Original Article

Effect of Functional Condition and Self-Efficacy Level on Morale: A Nursing Home Sample

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Abstract

Background: Morale is associated with self-satisfied and well-adjusted feelings of individuals regarding their ability to search for suitable efforts by accepting the inevitable. Functional disorder may occur in individuals owing to age-related changes, diseases, and social factors. A high self-efficacy level increases positive life style changes, motivation, and the ability for coping with stress.
Objective: This study assessed the effect of functional condition and self-efficacy level on the morale of elderly people living in a nursing home.
Methodology: Although this cross-sectional, descriptive, and correlative study had a target population of 437 elderly people who resided in a nursing home in the European side of Istanbul, the study included 91 elderly people who had no hearing impairment and who accepted to participate in the study between January and March 2016. Data were collected using the Descriptive Information Form, Barthel Activities of Daily Living Index for assessing the functional condition, General Self-Efficacy Scale, Philadelphia Geriatric Center Morale Scale, and a face-to-face interview method. The data were analyzed using the SPSS software.
Results: The mean age was 71.0 ± 9.83 years; 68.1% of the participants were males. The functional condition of the participants on an average was 99.0 ± 4.23, the General Self-Efficacy Level was 61.92 ± 13.95, and the morale level, determined by Philadelphia Geriatric Center Morale Scale, was 7.25 ± 3.39 points. The morale of elderly people who were functionally more dependent was low. However, the effect of self-efficacy on morale could not be determined. Education level, having a chronic disease, continuous medication use, and having a child were correlated with the functional condition. In addition participants with lower education level, with chronic diseases, continuously using medication and smoking, and with a child were functionally more dependent.
Conclusions: The functional condition of elderly people in the nursing home affected their moral levels, although a direct effect of self-efficacy on morale could not be determined.

Key Words: Aged; Activities of daily living; Morale; Nursing homes

Introduction

Although some elderly people are able to live independently in the comfort of their own home, some live in nursing homes because of chronic diseases and care requirements (Kara et al., 2009). In addition, although the traditional trend in Turkey is for elderly people to live with their family and children, in recent years, a shift toward an elementary family structure has led to an increase in the number of elderly people living in nursing homes (Askullu & Dogan,

2004). Elderly people who comprise a risk group with regard to mood (mental state) have been facing more intensive problems in nursing homes and are beginning to get isolated from the public and thus retreat (Altiparmak, 2009). Furthermore, elderly people who live with their relatives in Turkey are less depressed and more creative (Bozo, Toksabay, & Kurum, 2009).

Protecting the mental health of elderly people, keeping their morale up, and improving their independent living ability all increase the quality of life of elderly people. Morale is defined as the lack of stress symptoms and the self-satisfaction of a person who is well-adjusted, who accepts the inevitable, and who has the ability to seek suitable effort. Morale is a subjective and psychological well-being state and can also be defined as the quality of life (Lawton, 1975). The morale of an individual is affected by many psychosocial factors such as despair, depression, anxiety, poor social support, and poor quality of life. Low morale is an independent determinant of stroke incidence (Araki et al., 2004) and mortality (Benito-Leon et al. 2010) in elderly people and can lead to problems such as depression, grief, and emotional problems (Sullivan, 1997). Low morale is also an important determinant of depression (Niklasson, Lovheim, & Gustafson, 2014), and elderly people with a high morale have a lower risk of depressive disorder in the next 5 years follow-up (Niklasson, et al. 2017). High morale is associated with an independently increased survival desire (Niklasson, et al. 2015). Von HeidenWagert et al. (2005) reviewed the factors that affected the morale of individuals aged >85 years in Switzerland; they determined that a lack of depression symptoms, living in one's own house, lack of experiencing loneliness, attending social activities, and being satisfied with one's own health resulted in high morale (von Heideken Wagert, et al. 2005). In another study, the disability of elderly people, existence of chronic diseases, social support level, and religious belief and personal characteristics were reported to affect morale (Loke et al. 2011).

Functional disorder is a common condition observed in elderly people. It may develop because of various changes depending on age, social factors, or diseases. Self-care ability of elderly patients was evaluated using daily life activities (DLAs), which are divided into two groups: basic and instrumental DLAs (IDLAs). Dependency in basic DLA was observed in 25% of the group of individuals aged >65 years and 50% of the group aged >85 years. This dependency might be based on cardiovascular diseases, dementia, and musculoskeletal system disorders. Determining the basal level and falls of patient that could occur during follow-up period are vitally important for understanding the special care requirements for settling in an aged care facility. Falls determined in basic DLA and IDLA might be a precursor of depression, dementia, falling, incontinence, sight impairment, or other diseases (Yavuz, 2007). Self-efficacy that affects positive life style changes, motivation level, and emotional response performance under stressful conditions is a significant issue for sustaining the lives of elderly people (Yildirim & Ilhan 2010).

This study aimed to determine the effect of functional condition and self-efficacy level on morale of elderly people living in nursing homes.

Methodology

This was a single-phased, cross-sectional, descriptive, and correlative study. The target population of the study was 437 elderly people who lived in a nursing home on the European side of Istanbul and who mostly did not have family or intimate relatives of 437 elderly people in the nursing home, data could not be collected from 125 people because of a mentally retarded state, dementia, or psychiatric disorders, which prevented them from understanding the questionnaire; communications could not be set up with 120 people owing to problems such as speech disorder, stroke, and sensory problems; 101 people did not want to participate in the study.

Finally, 91 elderly people with no hearing impairments agreed to participate and thus were included in the study between January and March 2016.

Data were collected using the Descriptive Information Form that included sociodemographic characteristics, Barthel Activities of Daily Living (ADL) Index, General Self-Efficacy Scale, and Philadelphia Geriatric Center Morale Scale.

The Descriptive Form was prepared by the researchers and comprised 19 questions regarding sociodemographic characteristics such as age, education level, income level, occupation, overall health condition, and habits.

Barthel ADL Index records the daily activities of an individual and also assesses the functional condition. The 10-question scale assessed fecal continence, urinary continence, nutrition, bathing (washing face, hair care, and shaving), dressing, transfer, using bathroom, mobility, ascending stairs, and bathing activities.

A point is given as per the ability of the patient to independently or with support perform these activities. The total score indicates the independency level. The lower the total score, the more independent the basic DLA was performed (Yavuz, 2007). The General Self-Efficacy Scale comprises 17 questions, with the points varying between 1 and 5. The questions 2, 4, 5, 6, 7, 10, 11, 12, 14, 16, and 17 of the scale are also scored in reverse. The total points vary between 17 and 85. An increase in the point reveals an increase in self-efficacy belief. When any subscale of the scale is unavailable, its total score is assessed (Yildirim & Ilhan 2010).

The Philadelphia Geriatric Center Morale Scale was developed to determine the morale level of an individual. The scale has 15 questions in total, and morale scores vary between 0 and 15, with an increase in scores showing high morale levels (Lawton, 1975).

The forms were filled by researchers via a face-to-face interview with the participants in a suitable environment. Each interview lasted for an average of 20 min.

Before initiating the study, written consents were received for both ethical and corporate approvals from the relevant nursing home. The study was conducted according to the "Ethical principles for medical research involving human subjects" of the Helsinki Declaration. Oral approval was also received from the participants.

Data were analyzed using the SPSS software for Windows 20.0. Descriptive statistics were expressed in number and percentage (%), average, standard deviation, and median. For non-parametrical comparisons, Mann–Whitney and Kruskal–Wallis tests and advanced analysis were performed. For comparison among the scales, Spearman's correlation analysis was performed. p values of <.05 were considered to be statistically significant.

Results

The mean age was 71.0 ± 9.83 years. Of all participants, 68.1% were males, 67.0% were widows, 73.6% mostly lived in the city, 51.6% graduated from elementary school only, and 48.4% were self-employed. Moreover, 83.5% of the participants had chronic diseases and 74.7% continuously used medication. Chronic diseases included hypertension (38.5%), cardiovascular diseases (23.1%), diabetes (16.5%), and lung diseases (12.1%). In addition, 53.8% of the participants were living in the same nursing home for ≥5 years. The sociodemographic characteristics of the participants are shown in Table 1.

The average scores of the scales are presented in Table 2. It was observed that the participants were mostly independent while performing their DLAs. Furthermore, the General Self-Efficacy Scale showed an above average competence level, and the Philadelphia Geriatric Center Morale Scale showed an average morale among the participants.

Correlation analysis revealed no significant association between the scores of Barthel ADL Index and General Self-Efficacy Scale and between those of the General Self-Efficacy Scale and Philadelphia Geriatric Center Morale Scale. There was a poor and negative statistically significant correlation between the scores of the Barthel ADL Index and Philadelphia Geriatric Center Morale Scale ($r = 0.28$, $p = 0.007$).

When the effect of sociodemographic variables on the scores of the Barthel ADL Index, General Self-Efficacy Scale, and Philadelphia Geriatric Center Morale Scale was assessed, education level, having chronic diseases, medication use, smoking, and having a child were associated with the scores of the Barthel ADL Index (functional condition). In addition, participants with low education level, chronic diseases, continuous medication use, who smoke, and who had children were functionally more dependent. Although the functional condition was better in women than in men, the difference was not statistically significant. Sociodemographic characteristics did not affect the scores of the General Self-Efficacy Scale and Philadelphia Geriatric Center Morale Scale (Table 3).

Table 1. Distribution of Sociodemographic Characteristics of the Participants Living in the Nursing Home

Sociodemographic characteristics (N = 91)		**n**	**%**
Sex	Female	29	31.9
	Male	62	68.1
Marital status	Married	2	2.2
	Single	28	30.8
	Widow	61	67.0
Income level	Income less than outgoings	42	46.2
	Income equal to outgoings	49	53.8
Previous residency place	Rural	24	26.4
	Urban	67	73.6
Educational level	Literate	30	33.0
	Primary school	47	51.6
	High school/university	14	15.4
Job	Housewife	23	25.3
	Operator/clerk	24	26.4
	Self-employed	44	48.4
Chronic disease	No	15	16.5
	Yes	76	83.5
Continuous medication use	No	23	25.3
	Yes	68	74.7
Smoking	No	36	39.5
	Yes	23	25.3
	Discontinued	32	35.2
Alcohol consumption	No	73	80.2
	Yes (sometimes)	18	19.8
Children	Yes	34	37.4
	No	57	62.6

Table 2. Total Scores of the Scales

Scales	**Mean ± SD**	**Median**	**Min–Max**
Barthel ADL Index	2.99 ± 4.23	1	0–22
General Self-Efficacy Scale	61.92 ± 13.95	66	31–83
Philadelphia Geriatric Center Morale Scale	7.25 ± 3.39	7	0–13

Table 3. Comparison of the Scores of the Scales with Regard to Sociodemographic Characteristics

Variables	Total activity (mean ± SD)	Statistics	Self-efficacy (mean ± SD)	Statistics	Moral (mean ± SD)	Statistics
Age group (years)						
≤65	2.41 ± 3.89		62.26 ± 15.13		7.81± 3.79	
66–75	2.55 ± 4.34	X^2 = 5.584	62.13 ± 13.84	X^2 = .385	6.94 ± 3.14	X^2 = 1.165
≥76	3.88 ± 4.38	p = .061	61.45 ± 13.47	p = .825	7.09 ± 3.32	p = .558
Sex						
Female	4.24 ± 4.572	z = −1.892	63.48 ± 12.38	z = −.239	8.03 ± 3.52	z = −1.577
Male	2.40 ± 3.969	p = .058	61.19 ± 14.67	p = .811	6.89 ± 3.30	p = .115
Marital status						
Single	2.00 ± 2.87	z = −1.329	63.50 ± 12.50	z = −.119	8.04 ± 3.35	z = −1.446
Widow	3.51 ± 4.72	p = .184	61.31 ± 14.74	p = .905	6.82 ± 3.34	p = .148
Place of birth						
Rural	2.93 ± 4.04	z = −.012	58.53 ± 15.76	z = −1.597	7.28 ± 3.07	z = −.004
Urban	3.04 ± 4.42	p = .990	64.59 ± 11.84	p = .110	7.24 ± 3.65	p = .997
Income level						
Income equal to outgoings	2.86 ± 4.25	z = −.212	60.80 ± 14.81	z = −.402	7.53 ± 3.60	z = −.999
Income less than outgoings	3.14 ± 4.26	p = .832	63.24 ± 12.94	p = .687	6.93 ± 3.15	p = .318
Educational status						
Literate	5.00 ± 4.339	X^2 = 16.54	62.13 ± 14.15	X^2 = .355	6.17 ± 3.70	X^2 = 4.301
Primary/secondary school	1.74 ± 2.915	**p = .000***	61.06 ± 14.38	p = .837	7.87 ± 2.85	p = .116
High school/university	2.86 ± 6.087		64.36 ± 12.67		7.50 ± 4.03	
Chronic disease						
No	.40 ± .63	z = −3.624	65.60 ± 14.45	Z = −1.280	7.80 ± 3.12	z = −.564
Yes	3.50 ± 4.45	**p = .000**	61.20 ± 13.84	p = .201	7.14 ± 3.45	p = .573
Continuous drug use						
No	.96 ± 1.33	z = 2.893	64.43 ± 13.91	z = −.937	6.87 ± 3.38	z = −.857
Yes	3.68 ± 4.65	**p = .004***	61.07 ± 13.97	p = .349	7.38 ± 3.41	p = .391
Smoking						
No	3.72 ± 4.35	X^2 = 12.696	63.28 ± 11.95	X^2 = 384	7.58 ± 3.35	X^2 = .672
Yes	.74 ± 1.14	**p = .002****	59.65 ± 16.29	p = .825	7.13 ± 3.36	p =.715
Discontinued	3.78 ± 4.97		62.03 ± 14.48		6.97 ± 3.53	
Children						
No	2.79 ± 4.56	z = −1.961	61.58 ± 13.71	z = −.558	7.42 ± 3.32	z = −.482
Yes	3.32 ± 3.67	**p = .050**	62.50 ± 14.54	p = .577	6.97 ± 3.52	p = .630

X^2 = Kruskal–Wallis test; z = Mann–Whitney test * Significant difference: Literate and primary/secondary, p = 0.000; literate and high school/university, p = 0.013 ** Significant difference: no and yes, p = .004; yes and discontinued, p = .004

Discussion

In this study, we observed that among the participants, functional condition was mostly at a dependent level, self-efficacy was above average, and morale was average. The study was important in terms of reflecting the capacity of elderly people, as the study participants comprised elderly people living in a nursing home who were particularly disadvantaged with no intimate relatives.

As per the results of the life satisfaction study by Turkish Statistical Institute, the rate of elderly people who stated that they were satisfied with their overall health condition had increased from 43.1% in 2012 to 45.3% in 2016. Furthermore, the rate of elderly people who stated that they were happy increased from 56.8% in 2015 to 64.5% in 2016. When overall happiness level was assessed with regard to sex, it was observed that in 2016, 66.2% of elderly men and 63.2% of elderly women had stated that they were happy. When compared with TSI data, in our study, the

participants living in the nursing home were more negatively affected by physical and psychosocial factors (Turkish Statistical Institute). In addition, Scult et al. revealed that the morale of elderly people in their study was higher (Scult et al., 2015). Buker et al. compared elderly people living in nursing homes with those living in their own homes with respect to their depression and morale states, mobility status, and functional levels and observed that elderly people living in their own homes houses had statistically better outcomes (Buker et al., 2010). Thus, on the basis of the current results, elderly people living in nursing homes may be at a higher risk in terms of depression, mood, mobility and functional status.

Self-efficacy, which has the ability of influencing an individual, was associated with increased self-care requirements in elderly people and is also important for the healthy aging of elderly people. Sabanciogullari et al. (2007) revealed that 55.2% of elderly people living in their own homes were dependent for basic DLAs, whereas 11.4% of them were dependent for IDLAs (such as using the telephone, cooking, shopping, handling daily house work, laundering, boarding transportation vehicles, using medication, and handling money administration); in contrast, 50.5% of elderly people living in nursing homes were dependent for basic DLAs, whereas 14.3% of them were dependent for IDLAs (Sabanciogullari, Tel, & Tel 2007).

When the effect of sociodemographic variables on the average functional condition, self-efficacy, and morale scores was assessed, education level, having chronic diseases, continuous medication use, smoking, and having children were found to be correlated with the functional condition. Moreover, participants with low education level, who did not work, who had chronic diseases, who continuously used medication, and who did not have children were functionally more dependent.

In a study conducted with elderly people having type 2 diabetes, the average morale score was 9.70 ± 3.50 and average depression score was 12.76 ± 7.65, revealing that depression scores decreased as the age increased, with a significant association between morale scores and education level and duration of the diseases (Karakurt et al. 2016).

Sociodemographic characteristics did not affect the scores of self-efficacy and morale at a statistically significant level. Jang et al. (2009) showed that the morale of participants with higher education and income levels was high. Further studies with larger sample populations are warranted to demonstrate the effect of sociodemographic variables on functional condition, self-efficacy, and morale (Jang, Choi, & Kim 2009).

In this study, functional condition and self-efficacy of the participants were good. In studies conducted with healthy individuals, an association between morale and life quality together with physical health was observed. Morale was also positively correlated with healthy aging. Furthermore, a better morale state is negatively associated with functional disability and positively associated DLAs (Litwin 2006). In the study conducted by Boylu and Gunay (2017) with 360 elderly people, when elderly people independently sustained their DLAs, their satisfaction with life and the quality of life increased (Aydiner Boylu, & Gunay , 2017).

This study was conducted in a nursing home that accommodates elderly people who are generally orphans or who do not have any intimate relatives who could take care of them. The functional condition of the participants who did not have children was poor and high in terms of morale. Deng et al. found a correlation functional condition and mental state with regard to morale and social support, but using multiple regression analysis, they also revealed that mental state and the family dimension of social support were independent determinants of morale (Deng et al., 2010).

When the abovementioned study results, which have parallel aspects with our study results, were considered, it was observed that the morale of elderly people need to be increased and their physical dependencies need to be reduced in order to protect their psychosocial health. It is known that a healthy aging program helps increase self-efficacy and morale levels of elderly people (Buker et al., 2010).

In our study, an association between self-efficacy and functional condition was not observed, whereas in the study by Yajima et al., an association between self-efficacy and change in physical performance was found (Yajima, Asakawa, & Yamaguchi, 2016).

Conclusion and Recommendations: While the functional conditions of elderly people living in

nursing homes affected their morale, self-efficacy did not directly affect their morale. It should be considered that elderly people living in nursing homes, who had low education levels, had chronic diseases, continuously used medication, and had children were functionally more dependent. Routine assessment of the morale of elderly people, which is significantly distinctive of depression, and determination of the functional condition and self-efficacy levels need to be prioritized to promote healthy aging. Further studies with more heterogenic groups are warranted to assess elderly people living in their own homes and to evaluate the effect of self-efficacy on their functional condition. Programs with a multidisciplinary approach should be conducted to ensure the psychosocial well-being of the gradually increasing elderly population, to keep their morale up, and to increase their independent living abilities and self-efficacy levels.

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