advantage in terms of successful aging. As the educational status of the patients increased, successful aging scores increased except for the undergraduate level. The reason for the decrease at the undergraduate level may be that the number of patients with undergraduate degrees was only 4 people.

In the study, the duration of service from the home health unit and age, marital status, gender, and having relatives who care for them were compared. While there was no significant difference between the duration of service from the home health unit and age (p>0.05), a significant relationship was found between marital status, gender, and having relatives who care for them (p<0.05). Those who are single, women, and those who do not have a relative to take care of them receive service from the home health unit for a longer period. Due to the fact that in our country, culturally, women have a role in taking care of individuals, cooking, and cleaning more than men, it may be that if women take care of male patients, especially married ones, the period of time for men to receive service from the home health unit may be short. The fact that women and single people do not have anyone to take care of them may have led to the need to receive services from the home health unit.

The relationship between chronic diseases of patients and successful aging was examined. A significant correlation was found between the chronic diseases hypertension, diabetes, and cancer and the successful aging score (Table 4). Although Rowe and Kahn (1987)[3] define individuals' low risk of chronic disease and disability as a criterion for successful aging, in this study, we see that those with chronic diseases have higher scale scores. We can discuss this situation in two ways. Firstly, we can say that home health patients with chronic diseases pay more attention to nutrition, physical activity, and self-care with the education and care given by the home health unit than those who do not have chronic diseases, and they learn to live with their chronic diseases. In the second case, we can say that the physical, social, and psychological conditions of the patients that affect successful aging are not affected by their chronic diseases, their chronic diseases are under control, and they do not have complications. In this situation, it can be said that the service provided by the home health unit is at a good level in terms of providing quality care.

Conclusion

The successful aging score of geriatric home health patients was lower than average. In addition, age, marital status, educational status, and the presence of hypertension, diabetes, and cancer were found to affect the successful aging score. It was observed that the higher the education level, the higher the successful aging score. It was determined that the scale scores of those diagnosed with hypertension, diabetes, and cancer were high. We can say that this situation may have increased in parallel with the training that individuals received. As a result, it is thought that individuals' healthy life-supporting nutrition, increasing physical activity, avoiding addictive habits such as smoking and alcohol, and involving the elderly in social life as much as possible will be effective on successful aging. For this reason, home health units should work in coordination with preventive, curative, and rehabilitative health institutions, develop training modules to increase healthy life activities, and include patients and their relatives in care. Globally, it is necessary

to develop health policies that will support successful aging in the aging population.

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