 Ethno Med, 10(2): 186-194 (2016)

# The Relationship between Daily Life Activities and the Cognitive Function Levels of the Elderly in a Nursing Home

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**KEYWORDS** Daily Living Activities. Cognitive Abilities. Elderly.Faculty Nursing Home. Relationship

**ABSTRACT** As the general population is getting older the need for the health care of this group also increases. Elderly health care needs increase due to loss of physical and cognitive abilities which may limit or prevent their usual independent daily life activities. The research was done descriptively to determine the relation between the levels of the cognitive functions and the daily living activities for the aged in a nursing home. This study was conducted with 54 elderly residents of the Private Nursing Home in Mugla, Turkey. A questionnaire was formulated after examining the studies and literature about the elderly. It consisted of socio-demographic characteristics, a Standardized Mini Mental Test (SMMT) to determine the existence of cognitive disorders and also a short-term faculty-loss questionnaire. As a result of the study, the cognitive disorder and faculty loss were determined in 57.5 percent and 72.2 percent of the aged people respectively.

## INTRODUCTION

The population of the elderly patients at the age of ≥65 years has been increasing throughout the world. Access to healthcare services by the elderly has been rising with increase in age of the population (Karabulut et al. 2015). Some of the physical and spiritual aspects of individuals with aging in function, reduction or loss of social relationships occur. (Diker 2001). This occurs because loss of abilities and functional capacity can limit or prevent the usual daily life activities of the elderly and their independent functions become semi-dependent or completely dependent (Inal et al. 2007; Akça et al. 2014). The association between cognitive decline and decline in activities of daily living functioning in older people is well-known from numerous of studies covering a wide range of countries (Helvik et al. 2015). When individuals maintain their life actively, they fell themselves better, they become healthier and they become self-sufficient (Mehtap et al. 2015). Efforts to improve the sensory capabilities, perceptions and well- being of the elderly and increase their cognitive performance may also increase their overall function and positively affect their quality of life (Njegovan et al. 2001).

Aging is a universal and natural period occurring in all living creatures in which irreversible structural and functional changes cause a decline in all bodily functions. These changes are divided into two groups, chronological and biological. Though the chronological age is the same for all humans, the biological age can differ from one person to another. Biological aging occurs as a result of functional and structural changes in molecular cells, tissues and organs; hereditary factors also play a role (Yigitoglu 2008).

As the population of the elderly in society increases, more attention is being given to mental diseases. Dementia is the most important disease of old age. It is well known that with increasing numbers of people living longer, the ratio of their chances for developing dementia also increases (Çuhadar 2006).

Dementia is a word originating from the Latin and is a usually progressive condition marked by deteriorating cognitive functioning often accompanied a decline in social skills. The memory is particularly affected and this then affects a person's daily activities (Eker 2005).

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Caretakers tending to the basic needs of their patients such as eating, cleaning, dressing and relieving themselves at the later stages of dementia, can find themselves directly affected on the mental health level by the many behavioural and psychiatric symptoms of their patients. In addition, the patients' psychiatric symptoms can contribute to caretakers abusing the patients physically, neglecting the patients' care and taking to their beds (Bulut et al. 2002).

Dementia which develops in most people over 65, that this disease ,when it occurs, happens mostly to people over the age of 65 is not only a private tragedy; it also seriously affects the family members of dementia patients and causes a serious social and economic burden (Clark and Cummings 2003).

If dementia is diagnosed early on, further declines in the cognitive functions, depressions, anxieties, delusions and behaviour disorders accompanying it can be cured as well. This research was carried out in order to determine the cognitive function and the daily living activity levels of the elderly residing in nursing homes.

## MATERIAL AND METHODS

### Research Type

The research was done descriptively to determine the relation between the levels of the cognitive functions and the daily living activities for the aged in a nursing home.

### Research Sampling

The sample group consisted of 54 elderly in the Private Nursing Home in Mugla ,Turkey in 4 January 2014 and 11 March 2015.Volunteer participants in the research, could communicate easily and who were not visually or hearing impaired or mentally retarded.

### Gathering the Findings

A questionnaire was formulated after examining the studies and literature about the elderly. It consisted of socio-demographic characteristics, a Standardized Mini Mental Test (SMMT) to determine the existence of cognitive disorders and also a short-term faculty-loss questionnaire.

#### *Standardized Mini Mental Test (SMMT)*

The Standardized Mini Mental Test (SMMT) was developed by Folstein et al. in 1975. The validity and reliability of this scale for use in Turkey, which evaluates the degree of cognitive disorder, was performed by Güngen et al. in 1999. The test scores over 30 points; we used a cut-off score of 23/24.

#### *Clock Drawing Test*

This test evaluates a person's visual motor skills. It is used particularly to evaluate the neglect phenomenon. A pencil and a form with an empty clock figure are given to the elderly person, and she or he is asked to draw the clock to show the time as "10:15." If they cannot do this, the score is 1. If they draw the common scheme of the clock but cannot complete it, the score is 2. If the numbers are correctly placed but the marking is wrong, the score is 3 and 4 is given for a good performance. Evaluation is as follows: 1 point for "He couldn't draw"; 2 or 3 points for "He drew incorrectly"; and 4 points for "He drew correctly."

#### *Short-Term Faculty Loss Questionnaire*

The Short-Term Faculty Loss Questionnaire was developed by the World Health Organization (WHO) to evaluate physical and social faculty losses. Its adapted form to Turkish was applied for this study. The questionnaire evaluated the previous one-month period by World Health Organization (WHO) of those elderly being tested.

#### *Modified Daily Living Activities (MDLA) and Instrumental Daily Living Activities (IDLA)*

The MDLA scale was developed by Katz et al. The scale consists of eight questions. The questions concern the following activities: eating and drinking, dressing and undressing, combing and shaving, walking, going to bed and getting up, relieving oneself, bathing and incontinence. The IDLA scale was developed by Lawton and Brody and consists of seven questions: using the telephone, travelling by car or taxi, food shopping, preparing meals, doing housework, recognizing their drugs and taking them, and handling money affairs.

### Application of the Data Gathering Tools

Before beginning the application, written permission was obtained from the Turkish Social Service and Child Protection Institution Directorate. The questionnaires were given to mobile elderly people by inviting them to the library. Immobile individuals were seen in their own rooms between 8:30-12:00 and 13:00-16:00 using a one-to-one interviewing technique. Each interview lasted 15 minutes. Before the interview, the aims of the research and the fact that the information gathered would be kept confidential were explained to those taking part in the research.

### Data Evaluation

Data were evaluated by a SPSS 11.0 computer packet programme. Frequency and chi-square analyses were used for the statistical analyses.

## RESULTS

A great majority of the elderly participants (70.4%) in the research were men; 40.7 percent of them were 80 years old or over, and 31.5 percent of them had completed a five–year basic education. A majority of the participants at the nursing home (63.0 %) were widowed; 51.9 percent of them had incomes from their retirement pensions, and 24.0 percent were receiving social security income from the Turkish Social Security Institution.

Table 1 indicates that 5.6 percent of the participants had high level cognitive disorders, 27.8 percent of them had medium level cognitive disorders; 24.0 percent of them had low level cognitive disorders while 42.6 percent of them were found as normal. Of the participants in the study 20.4 percent had light faculty losses; 18.5 percent of them had medium faculty losses; 33.3 percent had severe faculty losses, but 27.8 percent of them had no faculty losses. Those who could not draw the clock comprised

**Table 1: Distribution of the old in the resting home according to their scores from SMMT and SFL scales and their clock drawing states**

| *Scales* | | *n* | *%* |
|---|---|---|---|
| *SMMT* | 0–9 ( Severe ) | 3 | 5.6 |
| | 10–19 ( Medium ) | 15 | 27.8 |
| | 20–23 (Light) | 13 | 24.0 |
| | 24–30 (Normal) | 23 | 42.6 |
| *KYY* | 0–4 (Normal) | 15 | 27.8 |
| | 5–7 ( Slight ) | 11 | 20.4 |
| | 8–12 Medium ) | 10 | 18.5 |
| | 13 and'! ( Severe ) | 18 | 33.3 |
| *SÇT* | No Drawing | 19 | 35.2 |
| | Wrong Drawing | 23 | 42.6 |
| | Correct Drawing | 12 | 22.2 |

**Table 2: Distribution of the old in the resting home according to the states of their abilities to do MDLA and DLA**

| *MDLA* | | *n* | *%* |
|---|---|---|---|
| Eating-Drinking | Protected | 33 | 61.1 |
| | Slightly Disordered | 13 | 24.1 |
| | Completely Disordered | 8 | 14.8 |
| Dressing | Preserved | 29 | 53.7 |
| | Slightly Disordered | 15 | 27.8 |
| | Completely Disordered | 10 | 18.5 |
| Combing-Shaving | Protected | 27 | 50.0 |
| | Slightly Disordered | 16 | 29.6 |
| | Completely Disordered | 11 | 20.4 |
| Walking | Preserved | 20 | 37.0 |
| | Slightly Disordered | 20 | 37.0 |
| | Completely Disordered | 14 | 25.9 |
| Going to Bed-Getting up | Protected | 30 | 55.6 |
| | Slightly Disordered | 13 | 24.1 |
| | Completely Disordered | 11 | 20.4 |
| | Relieving Themselves | | |
| | Protected | 30 | 55.6 |
| | Slightly Disordered | 10 | 18.5 |
| | Completely Disordered | 14 | 25.9 |
| Bathing | Protected | 23 | 42.6 |
| | Slightly Disordered | 15 | 27.8 |
| | Completely Disordered | 16 | 29.6 |
| Incontinence | Absent | 20 | 37.0 |
| | Once a week | 17 | 31.5 |
| | Twice a week | 17 | 31.5 |
| Using the Telephone | Protected | 29 | 53.7 |
| | Slightly Disordered | 11 | 20.4 |
| | Completely Disordered | 14 | 25.9 |
| Travelling by Car or Bus | Protected | 26 | 48.1 |
| | Slightly Disordered | 11 | 20.4 |
| | Completely Disordered | 17 | 31.5 |
| Food Shopping | Protected | 26 | 48.1 |
| | Slightly Disordered | 11 | 20.4 |
| | Completely Disordered | 17 | 31.5 |
| Preparing Meals | Protected | 23 | 42.6 |
| | Slightly Disordered | 8 | 14.8 |
| | Completely Disordered | 23 | 42.6 |
| Doing the Housework | Protected | 25 | 46.3 |
| | Slightly Disordered | 10 | 18.5 |
| | Completely Disordered | 19 | 35.2 |
| Recognizing Their Drugs and Taking Them | Protected | 27 | 50.0 |
| | Slightly Disordered | 12 | 22.2 |
| | Completely Disordered | 15 | 27.8 |
| Doing the Money Affairs | Protected | 27 | 50.0 |
| | Slightly Disordered | 11 | 20.4 |
| | Completely Disordered | 16 | 29.6 |

35.2 percent; 45.0 percent of them drew it incorrectly, and only 22.2 percent were able to correctly draw the clock.

Table 2 shows that the activity of eating had completely deteriorated in 14.8 percent of the elderly participants of the research, and the activity of dressing had completely deteriorated in 18.5 percent of them. Combing and shaving, going to bed and getting up had also completely deteriorated in 20.4 percent of residents; walking and relieving oneself had completely deteriorated in 25.9 percent of participants while for 29.6 percent of them the activity of bathing had completely deteriorated. Incontinence was seen in 31.5 percent of the elderly once a week and in 31.5 percent of them twice a week. Ability to use the telephone had completely deteriorated in 25.9 percent of them, and travelling by car or bus had

**Table 3: The states of their abilities to do MDLA and DLA according to their cognitive disorder states**

| | | *Cognitive disorder* | | | | *Total* | |
|---|---|---|---|---|---|---|---|
| | | *Yes* | | *No* | | | |
| | | *n* | *%* | *n* | *%* | *n* | *%* |
| Eating-Drinking | Protected | 14 | 41.2 | 20 | 58.8 | 34 | 100.0 |
| | Deterioration | 17 | 85.0 | 3 | 15.0 | 20 | 100.0 |
| ÷²= 9.891, P= 0.002 | | | | | | | |
| Dressing and Undressing | Protected | 11 | 35.5 | 20 | 64.5 | 31 | 100.0 |
| | Deterioration | 20 | 87.0 | 3 | 13.0 | 23 | 100.0 |
| ÷²= 14.307, P= 0.000 | | | | | | | |
| Combing-Shaving | Protected | 8 | 29.6 | 19 | 70.4 | 27 | 100.0 |
| | Deterioration | 23 | 85.2 | 4 | 14.8 | 27 | 100.0 |
| ÷²= 17.041, P= 0.000 | | | | | | | |
| Walking | Protected | 5 | 25.0 | 15 | 75.0 | 20 | 100.0 |
| | Deterioration | | 26 | 8 | 23.5 | 34 | 100.0 |
| ÷²= 13.644, P= 0,000 | | | | | | | |
| Going to Bed-Getting up | Protected | 10 | 33.3 | 20 | 66.7 | 30 | 100.0 |
| | Deterioration | 21 | 87.5 | 3 | 12.5 | 24 | 100.0 |
| ÷²= 15.999, P= 0.000 | | | | | | | |
| Relieving Oneself | Protected | 10 | 33.3 | 20 | 66.7 | 30 | 100.0 |
| | Deterioration | 21 | 87.5 | 3 | 12.5 | 24 | 100.0 |
| ÷²= 15.999, P= 0.000 | | | | | | | |
| Bathing | Protected | 6 | 27.3 | 16 | 72.7 | 22 | 100.0 |
| | Deterioration | 25 | 78.1 | 7 | 21.9 | 32 | 100.0 |
| ÷²= 13.788, P= 0.000 | | | | | | | |
| Incontinence | Protected | 5 | 22.7 | 17 | 77.3 | 22 | 100.0 |
| | Once a week | 26 | 81.3 | 6 | 18.8 | 32 | 100.0 |
| ÷²= 18,.261, p= 0.000 | | | | | | | |
| Using the Telephone | Protected | 8 | 27.6 | 21 | 72.4 | 29 | 100.0 |
| | Deterioration | 23 | 92.0 | 2 | 8.0 | 25 | 100.0 |
| ÷²= 22.782, p= 0.000 | | | | | | | |
| Travelling by Car or Bus | Protected | 7 | 26.9 | 19 | 73.1 | 26 | 100.0 |
| | Deterioration | 24 | 85.7 | 4 | 14.3 | 28 | 100.0 |
| ÷²= 19.057, p= 0.000 | | | | | | | |
| Food Shopping | Protected | 7 | 26.9 | 19 | 73.1 | 26 | 100.0 |
| | Deterioration | 24 | 85.7 | 4 | 14.3 | 28 | 100.0 |
| ÷²= 19.057, p= 0.000 | | | | | | | |
| Preparing Meals | Protected | 6 | 27.3 | 16 | 72.7 | 22 | 100.0 |
| | Deterioration | 25 | 78.1 | 7 | 21.9 | 32 | 100.0 |
| ÷²= 13.788, p= 0.000 | | | | | | | |
| Doing the Housework | Protected | 7 | 28.0 | 18 | 72.0 | 25 | 100.0 |
| | Deterioration | 24 | 82.8 | 5 | 17.2 | 29 | 100.0 |
| ÷²= 16.464, p=0.000 | | | | | | | |
| Recognizing Their Drugs and Taking Them | Protected | 7 | 25.9 | 20 | 74.1 | 27 | 100.0 |
| | Deterioration | 24 | 88.9 | 3 | 11.1 | 27 | 10.0 |
| ÷²= 21.888, p= 0.000 | | | | | | | |
| Doing the Money Affairs | Protected | 7 | 25.9 | 20 | 74.1 | 27 | 100.0 |
| | Deterioration | 24 | 88.9 | 3 | 11.1 | 27 | 100.0 |
| ÷²= 21.888, p= 0.000 | | | | | | | |

also completely deteriorated in 31.5 percent of the participants. Preparing meals had completely deteriorated in 42.6 percent of those in our study, and doing the housework had completely deteriorated in 35.2 percent. Recognizing and taking their drugs had completely deteriorated in 27.8 percent of residents. Shopping for food and clothing had completely deteriorated in 17.0 percent and for 29.6 percent of them, correctly managing their money affairs had completely deteriorated.

In Table 3, the deterioration of eating and drinking capability was seen in 85.0 percent of the elderly with cognitive disorders and in 15.0 percent of those without cognitive disorders. This difference between the groups was found statistically meaningful ($p < 0.05$). The activity of eating and drinking had deteriorated more in those who had cognitive disorders.

When we examined the activity of dressing and undressing, it had deteriorated in 87.0 percent of the elderly with cognitive disorders and in 13.0 percent of those without cognitive disorders. A very meaningful statistical difference between the groups was found ($p < 0.05$). In our study, the activities of combing and shaving had deteriorated in 85.2 percent of participants with cognitive disorders and in 14.8 percent of those without cognitive disorders. The difference between the groups was found to be statistically very meaningful ($p < 0.05$). The ability to walk had deteriorated in 76.5 percent of the participants with cognitive disorders and in 23.5 percent of those without cognitive disorders. The relation between the existence of cognitive disorders and the state of walking was found to be statistically very meaningful ($p < 0.05$).

The activities of relieving oneself, going to bed and getting up had deteriorated in 87.5 percent of the elderly with cognitive disorders and in 12.5 percent without cognitive disorders. The differences between the groups were statistically very meaningful ($p < 0.05$). The ability to bathe oneself had deteriorated in 78.1 percent of the elderly with cognitive disorders and in 21.9 percent without cognitive disorders. The relation between the state of the cognitive disorders and the activity of bathing was also found to be statistically very meaningful ($p < 0.05$). Incontinence had become an issue for 18.8 percent of elderly residents of the rest home without cognitive disorders and for 81.3 percent of those with cognitive disorders. A statistically very meaningful difference was found between incontinence and the level of cognitive disorders ($p < 0.05$).

The ability to use the telephone had deteriorated in 92.0 percent of the participants with cognitive disorders and in 8.0 percent for those without cognitive disorders. A statistically very meaningful relation was found between the states of the cognitive disorders and using the telephone ($p < 0.05$). Activities such as travelling by car or bus and grocery shopping had deteriorated in 85.7 percent of the elderly with cognitive disorders and in 14.3 percent for those without cognitive disorders. Statistically very meaningful relations between the groups were found ($p < 0.05$).

The ability to prepare meals had deteriorated in 78.1 percent of individuals with cognitive disorders and in 21.9 percent of those without cognitive disorders, and the difference between the groups was found to be statistically very meaningful ($p < 0.05$). The ability to do housework had deteriorated in 82.8 percent of elderly with cognitive disorders and in 17.2 percent in those without cognitive disorders. A statistically very meaningful correlation was determined between the ability to do housework and cognitive disorders ($p < 0.05$).

Being able to recognize their drugs and take them, and handling their money affairs had deteriorated in 88.9 percent of the elderly with cognitive disorders and in 11.1 percent of those without cognitive disorders. The differences between the groups were found statistically very meaningful ($p < 0.05$).

Table 4 shows that cognitive disorders among the elderly were seen in 80.0 percent of the 70-79 age group and in 68.2 percent of the 80 and over group. The difference between the groups was found statistically very meaningful ($p < 0.05$). When we examine cognitive disorders according to education level, the frequency rate for cognitive disorders for elderly with less than five education years was determined as 81.5 percent; the rate for those who finished primary education was at least 33 percent. The correlation between the state of cognitive disorder deterioration and the educational level was found to be statistically very meaningful ($p < 0.05$).

When we examine cognitive disorders in relation to faculty loss, faculty loss was seen in 71.8 percent of older people with cognitive disorders and in 28.2 percent of those without cognitive disorders. A statistically very meaningful

**Table 4: The states of cognitive disorder and faculty loss according to some socio- demographical features**

| | | *Cognitive Disorder* | | | | *Total* | |
|---|---|---|---|---|---|---|---|
| | | *Yes* | | *No* | | | |
| | | *n* | *%* | *n* | *%* | *n* | *%* |
| *Age Groups* | 60–69 | 0 | 0.0 | 12 | 100.0 | 2 | 100.0 |
| | 70–79 | 16 | 80.0 | 4 | 20.0 | 0 | 100.0 |
| | 80↑ | 15 | 68.2 | 7 | 31.8 | 2 | 100.0 |
| Total | | 31 | 57.4 | 23 | 42.6 | 4 | 100.0 |
| ÷²= 21.393, p= 0,000 | | | | | | | |
| *Education Status* | < 5 years | 22 | 81.5 | 5 | 18.527 | | 100.0 |
| | ≥5 years | 9 | 33.3 | 18 | 66.727 | | 100.0 |
| Total | | 31 | 57.4 | 23 | 42.654 | | 100.0 |
| ÷²= 12.799, p= 0.000 | | | | | | | |

| | | *Faculty Loss* | | | | *Total* | |
|---|---|---|---|---|---|---|---|
| | | *Yes* | | *No* | | | |
| | | *n* | *%* | *n* | *%* | *n* | *%* |
| | Have | 28 | 71.8 | 11 | 28.2 | 39 | 100.0 |
| | Not | 3 | 20.0 | 12 | 80.0 | 15 | 100.0 |
| | Total | 31 | 57.4 | 23 | 42.6 | 54 | 100.0 |
| ÷²= 11.886, p= 0,001 | | | | | | | |
| *Age Groups* | 60-69 | 4 | 33.3 | 8 | 66.7 | 12 | 100.0 |
| | 70-79 | 16 | 80.0 | 4 | 20.0 | 20 | 100.0 |
| | 80↑ | 19 | 86.4 | 3 | 13.6 | 22 | 100.0 |
| Total | | 39 | 72.2 | 15 | 27.8 | 54 | 100.0 |
| ÷²= 11.842, p= 0.003 | | | | | | | |

difference was found between the existence of cognitive disorders and faculty loss ($p < 0.05$). In Table 4**,** we can see that faculty loss has been determined in 33.3 percent of the 60-69 age group; in 80.0 percent of the 70-79 age group; and in 86.4 percent of the 80 and over 80 age group. The difference between the groups was statistically meaningful ($p < 0.05$). As people age, their faculty loss increases.

## DISCUSSION

Elderly men comprised the great majority (70%) of participants in the study. When other studies done at nursing homes are examined, men have generally constituted the majority oThe percentages and the SMMT scores of elderly participants in our study were as follows: 42.6 percent received 24-30 points, 27.8 percent got 10-19 points, 24.0 percent of them got 20-23 points and 5.6 percent received 0-9 points from the SMMT. In a similar study done earlier, while 38.3 percent of study participants got 24 or more points; 33.3 percent got 10-19 points; 28.3 percent received 20-23 points, and none of them scored 0-9 points (Çuhadar et al. 2006). Another study; group average was found to be $21.4 \pm 5.6$ by Akça et al. (2014). In the study performed by Sahin et al. (2005), 41.5 percent of those studied got 23 (the threshold value) or less from the SMÇMT, and the test results decreased as the age increased. Results indicated that the ratio of cognitive disorder increased depending on the increase in age (Sahin et al. 2005).

When the state of faculty loss was examined, it was determined that 33.3 percent of the elderly had severe faculty losses; 18.5 percent had medium faculty losses; 20.4 percent of them had light faculty losses, but 27.8 percent had no faculty losses. In a similar study, it was determined that 40.0 percent of the older persons had medium faculty losses (Çuhadar 2006).

According to study results, while no cognitive disorder was found in participants in their sixties, indications of cognitive disorder were evident in 68.2 percent of persons at age 80 and over, and a very high level (80 %) of cognitive

disorder was found in the elderly in their seventies. This difference between the groups was found to be statistically meaningful ($p < 0.05$). As people get older, the ratio of having cognitive disorder increases. Güngen et al. (1999), in their validity and reliability study, determined that the SMMT average points for people in the 80 or over 80 age group were lower (Güngen et al. 1999). In their study, Diker et al. (2001) determined that the ratio of light cognitive disorder was 25.7 percent and the ratio of severe cognitive disorder was 6.9 percent (Diker et al. 2001). Maral et al. (2001) determined that cognitive disorder was found in 27.2 percent of older persons in the 60-74 age group and in 56.0 percent of those 75 or over (Maral et al. 2001). In another similar study done earlier, it was reported that while the dementia prevalence for the 65 and over 65 age group was 2.2 percent to 8.4 percent, it was between 10.5 percent and 16.0 percent for the 75 and over 75 age group and it was 15.2 percent - 38.9 percent for the 85 and over 85 age group.(Lobo et al. 2000; Rockwood and Standnyk 1994; Rockwood and Stadnyk 1994). When the education status of the elderly participants in the study and their states of cognitive disorder were evaluated, it was determined that the frequency rate of having cognitive disorders for those who had less than five years of education was 81.5 percent and it was a lot more. This difference between the groups was found statistically meaningful, too ($p < 0.05$).

In their study, Gülseren et al. (2000) determined that there was a positive correlation between education level and several cognitive functions (Gülseren et al. 2000). In similar studies done at rest homes, a statistically meaningful relation was also determined between the education status and cognitive disorders (Çuhadar et al. 2006; Diker et al. 2001). It is known that a low education level in the elderly increases the dementia prevalence. This may be explained by the fact that more education and learning increases the neocortical synaptic density. It has been proposed that a higher level of education may possibly postpone the onset and age of dementia (Bulut et al. 2002).

The ratio of faculty loss is 71.8 percent and higher in the elderly with cognitive disorders. .The difference between the groups was also found statistically meaningful ($p < 0.05$). In a similar study in which the faculty loss was evaluated according to the existence of cognitive disorders, a statistically meaningful relation was not found between faculty loss and cognitive disorders (Çuhadar et al. 2006).

When the state of faculty loss was evaluated according to ages, faculty loss in the 80 and over 80 age group was much higher (86.4 %) than that of other age groups. In a similar study done earlier, a statistically meaningful relation was also found between the age groups and faculty loss (Çuhadar et al. 2006). Ergün et al. (2003) determined that cognitive functions affected the daily living activities. In that study, researchers found that the elderly residents of the rest home with low SMMT averages were more dependent in terms of shopping and dressing while those in the polyclinic group were more dependent regarding travelling and using the telephone (Ergün et al. 2003). Another study; when physical activity levels of elderly individuals were examined in the research, it was found that 28.8 percent of whom is very active, 53.6 percent of whom is minimal active and 17.6 percent of whom is inactive (Mehtap et al.2015).

As individuals get older, their ability to accomplish daily living activities decreases and performing normally routine tasks becomes more difficult (Berberoglu et al. 2002). In our study, the incidence of incontinence and ability to walk were the most deteriorated areas for nursing home residents. Residents' ability to perform other routine daily activities decreased in the following order: bathing, preparing meals, travelling by car or bus, food and clothes shopping, doing the housework, combing- shaving, recognizing their drugs and taking them, handling money affairs, using the telephone, dressing and undressing and eating – drinking. In another study performed at the rest home, it was determined that the residents were more dependent in terms of cleaning, shopping, travelling, preparing meals, a thing and transfer (Berberoglu et al. 2002). In another study, women were determined as more dependent than men in terms of climbing up and going down the stairs, moving their plates away from the table, making their beds, sitting down and standing up, relieving themselves, eating, doing the housework and dressing (Yaris et al. 2001). In another study performed in the city centre of Malatya, women were determined as more dependent in shopping, climbing up the stairs and controlling their bladder function (Günes et al. 2005).

## CONCLUSION

High level cognitive disorder was found in 5.6 percent of older persons, a medium-level cognitive disorder was found in 27.8 percent of the elderly and low level cognitive disorder was found in 24.0 percent of them. Light faculty loss was found in 20.4 percent of the elderly, 18.5 percent had medium faculty loss and 33.3 percent of them suffered severe faculty loss.

## RECOMMENDATIONS

Cognitive decline may cause deterioration in the daily living activities, nutrition and capacity for independent functioning.Risk factors are important for cognitive impairment. Early diagnosis of dysfunction the effect on the functionality of the person is important.

For this reason, nursing home residents assessing cognitive function in the elderly by health care personnel become a part of routine screening tests, such as SMMT, MDLA about that should be used.

## ACKNOWLEDGEMENTS

The authors declare that they have no conflict of interests.

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**Paper received for publication on June 2015**
**Paper accepted for publication on April 2016**