DOI: 10.5152/cjms.2021.1692

Original Article

Multi-Faceted Evaluation of Psychosocial Function of Older People

Authors: Birgül Vural Doğru[1-0000-0002-1011-4963], Hediye Utli[2-0000-0002-4732-9503]

Institutions:

[1]Department of Internal Medicine Nursing, Mersin University Faculty of Nursing, Mersin, Turkey

[2]Department of Elderly Care, Mardin Artuklu University Vocational School of Health Services, Mardin, Turkey

Corresponding Author: Hediye Utli

E-mail: hediyeutli@gmail.com

Received Date: 14.01.2020

Accepted Date: 16.08.2020

Cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.

BACKGROUND/AIMS:

With aging, physical, psychological and social changes occur and individuals lose their independence and become semi-or full dependent. Accordingly, physical, psycho-social problems can be seen in the older people and their functionality decreases. For this reason, the study was carried out for the purpose of multidimensional evaluation of cognitive and psycho-social functions of older people.

MATERIAL and METHODS

The study was conducted between April and November 2018. This descriptive and cross-sectional study was performed in two different family health centers in Mardin province. The research was completed with a total of 200 older people who agreed to participate in the study. The data were collected using "Patients Information Form", "Katz Index of Independence in Activities of Daily Living (Katz ADL)" and "Multidimensional Observation Scale for Elderly Persons (MOSES)". The number, percent, mean, Mann Whitney U, Kruskal-Wallis test and Spearman correlation analysis were used in the data analysis.

RESULTS

The mean age of participants was 70.03±8.48 years. 54.2% of older people were female and 45.8% were male. The mean scores of Multidimensional Observation Scale for Elderly Persons was 24.36 ±22.38. The mean scores of the Katz Index of Independence in Activities of Daily Living was 16.32 ±3.14. There was a weak positive correlation between age and Multidimensional Observation Scale for Elderly Persons ($p < 0.001$, $r = 0.43$), and a moderate negative correlation was found between Katz Index of Independence in Activities of Daily Living and Multidimensional Observation Scale for Elderly Persons ($p < 0.001$, $r = -0.56$).

CONCLUSIONS

This study revealed that older people had high functional and independence levels, and this is due to the fact that older people who come to family health care centers form a sample group. However, multidisciplinary studies periodically are needed to evaluate the cognitive, psychological and social functioning of older people living at home.

Keywords: Psychosocial functioning, multidimensional observation, older people.

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.- Available online at https://cyprusjmedsci.com/EN

INTRODUCTION

Aging is a physiological, psychological and sociological process that involves all of the functional and structural changes that occur over time at the level of cells, tissues, and systems of the organism (1). The psychological dimension of old age, perception, learning, psycho-motor, problem-solving and personality characteristics of the human adaptability capacity in terms of changes as the chronological age progresses. Sociologically, old age is related to the behaviors expected from a particular age group and the values that society gives to that group (2).

Looking at population statistics in the world and Turkey, there has been a significant increase in the older population in recent years. There are 901 million older people (3), who account for 12% of the world's population. It is expected that this figure will be doubled in 2025 and reach about two billion in 2050 (4).

The older population is the fastest growing group, which has the most health problems and needs of health care (5). The need for long-term care and support with the growing population is also increasing (6). Physical problems in older people (falls, bone fractures, etc.) and chronic diseases increase dependency level (7). The difficulties that start with the loss of physical power, functional losses and difficulty in adapting the body to changing situations negatively affect the mental state of older people. This situation leads to negative feelings such as introversion, unwillingness and decreasing life satisfaction together with the sense of loneliness in older people (8). Dementia, delirium, Alzheimer's disease, cognitive disorders, incontinence, physical limitations and problems with relatives cause social isolation among older people (7, 9). The social isolation and mental problems of older people lead to a deterioration in health status and a significant decrease in the quality of life (10). In addition, with the increase of age, loss of peers and close friends, social support and decrease in income levels may lead to significant changes in bio-psychosocial health. This situation affects the daily living activities of older people and causes significant changes in quality of psychosocial functioning (11). Functional capacity is usually assessed through questionnaires of the elderly's report on the performance of daily living activities,

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.- Available online at https://cyprusjmedsci.com/EN

and the physical performance related to functional limitations is investigated through physical tests where individuals perform specific tasks, which confers greater responsiveness to relevant clinical changes (12, 13). Changes in the

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.- Available online at https://cyprusjmedsci.com/EN

physiological, psychological, economic and social dimensions of the life not only affect older people, but also everyone who lives with older people (14). Limitations in functioning and dependence on other people in performing daily activities lead to a worse quality of life for older people and an increase in the social costs of care and health (13).

Psychosocial functioning is a multidimensional concept that encompasses different aspects of functioning such as intellectual, social and cognitive functioning, psychosocial aptitude and measurement of physical needs (15). A national approach that providing care for older people should be developed to meet the needs of a growing population and improve the quality of care. Adaptation of the environment to meet the needs of older people, capacity, functionality and daily living activities need to be evaluated continuously (6). The belief that dependence is inherent to the aging process produces negative attitudes and intimidates the elderly population within a sociocultural context that values the preservation of autonomy and independence (12). The World Health Organization has set five main goals to guide countries on how to improve the functional abilities of older people: to have a pleasant time with their peers, to organize health systems according to the needs of the older population, to develop sustainable and equitable long-term care systems, and to involve older people in decision-making process (4).

For this reason, health and social services for older individuals should be addressed not only in traditional values but also in a holistic approach. Physiological, psychological, social and economic deficiencies must be identified and supported earlier stage to provide a better healthy aging of individuals. Self-care skills of older people, disorientation, depressive and anxious moods; the evaluation of psychosocial characteristics such as disquiet behavior and secession withdrawal from the society are very important in terms of planning health and social services for older population. There are a limited number of studies in the literature evaluating the psychosocial functionality of the elderly (11, 15-17). In line with this information, this study was conducted to evaluate the cognitive, psychological and social functioning of the older people who apply to primary health care services in a multi-faceted way.

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.- Available online at https://cyprusjmedsci.com/EN

Research Questions

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.- Available online at https://cyprusjmedsci.com/EN

Research Question 1: Is there a difference between older people MOSES total, sub-dimension scores and their socio-demographic characteristics?

Research Question 2: Is there a correlation between older people Katz ADL and MOSES score averages?

MATERIAL and METHODS

Study design

This descriptive and cross-sectional study was carried out between April and December 2018.

Sample of the study

The population of the study was composed of older people who applied two different Family Health Centers in the city of Mardin. In the study, no sample calculations were made and 200 elderly people who meet the inclusion criteria between the dates of the study were included.

Inclusion criteria

Individuals who are over 60 years old, who do not have mental health problems and communication problems and who volunteer to participate in the study were included in the study.

Exclusion criteria

Individuals who are tired of answering questions and do not volunteer to participate in the research are excluded.

Data collection tool

The Patients Information Form was used which included questions regarding socio-demographic information of the older people. Katz Index of Independence in Activities of Daily Living (Katz ADL) was used to determine the activity level. As for functional status, Multidimensional Observation Scale for Elderly Persons (MOSES) was used.

Patients Information Form: 17 open-ended and multiple-choice questions developed by the researchers in the literature (11, 18-20) constitute independent variables.

Katz Index of Independence in Activities of Daily Living (Katz ADL): The Katz ADL

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.- Available online at https://cyprusjmedsci.com/EN

index developed by Katz et al. In 1963 consists of 6 questions which include the information about the bath, dressing, toilet, movement, excretion, nutrition activities that evaluate the dependency status of the individual in performing daily life activities.

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.- Available online at https://cyprusjmedsci.com/EN

In the Katz ADL index, 0-6 points are dependent, 7-12 points are semi-dependent,13-18 points are evaluated as independent of 19, 20 (18). While the Cronbach Alpha of the scale was 0.83, in our study, the Cronbach Alpha was found 0.85.

Multi-Dimensional Observation Scale for Elderly Persons (MOSES): The validity and reliability of the Multi-Dimensional Observation Scale for Elderly Persons (MOSES) developed by Helmes, Csapo and Short (1987) was conducted by Soygür et al. The Multidimensional Observation Scale for Elderly Persons has been developed in order to evaluate the psychosocial aspects and the functionality of the elderly. This scale consists of 40 items and evaluates five functional areas, each consisting of eight items. The lowest score and the highest score that can be obtained from the sub-dimensions of the scale; 0-25 for self-care, 0-30 for disorientation, 0-29 for depressive / anxious mood, 0-29 for disquiet behaviors, 0-25 for the community. Each item in the scale is scored between 0-4. 18 items of the scale are 5 and 22 items have 4 options. The lowest total score that can be taken from the scale is 0, and the highest score is 138 and the low scale score shows that the functionality of the elderly persons is high and the scale score is high, whereas the functionality of the elderly persons is low (11). While the Cronbach Alpha of the scale was 0.87, in our study, the Cronbach Alpha was found 0.96.

Data collection and analysis

The data were collected from both the face to face interviews of the older people and the observations of nurses and family members who care for the older people. The application of data collection tools to the older people who agreed to participate in the study took approximately 15-20 minutes for each older people. SPSS 21.0 package program was used in the evaluation of data. The mean standard deviations, number and percent values were used in descriptive tables. For the evaluation of data that do not conform to a normal distribution, Kruskal-Wallis, Mann-Whitney U test and Spearman's correlation analysis were used. The significance level of the study was accepted as $p < 0.05$.

Ethics

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.- Available online at https://cyprusjmedsci.com/EN

For the application of the research, written permission was obtained from the scientific publication Ethics Committee of Mardin Artuklu University (Approval

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.- Available online at https://cyprusjmedsci.com/EN

number: 2018/01-6) and the institution to which the study will be conducted. After informing the older people who participated in the study voluntarily, they were informed about the research and their written and oral informed consent was obtained. This was conducted in consideration of the declaration of Helsinki.

RESULTS

Image indices

The mean age of older people was 70.03±8.48 years. 54.2% of older people were female, 82.5% were married, 68% have chronic disease, 60% were illiterate, 87.5% were not working, and 71.5% used drugs, and 53.5% stated that their care was done by their spouses (Table 1).

The mean age of women participating in our study was 70.25± 9.32, and men 69.76 ±7.39 years. It was found that 35.8% of women and 74.7% of men received care by their spouses. It was found that 70.6% of women and 96.7% of men were married.

TABLE I. Socio-demographic characteristics of older people (n = 200)

Features	**n (%)**
Age (Mean ± SD*) 70.03 ± 8.48	
Gender	
Male	91 (45.8)
Female	109 (54.2)
Marital Status	
Single	35 (17.5)
Married	165 (82.5)
Education	
Illiterate	120 (60.0)
Literate	46 (23.0)
Elementary and above	24 (12.0)
High school and above	10 (5.0)
Working condition	
Working	25 (12.5)
Not working	175 (87.5)
Chronic disease	
No	64 (32.0)
Yes	136 (68.0)
Drug use	
Yes	143 (71.5)
No	57 (28.5)
Who is looking at you?	

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.- Available online at https://cyprusjmedsci.com/EN

Spouse	107 (53.5)
Children	62 (31.0)
Other	31 (15.5)

* SD: Standard Deviation

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.- Available online at https://cyprusjmedsci.com/EN

The mean scores of Multidimensional Observation Scale for Elderly Persons (MOSES) were 24.36±22.38, the corresponding scores of Katz Index of Independence in Activities of Daily Living (Katz ADL) were 16.32 ±3.14. The mean scores of MOSES sub-dimension were followed as given. The mean scores of self-care sub-dimension were 3.73 ± 6.10, 3.31±5.28 was for the disorientation sub-dimension, 8.45 ± 6.24 was for the depressive-anxious mood sub-dimension, 3.42 ± 3.61 was for the disquiet behavior sub-dimension, and 5.44 ± 5.58 for secession from society sub-dimension (Table 2). The mean of Katz ADL in women was found 15.74 ±3.73, and 17.01 ± 2.05 among men.

TABLE 2. MOSES total and sub-dimension scores and Katz ADL total

Features	**(Mean ± SD*)**	**Min-Max**
Self-care	3.73 ±6.10	0.00-23.00
Disorientation	3.31 ±5.28	0.00-29.00
Depressed/anxious mood	8.45 ±6.24	0.00-25.00
Disquiet behavior	3.42 ±3.61	0.00-15.00
Secession from society	5.44 ±5.58	0.00-22.00
MOSES total	24.36 ±22.38	0.00-107.00
Katz ADL total	16.32 ±3.14	6.00-18.00

MOSES: multidimensional observation scale for elderly persons; Katz ADL: Katz index of independence in activities of daily living *SD: standard deviation.

TABLE 3. Comparison of socio-demographic characteristics and MOSES total, sub-dimension scores

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.- Available online at https://cyprusjmedsci.com/EN

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as: Vural Doğru B, Utli H. Multi-Faceted Evaluation of Psychosocial Function of Older People. Cyprus J Med Sci 2021; DOI: 10.5152/cjms.2021.1692.- Available online at https://cyprusjmedsci.com/EN

Features	N	Self-care Median(Min±Max)	Disorientation Median (Min±Max)	Depressed/ Anxious Mood Median (Min±Max)	Disquiet behavior Median (Min±Max)	Secession from society Median (Min±Max)	MOSES total points Median (Min±Max)
Gender							
Female	109	1.00(0.00±23.00)	1.00 (0.00±29.00)	9.00 (0.00±25.00)	3.00 (0.00±15.00)	4.00 (0.00±22.00)	23.00 (1.00±107.00)
Male	91	0.00(0.00±22.00)	0.00 (0.00±20.00)	6.00 (0.00±21.00)	2.00 (0.00±15.00)	3.00 (0.00±22.00)	13.00(0.00±84.00)
Test Value		z = -2.349*	z=-1.953*	z = -3.347*	z = -1.612*	z=-1.935*	z=-014*
		p=.019	p=.051	**p=.001**	p=.107	p=.053	**p=.003**
Marital Status							
Single / Widow	35	3.00(0.00±23.00)	3.00(0.00±29.00)	11.00(1.00±25.00)	4.00 (0.00±15.00)	6.00(0.00±22.00)	28.00(1.00±107.00)
Married	165	0.00 (0.00±22.00)	1.00(0.00±26.00)	7.00(0.00±24.00)	2.00(0.00±15.00)	4.00 (0.00±22.00)	14.00(0.00±106.00)
Test Value		z = -3.202*	z=--1.691*	z=-3.174*	z=-200*	z=-1.957*	z = -3.279*
		p=.001	p=.091	**p=.002**	**p=.027**	**p=.050**	**p=.001**
Education Status							
Illiterate	120	2.00(0.00±23.00)	2.500(0.00±29.00)	10.00(0.00±25.00)	3.00(0.00±15.00)	5.50(0.00±22.00)	24.00(0.00±107.00)
Literate	46	0.00(0.00±22.00)	0.00(0.00±20.00)	5.50(0.00±18.00)	2.00(0.00±12.00)	3.00(0.00±15.00)	12.50(0.00±84.00)
Primary	24	0.00(0.00±6.00)	0.00(0.00±7.00)	5.00(0.00±20.00)	1.50(0.00±15.00)	0.00(0.00±18.00)	9.50(0.00±45.00)
High school and above	10	0.00(0.00±6.00)	0.00(0.00±3.00)	2.00(0.00±12.00)	0.00(0.00±6.00)	1.00(0.00±2.00)	7.00(0.00±15.00)
Test Value		χ2=24.568**	χ2=24.184**	χ2=25.793**	χ2=11.099**	χ2=29.602**	χ2=36.050**
		p<.001	**p<.001**	**p<.001**	**p=.011**	**p<.001**	**p<.001**
Working condition							
Working	25	0.00(0.00±16.00)	0.00(0.00±7.00)	5.00(0.00±20.00)	1.00(0.00±15.00)	0.00(0.00±8.00)	10.00(0.00±38.00)
Not working	175	0.00(0.00±23.00)	1.00(0.00±29.00)	8.00(0.00±25.00)	3.00(0.00±15.00)	4.00(0.00±22.00)	20.00(0.00±107.00)
Test Value		z=-2.877*	z=-3.567*	z=-2.370*	z=-2.244*	z=-4.637*	z=-3.729*
		p=.004	**p<.001**	**p=.018**	**p=.025**	**p<.001**	**p<.001**
Chronic Disease							
No	64	4.00(0.00±22.00)	0.00(0.00±20.00)	5.50(0.00±22.00)	2.00(0.00±15.00)	2.00(0.00±18.00)	11.00(0.00±84.00)
Yes	136	0.00(0.00±23.00)	2.00(0.00±29.00)	9.00(0.00±25.00)	2.50(0.00±15.00)	5.00(0.00±22.00)	23.00(0.00±107.00)
Test Value		z=-2.655*	z=-3.296*	z=-2.955*	z=-1.151*	z=-3.072*	z=-3.433*
		p=.008	**p=.001**	**p=.003**	p=.250	**p=.002**	**p=.001**
Drug Use							
Yes	143	0.00(0.00±23.00)	1.00(0.00±29.00)	9.00(0.00±25.00)	3.00(0.00±15.00)	4.00(0.00±22.00)	21.00(0.00±107.00)
No	57	0.00(0.00±13.00)	0.00(0.00±10.00)	7.00(0.00±22.00)	2.00(0.00±15.00)	2.00(0.00±18.00)	12.00(0.00±63.00)
Test Value		z=-2.794*	z=-2.926*	z=-2.514*	z=-1.196*	z=-2.354*	z=-2.920*
		p=.005	**p=.003**	**p=.012**	p=.232	**p=.019**	**p=.004**
Caring Person							
Spouse	107	0.00(0.00±22.00)	1.00(0.00±20.00)	7.00(0.00±21.00)	2.00(0.00±15.00)	3.00(0.00±20.00)	13.00(0.00±84.00)
Child	62	4.00(0.00±23.00)	3.00(0.00±26.00)	9.00(0.00±24.00)	4.00(0.00±15.00)	5.00(0.00±22.00)	26.00(0.00±107.00)
Other	31	0.00(0.00±22.00)	0.00(0.00±29.00)	8.00(0.00±25.00)	2.00(0.00±13.00)	2.00(0.00±22.00)	13.00(0.00±107.00)
Test Value		χ2=24.427**	χ2=7.265**	χ2=5.791**	χ2=5.452**	χ2=10.409**	χ2=13.402**
		p<.001	**p=.026**	p=.055	p=.065	**p=.005**	**p=.001**
Using The Assistive Device	67	0.00(0.00±21.00)	0.00(0.00±20.00)	8.00(0.00±24.00)	2.00(0.00±15.00)	2.00(0.00±16.00)	13.00(0.00±86.00)
Glasses	15	18.00(0.00±23.00)	10.00(0.00±26.00)	14.00(1.00±24.00)	6.00(0.00±12.00)	15.00(0.00±22.00)	63.00(10.00±106.00)
Wheelchair/Walker	30	6.00(0.00±22.00)	5.00(0.00±20.00)	11.50(0.00±21.00)	4.00(0.00±15.00)	6.50(0.00±22.00)	32.00(0.00±84.00)
Cane	88	0.00(0.00±22.00)	0.00(0.00±29.00)	6.00(0.00±25.00)	2.00(0.00±13.00)	3.00(0.00±22.00)	12.50(0.00±107.00)
Other							
Test Value		χ2=58.843**	χ2=45.314**	χ2=21.816**	χ2=16.530**	χ2=27.827**	χ2=45.313**
		p<.001	**p<.001**	**p<.001**	**p=.001**	**p<.001**	**p<.001**

* Mann Whitney U test; ** Kruskal Wallis Chi-square value

A significant difference was found between gender and MOSES total and self-care, depressive/anxious mood sub-dimensions (p<.05). A significant difference was found between marital status and MOSES total and self-care, depressive/anxious mood, and disquiet behavior sub-dimensions (p<.05). A significant difference was found between MOSES total and all sub-dimensions of education, study and assistive device use (p <.05). A significant difference was found between the presence of chronic disease and drug use and MOSES total and self-care, disorientation, depressive/anxious mood, and secession from society sub-dimensions (p <.05). While there was no significant difference between the caregiver and depressive/anxious mood and disquiet behavior sub-dimensions (p>.05), a significant difference was found between MOSES total and other sub-dimensions (p<.05) (Table 3).

TABLE 4. Correlation between age and Katz ADL and MOSES score averages

	MOSES	
	r**	**P**
Age	.503	**p<.001**
Katz ADL	-.581	**p<.001**

MOSES: multidimensional observation scale for elderly persons; Katz ADL: katz index of independence in activities of daily living; ** Pearson correlation

A moderate correlation was found between age and MOSES (p <0.001, r = 0.503), and a moderate negative correlation between Katz ADL and MOSES (p <0.001, r = -0.581) (Table 4).

DISCUSSION

As it is the case in many countries all over the world, the demographic structure of Turkey has been rapidly changing. As fertility rates are falling and average life span is increasing, the share of the elderly within the population is constantly increasing (15). As the number of older people increase, the need for rehabilitative services will be increased and more psychological and social support will be needed in order to effectively manage the problems of the older individuals and their families in order to plan and develop older people' care and health services and to support independence (11). In addition, it is stated that care needs and activity levels of older people have an effect on life satisfaction and quality (5, 21, 22). In this study, multidimensional evaluation of cognitive and psycho-social functionality of older people based on their daily life activities was performed.

In our study, the mean score of MOSES was 24.36 ±22.38. Since the scale has no predictive value, the highest score that can be obtained from the scale is 138, and the cognitive and psycho-social functionality of the elderly people who participated in our study was found to be low. This situation can be related to the fact that the majority of older people (68%) have chronic diseases, 53.5% of them are cared for by their spouses and the average age is high. Similarly, in the study of Nakamae et al. (2014) (19) and Van Haitsma et all (2015) (17) the mean score of MOSES was found to be low. In some studies, conducted with different sample groups, the mean score of MOSES was found to be higher (6, 7, 15, 20). Nakamae et al. (2014) (19) average age of the participants who participated in the study is advanced. It can be concluded that age is a factor affecting cognitive and psycho-social functionalities.

When the MOSES sub-dimensions were examined; while the mean scores of depressive/anxious mood and distance from society were high, the mean scores of self-care, disquiet behavior, and disorientation sub-scale were low. This situation can be deduced from the fact that the older people who participated in our research were depressed and moved away from the society. It may be due to the fact that the majority (53.5%) of the elderly individuals who participated in our research were dependent on their daily care. Van Haitsma et al. (2015) (17), Nakamae et al. (2014) (19) and Yamagami et al. (2012) (20) studied people with dementia, disorientation, secession from society and self-care sub-scale mean scores were high, while disquiet behavior and depressive/anxious mood sub-dimension mean scores were found to be low. In

contrast to our study, it is thought that the high incidence of disorientation and self-care scores is due to the formation of dementia patients.

In our study, MOSES total, self-care and depressive / anxious mood sub-dimension scores were higher in women than in men. In addition, MOSES total and self-care, depressive / anxious mood, disquiet behavior sub-dimensions scores were higher in single or widowed than married. In the literature, it is stated that being a woman is a risk factor for depressive mood (23, 24). Similar to our study, Kaur et al. (2015) (25) reported that the lack of self-care was higher in older people who were widowed or divorced, whereas Ishak et al. (2017) (26) did not find a significant difference between marital status and self-care. It is thought that depressive/anxious mood is high among single or widowed people, lack of social support, lack of motivation, difficulties in communicating with the environment and may be caused by feeling alone. Similarly, in some studies, the prevalence of depression is more common in single and widowed ones; in some cases, it was determined that the marital status did not affect the level of depression (23, 27, 28). This result is thought to be due to the fact that the mean age of women participating in our study was higher than that of men, the majority of women received care from people other than their spouses (children and caregivers, etc.) and the proportion of married people was lower than that of men. Because with aging, individuals' dependence on others increases in meeting self-care needs such as nutrition, bathing, and discharge. In case of receiving care from people other than their spouses, they may think that there is a burden on others and cause anxiety and communication difficulties. Losing spouse or living alone can lead to problems such as depression, leading to a lack of social support and loneliness (11, 25).

In our study, MOSES total and sub-dimension scores were higher in the elderly who were illiterate, not working, and who used assistive device. Similar to our study, Ikegami et al. (2020) (12), stated that low education level and non-working status are related to low functional capacity. In addition to keeping the elderly active, it is stated that being employed positively affects the psychosocial functionality by living with other people, maintaining cooperation and interaction and social support mechanisms (9, 12). Education level is important in providing and channeling financial resources related to care while contributing to the development of the skills and confidence necessary to maintain and maintain healthy aging (12, 13, 16, 29). The use assistive device (wheelchairs, canes, etc.) of the elderly reduces their functional capacity and

increases dependency on others. This situation can cause anxiety and social isolation in the elderly. Therefore, in our study, it is thought that the majority of the elderly do not work, are illiterate and use auxiliary equipment reduces psychosocial functionality. A significant difference was found between the presence of chronic disease and drug use, and MOSES total and self-care, disorientation, depressive/anxious mood, and secession from society sub-dimensions. With age, the number of chronic diseases seen in older people increase (30). Chronic diseases may cause frequent hospitalizations, multiple drug use, economic and psychosocial problems in older people (25, 26, 30). It is thought that this situation will affect psychosocial functioning in older people and decrease the quality of life.

In our study, the mean total score of the Katz Index of Independence in Activities of Daily Living (ADL) was 16.32 ± 3.14. Those with a ADL score of 13 or above applied to the participants ıt has been evaluated as "independent". Therefore, it is seen that older people who participate in the study have a high level of independence in performing daily activities. The results of some studies are similar to our research (9, 12, 13, 18, 31). Differently, in the study of Knapik et al. (2020) (16), with patients with parkinson, stroke and multiple sclerosis, daily life activity scores were lower. In this case, it is thought that the individuals participating in our study are physically less dependent.

Impaired cognitive and psycho-social functions are associated with the daily lives of the elderly. In our study, cognitive and psycho-social functions of older people decreased as age progressed. With aging, not only physical functions but also psychosocial functions decrease and slow down (7, 8). In our study, the MOSES score decreased as the independence of older people increased in the activities of daily living. The high level of independence of the older people in daily living activities shows the ability to perform independently in the self-care activities such as nutrition, dressing, bathroom, toilet, movement, and excretion without getting help from anyone. The problems in the physical field and the high level of dependence in the activities of daily living in older people cause a loss in the psychological and social areas (23, 30). This situation may affect the physical, social and psychological aspects of older people, and affect the well-being of the older population, which may lead to decreased life satisfaction and psychosocial functioning (21, 23). Therefore, it is thought that the high level of independence of older people in our study positively affects psychosocial functioning.

Limitations of the Study

This study, due to be made in two different Family Health Center providing primary health care services in the southeast of Turkey results cannot be generalized. For this reason, it is recommended to conduct the study in secondary and tertiary healthcare places and in different sample groups.

Conclusion

It is thought that the functionality and independence levels of older people are high and this is due to the fact that older people living with their family and coming to the Family Health Centers constitute the sample group. As the age increases, the Multi-Dimensional Observation Scale for older people score increases and therefore the functionality of older people decrease as the age progresses.

In addition, as the Katz Index of Independence in Activities of Daily Living (ADL) score increases, The Multi-Dimensional Observation Scale for Elderly Persons decreases. This shows that as the independence levels of older people increase, the functionality increases. The evaluation of cognitive, psychological and social functions of the elderly who live alone or live with family members at home will support the psychosocial functionality of the elderly. Support by healthcare professionals can encourage older people to autonomy. For this reason, the psychosocial functionality of the elderly should be monitored periodically by the healthcare professionals and the deficiencies should be supported.

Ethics Committee Approval: For the application of the research, written permission was obtained from the scientific publication Ethics Committee of Mardin Artuklu University (Approval number: 2018/01-6) and the institution to which the study will be conducted.

Peer-review: Externally peer-reviewed.

Author contributions: Concept, Design, Supervision, Resource, Materials, Data Collection and/or Processing- H.U., Analysis and/or Interpretation, Literature Search Writing, Critical Reviews – B.V.D.

Conflict of Interest: None declared.

Financial Disclosure: There are no financial support.

REFERENCES

1. Aslan M, Hocaoğlu Ç. Aging and psychiatric problems associated with aging period. J DU Health Sci Inst 2017; 7(1): 53-62.
2. Beğer T, Yavuzer H. Aging and aging epidemiology. Clinical Development 2012; 25: 1-3.
3. World Population Prospects (WPP) [homepage on the Internet]. New York. 2015. [cited: 06.06.2018]. Available from: https://esa.un.org/unpd/wpp/publications/files/key_findings_wpp_2015.pdf.
4. Global strategy and action plan on ageing and health. Switzerland. 2017. [cited: 06.06.2018]. Available from: http://www.who.int/ageing/WHO-GSAP-2017.pdf?ua=1.
5. Elkin N. Evaluation of life satisfaction & depression prevalence in elderly patients administered to a family health center. Mersin Univ Saglık Bilim Derg 2016;(9)1.
6. Lee S, Chaudhury H, Hung L. Effects of physical environment on health and behaviors of residents with dementia in long-term care facilities: a longitudinal study. Res Gerontol Nurs 2016; 9(2):81-91.
7. Tsuchiya K, Yamaguchi T, Fujita T, Taguchi M, Honda A, Satou Y, et al. A quasi-randomized controlled trial of brain-activating rehabilitation in an acute hospital. American Journal of Alzheimer's Disease & Other Dementias® 2016; 31(8): 612-617.
8. Yerli G. Characteristics of ageing period and social works for the elderly. The Journal of International Social Research 2017; 10(52):1271-1287.
9. Doğan DM, Ünsar S. Hastanede tedavi gören 65 yaş üstü bireylerin günlük yaşam aktiviteleri. Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi 2015; 4(2): 204-214.
10. Ekici SK, Gümüş Ö. Technology usage in older ages. Ege Journal of Medicine 2016; 55: 26-30.
11. Soygür H, Duyan V, Hasgül E, Adıbatmaz M. Turkish adaptation study of multidimensional observation scale for elderly subjects. TJFMPC 2017;11(3).
12. Ikegami ÉM, Souza LA, Tavares DMS, Rodrigues LR. Functional capacity and physical performance of community-dwelling elderly: a longitudinal study.

Cıencıa & Saude Coletıva 2020; 25 (3): 1083-1090. DOI: 10.1590/1413-81232020253.18512018.

13. Ćwirlej-Sozańska A, Wiśniowska-Szurlej A, Wilmowska-Pietruszyńska A, Sozański B. Determinants of ADL and IADL disability inolder adults in southeastern Poland. BMC Geriatrics 2019; 19:297. doi: https://doi.org/10.1186/s12877-019-1319-4.
14. Çelebi DÇ, Yüksel MY. Elderliness and a review of psychological counseling and guidance services for elderly people in Turkey. Journal of Pencil Education and Human Sciences 2014;4(2):175-202.
15. Duyan V, Kara GŞ, Duyan GC, Özdemir B, Megahead HA. The effects of group work with ınstitutionalized elderly persons. Research on Social Work Practice 2017; 27(3): 366-374. https://doi.org/10.1177/1049731516654572.
16. Knapik A, Krzystanek E, Szefler–Derela J, Siuda J, Rottermund J, Plinta R, Brzek A. Affective disorder and functional status as well asselected sociodemographic characteristics in patients with multiple sclerosis, parkinson's disease and history of stroke. Medıcına 2020; 56(3): 1-8. DOI: 10.3390/medicina56030117.
17. Van Haitsma KS, Curyto K, Abbott KM, Towsley GL, Spector A, Kleban M. A randomized controlled trial for an ındividualized positive psychosocial ıntervention for the affective and behavioral symptoms of dementia in nursing home residents. Journals Of Gerontology Serıes B-Psychologıcal Scıences And Socıal Scıences 2015; 70(1): 35-45. DOI: 10.1093/geronb/gbt102.
18. Pehlivanoğlu EFÖ, Özkan MU, Balcıoğlu H, Bilge U, Ünlüoğlu İ. Yaşlılar için Katz Günlük Yaşam Aktiviteleri Ölçeğinin Türkçe' ye uyarlanması ve güvenilirliği. Ankara Med J 2018; (2): 219-23. DOI: 1017098/amj.435264.
19. Nakamae T, Yotsumoto K, Tatsumi E, Hashimoto T. Effects of productive activities with reminiscence in occupational therapy for people with dementia: a pilot randomized controlled study. Hong Kong Journal of Occupational Therapy 2014;24:13-19.
20. Yamagami T, Takayama Y, Maki Y, Yamaguchi H. A randomized controlled trial of brain-activating rehabilitation for elderly participants with dementia in residential care homes. Dement Geriatr Cogn Disord Extra 2012;2:372–380.

21. Henning-Smith C. Quality of life and psychological distress among older adults: The role of living arrangements. Journal of Applied Gerontology 2016; 35(1) : 39-61.

22. Banjare P, Dwivedi R, Pradhan J. Factors associated with the life satisfaction amongst the rural elderly in Odisha, India. Health and quality of life outcomes 2015; 13(1): 201.

23. Domènech-Abella J, Lara E, Rubio-Valera M, Olaya B, Moneta MV, Rico-Uribe LA, et all. Loneliness and depression in the elderly: the role of social network. Social Psychiatry and Psychiatric Epidemiology 2017; 52(4):381-390.

24. Girgus J, Yang K, Ferri C. The gender difference in depression: are elderly women at greater risk for depression than elderly men? Geriatrics 2017; 2(4): 35.

25. Kaur N, Kaur J, Thapar K. Perceived self-care deficit and social support system among the elderly. Nursing and Midwifery Research Journal 2015; 11(3):112-119.

26. Ishak NH, Yusoff SSM, Rahman RA, Kadir AA. Diabetes self-care and its associated factors among elderly diabetes in primary care. Journal of Taibah University Medical Sciences 2017; 12(6): 504-511.

27. Volkert J, Härter M, Dehoust MC, Ausín B, Canuto A, Da Ronch C, et all. The role of meaning in life in community-dwelling older adults with depression and relationship to other risk factors. Aging & Mental Health 2017;1-7.

28. Demir G, Ünsal A, Arslan GG, Çoban A. Huzurevinde ve evde yaşayan yaşlılarda depresyon yaygınlığının karşılaştırılması. Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi 2013; *2*(1):1-12.

29. Tavares DMS, Pelizaro PB, Pegorari MS, Paiva MM, Marchiori GF. Prevalence of self-reported morbidities and associated factors among community-dwelling elderly in Uberaba, Minas Gerais, Brazil. Cıencıa & Saude Coletıva 2019; 24(9): 3305-3313. doı: 10.1590/1413-81232018249.31912017.

30. Vetrano DL, Foebel AD, Marengoni A, Brandi V, Collamati A, Heckman GA, et all. Chronic diseases and geriatric syndromes: the different weight of comorbidity. European Journal of İnternal Medicine 2016; *27*: 62-67.

31. Turgay G, Tutal E, Sezer S. Hemodiyaliz hastalarının günlük yaşam aktiviteleri, yeti yitimi, depresyon ve komorbidite yönünden değerlendirilmesi. Turk Neph Dial Transpl 2017; 26 (3): 311-316. doi: 10.5262/tndt.2017.1003.11.

Acknowledgement: The authors are grateful to older people for participating in the study.