



Majör nörobilişsel bozukluk (demans) hastalarında ücretin bakım verme yükü ile ilişkisi

*The relationship between pay and care burden in patients
with major neurocognitive disorder (dementia)*

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Dear Editor,

Caring for dementia patients results in varying degrees of burden. Caregiver burden is related to various factors such as demographics, health-related, caregiving situation, social resources, culture, and financial status.^(1,2) While paid care is more common in Western societies and its emergence go back to the old years, it has become widespread in Eastern regions in the last few decades.^(3,4) The relationship between pay and caregiving burden in dementia patients has not been investigated in our province yet. Our aim in this study is to compare caregiving burden and depression in paid caregivers with those who are not paid and reveal the related factors.

Caregivers of the patients who admitted to the Kah-ta District State Hospital neurology outpatient clinic between November 1, 2020 and January 20, 2021 and diagnosed with moderate major neurocognitive disorder (dementia) according to the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders⁽⁵⁾ (DSM-5) were included in this study. Seventeen caregivers who were illiterate were excluded from the study. The data collected by the Zarit Burden Interview (ZBI)⁽⁶⁾ and Beck Depression Inventory (BDI)⁽⁷⁾ from the caregivers of the patients with dementia.

Approval was obtained from the Adıyaman University Non-Interventional Clinical Research Ethics Committee for this study (2020/11-15). In statistical analysis, descriptive data and continuous variables were given as mean±standard deviation, and categorical variables as frequency and percentage. Chi-square test was used

in comparison of independent variables in categorical data and Mann–Whitney U test was used for numerical data. Kruskal Wallis test was used for three independent groups. A post-hoc Tamhane T2 test was used when a significant difference was found between the three independent groups. The relationship between the variables was assessed by Spearman correlation test. A value of less than 0.05 was considered statistically significant.

All of the caregivers (n=38) were female and divided into three groups: Bride (19 subjects, 39.58%), daughter (16 subjects, 33.34%), paid caregiver (13 subjects, 27.08%). Mean age (p=0.629) and education level (p=0.876) were similar between the groups. All of the patients cared for were male. There was a significant difference between three groups in terms of ZBI (p<0.001) and BDI (p<0.001). This difference was due to the paid caregiver. There was a significant difference between paid caregiver and bride (p<0.001); paid caregiver and daughter (p=0.002) in terms of ZBI.

There was a significant difference between paid caregiver and bride (p<0.001); paid caregiver and daughter (p<0.000) in terms of BDI. Bride and daughter groups were similar in terms of scale scores (p>0.05). In terms of ZBI (p<0.001) and BDI (p<0.001), those who received a home care salary from the government were lower than those who did not. Those who had been a caregiver for less than one year had lower ZBI (p=0.001) and BDI (p=0.009) scores than those who had been caregivers for more than one year. While there was no significant correlation between age and

ZBI ($r=0.246$; $p=0.092$) and BDI ($r=0.249$; $p=0.088$); In some results, there was a significant positive correlation between ZBI and BDI ($r=0.878$; $p<0.001$). Sociodemographic and clinical variables were shown in **Table 1**.

The ZBI consisting of 22 items is one of the most commonly used instruments to assess caregiving burden in clinical and research settings.⁽⁶⁾ The scores obtained through ZBI are graded as low/no load (0-20), moderate burden (21-40), high burden (41-60) and overburden (61-88).⁽⁸⁾ After all, our findings indicate a moderate burden in all three groups. When both the data of the paid caregiver group and the data of the

home care salary earners in bride and daughter groups are evaluated together, it is seen that getting paid has an inverse relationship with the caregiving burden and the level of depression. The fact that the caregiving burden and depression levels of the bride and girl groups are similar suggests that the effect of kinship level on the outcomes is limited. Another finding of the study was that there was a positive correlation between caregiving duration and caregiver burden and depression level.⁽⁹⁾

Caregivers have been shown to suffer from high caregiving burden and depression. The relationship between caregiving and depression was previously investigated in family caregivers. However, with the increasing

Table 1: Sociodemographic and Clinical Variables of the Groups

Parameters		Bride (n=19)	Daughter (n=16)	Paid Caregiver (n=13)	p value
Age of Caregiver (year)		44.21±8.54	46.37±11.50	42.76±10.56	0.629
Education Level of Caregiver (year)		4.52±2.41	4.06±3.49	4.15±2.44	0.876
Age of Patient (year)		74.45±18.14	70.36±16.87	76.54±56	0.204
ZBI		39.00±7.24	36.56±7.25	27.30±5.63	<0.001**
BDI		39.15±8.83	35.25±12.00	15.76±4.95	<0.001**
Marital Status of Caregiver	Married	19 (100.0%)	13 (81.25%)	8 (61.53%)	0.016*
	Other	0 (0.0%)	3 (18.75%)	5 (38.47%)	
Home Care Salary from Government	Yes	10 (52.63%)	12 (75.0%)	13 (100.0%)	0.012*
	No	9 (47.37%)	4 (25.0%)	0 (0.0%)	
Duration of Caregiving	<1 Year	9 (47.37%)	6 (37.5%)	7 (53.84%)	0.670
	>1 Year	10(52.63%)	10 (52.5%)	6 (46.16%)	

* $p<0.05$; ** $p<0.001$; Chi-square test and Kruskal Wallis test were used in statistical analysis; ZBI: Zarit Burden Interview; BDI: Beck Depression Inventory



prevalence of paid caregiving, studies have also been conducted in this group and it has been observed that the levels of depression were higher than the control groups.⁽¹⁰⁾ Although affected by sociocultural factors, caregiving is associated with a certain burden in many parts of the world.

However, studies have reported that the burden of paid caregiving involves less caregiving burden than unpaid caregiving. Lin et al.⁽¹¹⁾ designed a study to identify the predictors and differences in caregiver burden between foreign paid caregivers and family caregivers who provided care for patients with dementia with and without foreign paid caregivers.

It was determined that burdens were greater among family caregivers than foreign paid caregivers. They⁽¹¹⁾ stated that the sources of burden differ between family caregivers and foreign paid caregivers. Consistent with the Lin et al.'s⁽¹¹⁾ study, Ayalon's⁽¹²⁾ study conducted in Israel revealed that patients' neuropsychiatric symp-

toms did not affect paid caregiving burden, but increased family caregiving burden.

There may be various reasons for these perceptual differences between caregiver groups. Past positive and/or negative experiences of family members with the patient may affect the burden. On the other hand, it can be expected that the burden will be less, since this is a job for paid caregivers and their past experiences of the patient are less. The findings of the current study increased our understanding of the correlates of caregiver burden among different groups.

However, our study has several limitations. The study design was cross-sectional and the sample size was small. Sociodemographic data and scale diversity were limited. There is a need to support the study findings with longitudinal studies and to reduce sociodemographic and clinical limitations.

Conflict of Interest and Financial Disclosure:

None declared.

Kaynaklar:

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