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Relationship of Gratitude and Coping Styles with Depression in Caregivers of Children with Special Needs

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Abstract

This is a cross-sectional, descriptive and correlational study aiming to reveal the relationship of gratitude and coping styles with depression in caregivers of children with special needs. As a result of the study, which was conducted with 330 caregivers, it was determined that the caregivers' level of gratitude was high. In this study, it was found that the caregivers used mostly turning to religion, planning, positive reinterpretation, and instrumental social support as coping styles respectively. It was established that there was a significant correlation between caregivers' depression level and gender, education level, level of gratitude, focus on and venting of emotions, substance use, behavioural disengagement, positive reinterpretation, using emotional social support and planning coping styles. The depression disclosure level was found to be 17.8%. For holistic nursing care, the assessment of spiritual care and spiritual needs of caregivers is very important because of its positive effect on mental health.

Keywords Caregivers · Gratitude · Cope · Depression

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Introduction

According to 2010 data, the percentage of the population with at least one disability is about 15% (more than one billion people) in the world, and this ratio is predicted to increase with the effect of ageing, disability and other factors (WHO, 2018). In Turkey, according to the data announced in 2011, the percentage of the population with at least one disability is 6.9% in all age groups, and this ratio is expected to increase with the increase in the age group (T.R Ministry of Family and Social Services, 2019). A person's physical, social or intellectual disability affects not only the individual, but also the individual's immediate environment and even the society in which they live. In society, those who are most affected by this situation are undoubtedly the caregivers, and the caregivers are most composed of mothers (Ören & Aydın, 2020; Tahmaz et al., 2019; WHO, 2020). In its general definition, caregiving includes supporting the individual physically, socially, emotionally or financially (Türken Gel & Tokur Keskin, 2017). Caregivers of children with special needs experience more anxiety than other caregivers, take less time for themselves and participate in physical and social activities less. Stress, low quality of life, unhealthy family functioning and negative psychological conditions can be seen in caregivers as a result of social, physical and emotional burdens. At the same time, problems such as social exclusion, depression, feeling of burnout, inability to cope, hopelessness, loneliness, anger, blaming oneself or others, shame, difficulty in making decisions, shock and anxiety about the future are among the other problems experienced by caregivers (Gilbertson et al., 2019; Karadağ & Bilsin, 2016; Vitorino et al., 2018; Yılmaz, 2019).

Gratitude is defined as a positive thought, a satisfaction and a feeling felt towards God (Kaplaner & Ekşi, 2020; Lau & Cheng, 2017). There are studies in the literature that show that gratitude has positive effects on the mental health of individuals (Chafjiri et al., 2017; Erişen & Karaca Sivrikaya, 2017). In a study, it was reported that there was a significant positive correlation between gratitude and emotionfocused coping (Lau & Cheng, 2017). Similarly, it was found that there was a negative correlation between spiritual coping and depressive symptoms in paediatric cancer patients (Vitorino et al., 2018). The concept of coping is an important concept for caregivers regarding their mental state. Coping directly affects the health of the caregiver and the individual they are responsible for. In a study, it was found that there was a negative correlation between the coping styles and the anxiety levels of caregivers of elderly patients (Ay et al., 2017). Caregivers try to cope with the adverse situations they experience by receiving family support, social support or spiritual support (VanderWeele et al., 2017; Vitorino et al., 2018). When the studies were examined, it was seen that the coping style of the caregivers directly affects many conditions, such as depression, anxiety and social relations.

No research has been found in the literature examining the relationship between spiritual coping and depression in caregivers of children with special needs. Caregivers have many emotional burdens. Therefore, strengthening them in terms of factors related to depression will also make positive contributions to their mental health.



The aim of this study is to investigate the level of gratitude and coping styles in caregivers of children with special needs and their relationship with depression.

Research Questions;

- 1. What is the level of gratitude and coping styles of caregivers?
- 2. What are the socio-demographic factors affecting the depression level of caregivers?
- 3. Is there a relationship between caregivers' level of gratitude, coping styles and depression?

Materials and Methods

Study Design and Sample

The population of this cross-sectional, descriptive and correlational study consists of caregivers of students enrolled in a special education and application centre in a province in the West of Turkey. G Power Statistical Software 3.1.9.4 program was used for sample size calculation, Type I error was 0.05 and Type II error was 0.20 (Power 80%), and at least 75 caregivers were planned to participate in the study (Vitorino et al., 2018). A total of 330 caregivers between the ages of 18–65 who agreed to participate in the study were included in the study. Data were collected between December 2020 and April 2021.

Being older than 18 years of age, being the caregiver of a child with special needs who is enrolled in a special education and rehabilitation centre, speaking Turkish and agreeing to participate in the study were accepted as the inclusion criteria.

Reluctance to participate in the study, filling the survey form incompletely, and the absence of caregiver's special needs child in the relevant school were the exclusion criteria of the study.

Data Collection Tools

Socio-Demographic Data Form, Gratitude Scale, Coping Styles Scale Brief Form and Beck Depression Inventory were used in the study.

The Socio-Demographic Data Form was created by the researchers in line with the literature and includes questions related to caregiver's age, gender, education level, and age and disability type of the individual receiving care (Karadağ, 2014; Vitorino et al., 2018).

Gratitude Scale was developed by Hlava et al. (2014) and Turkish validity, and reliability study was conducted by Kaplaner and Ekşi (2020). The scale consists of 16 items in total and four sub-dimensions as 'expression of gratitude (items 2, 5, 10, 15)', 'gratitude as a value (items 3, 5, 11, 13)', 'transcendent gratitude (items 1, 6, 8, 16)' and 'spiritual connection (items 4, 9, 12, 14)'. Scale scoring is in the form of six-point rating, and only item 7 is reverse scored. The total score for each sub-dimension is obtained by summing the item scores of the sub-dimensions. A general



total score is obtained by summing the scores of all sub-dimensions. High score obtained from each sub-dimension of the scale indicates that the individual has the characteristic that the corresponding sub-dimension evaluates. The Cronbach's alpha coefficient of the scale was determined as 0.88 (Kaplaner & Ekşi, 2020). In this study, the Cronbach's alpha coefficient was found to be 0.90.

Coping Styles Scale Brief Form (CSS-BF) was developed by Carver et al. (1989). Turkish validity and reliability study of the scale brief form was conducted by Bacanlı et al. (2013). The scale is a 4-point Likert scale consisting of 14 sub-dimensions and 28 items in total. It is scored as: 1=I don't do this at all, 2=I do this a little bit, 3=I do this a medium amount, 4=I do this a lot. The raw score that can be obtained from each sub-dimension varies between 2 and 8. Cronbach's alpha coefficients of scale sub-dimension range from 0.50 to 0.90. Sub-dimensions are 'using instrumental social support', 'humour', 'focus on and venting of emotions', 'substance use', 'acceptance', 'suppression of competing activities', 'turning to religion', 'denial', 'behavioural disengagement', 'mental disengagement', 'restraint coping', 'positive reinterpretation', 'using emotional social support' and 'planning'. In the assessment of the scale, each sub-dimension is evaluated separately. Low scores indicate that the dimension is used less, and high scores show that the dimension is used more (Bacanlı et al., 2013). The overall Cronbach's alpha was calculated as 0.80.

Beck Depression Inventory; The Turkish validity and reliability study of the scale, developed by Beck et al. (1961) to determine the level of depressive symptoms, was carried out by Hisli (1989). Each response of the scale is scored between 0 and 3, and it consists of 21 questions in total. The total score of the scale ranges from 0 to 63. It was found that when 17 and above were accepted as the cut-off point, the sensitivity of the scale in predicting depression requiring treatment was over 90% (Hisli, 1989). In this study, the Cronbach's alpha reliability coefficient was found as 0.90.

Independent Variable

In this study, total score obtained from gratitude scale and scores obtained from the sub-dimensions, coping style scale scores and the socio-demographic characteristics of the caregivers were defined as independent variables.

Dependent Variable

In this study, the score obtained from Beck Depression Inventory was defined as dependent variable.

Data Analysis

The normality of distribution of continuous variables was tested by Shapiro–Wilk test. Mean \pm standard deviations ($X \pm SD$) were given as descriptive statistics. Mann–Whitney U test and Kruskal–Wallis and Dunn multiple comparison tests were



used to compare non-normal numerical data among groups. Multiple linear regression analysis was performed to determine significant variables for Beck depression scores. VIF (variance inflation factor) was calculated for controlling multicollinearity problem. Statistical analysis was performed with SPSS for Windows version 24.0, and p value < 0.05 was accepted as statistically significant.

Ethical Considerations

Approval was obtained from the Ethics Committee on October 10, 2020, with decision number: 2020/11-09. For the permission of the institution, approval was obtained from the Provincial Directorate of National Education. Permission for the use of scales in the study were obtained via e-mail. Written informed consent was obtained from the participants who agreed to participate in the study.

Results

Findings Related to Socio-Demographic Characteristics of the Caregivers and Scale Total Scores

It was established that 82.7% of the caregivers participated in the study were women, 53.6% were between the ages of 30–39, and the education level of 34.8% was primary school. It was found that 68.5% of the caregivers participated in the study had a male special needs child, 57.6% of them aged between 1 and 10 years and 48.8% had intellectual disability (Table 1).

It was determined that the gratitude scale total mean score of the caregivers was 77.90 ± 14.78 and the highest sub-dimension mean score was spiritual connection (21.86 ± 4.56) . It was found that caregivers used turning to religion (7.57 ± 0.98) , planning (6.80 ± 1.32) , positive reinterpretation (6.61 ± 1.35) and using instrumental social support (6.50 ± 1.53) coping styles, respectively. In our study, it was determined that the caregivers' level of depression was mild (11.45 ± 9.62) (Table 2).

Findings Related to the Socio-Demographic Characteristics of the Caregivers and the Level of Depression

The fact that the depression total mean score of the female caregivers being higher than that of the male caregivers was found to be statistically significant (p < 0.05). It was determined that the mean score of caregivers with primary school education (12.21 ± 9.79) and high school education (12.99 ± 9.84) was higher than the mean score of caregivers with university education (7.93 ± 7.83) (p < 0.05). The fact that caregivers with high school education (12.99 ± 9.84) having a higher depression total mean score than caregivers with a university education (7.93 ± 7.83) was found to be statistically significant (p < 0.05). When the caregiver's age, special needs child's age and type of disability, and depression total mean score were compared, no significant correlation was found between them (p > 0.05) (Table 3).



Table 1 Descriptive statistic of caregivers' (n=330)

Variables	n	%
Gender*		
Female	273	82.7
Male	57	17.3
Age		
20-29 years	25	7.6
30-39 years	117	53.6
40-49 years	105	31.8
50 years and older	23	7.0
Education level*		
Primary education	115	34.8
Secondary education	60	18.2
High school	100	30.3
University	55	16.7
Child's age		
1-10 years	190	57.6
11-19 years	127	38.5
20 years and older	13	3.9
Child's special needs		
Physical	70	21.2
Intellectual	161	48.8
Emotional	99	30.0

Findings Related to the Scale Scores and Various Socio-Demographic Characteristics of the Caregivers and Depression

A weak negative correlation was found between gratitude total score (r = -0.349), expression of gratitude (r = -0.300), gratitude as a value (r = -0.297), transcendent gratitude (r = -0.306) sub-dimensions and depression scores (p < 0.001). A very weak negative correlation was found between the spiritual connection sub-dimension and depression scale scores (r = -0.180, p < 0.001) (Table 4).

It was established that there was a weak positive correlation between Coping Styles Scale sub-dimensions of focus on and venting of emotions (r=0.203), behavioural disengagement (r=0.203) and depression scores (p<0.001). There was a weak negative correlation between planning sub-dimension and depression score (r=-0.288, p<0.001). A very weak positive correlation was found between substance use and depression score (r=0.154, p<0.001). It was determined that there was a very weak negative correlation between positive reinterpretation (r=-0.177), using emotional social support (r=-0.154) and depression score. A very weak but significant negative correlation was found between positive reinterpretation (r=-0.177), using emotional social support (r=-0.154) and depression score (p<0.05) (Tablo 4).

Table 5 shows the relationship between the study variables and depression. There is a correlation between model depression and gratitude scale total score, and the



Table 2 Descriptive statistics for gratitude, coping styles and depression score of caregivers' (n=330)

	$\overline{X} \pm SD$	Median [Min–Max]	
Gratitude scale	77.90 ± 14.78	80.00 [21–96]	
Expression of gratitude	19.09 ± 4.34	20.00 [4-24]	
Gratitude as a value	18.96 ± 4.49	19.00 [4-24]	
Transcendent gratitude	18.70 ± 4.31	19.00 [4-24]	
Spiritual connection	21.86 ± 4.56	24.00 [4-24]	
Coping styles scale sub-dimensions			
Using instrumental social support	6.50 ± 1.53	7.00 [2-8]	
Humour	4.03 ± 1.95	4.00 [2-8]	
Focus on and venting of emotions	5.31 ± 1.85	5.00 [2-8]	
Substance use	$2.20 \pm .81$	2.00 [2-8]	
Acceptance	6.02 ± 1.74	6.00 [2-8]	
Suppression of competing activities	5.54 ± 1.56	6.00 [2-8]	
Turning to religion	$7.57 \pm .98$	8.00 [2-8]	
Denial	3.82 ± 1.70	3.50 [2-8]	
Behavioural disengagement	3.48 ± 1.71	3.00 [2-8]	
Mental disengagement	4.93 ± 1.59	5.00 [2-8]	
Restraint coping	5.80 ± 1.45	6.00 [2-8]	
Positive reinterpretation	6.61 ± 1.35	7.00 [2–8]	
Using emotional social support	5.15 ± 1.67	5.00 [2-8]	
Planning	6.80 ± 1.32	7.00 [2–8]	
Beck Depression Inventory	11.45 ± 9.62	11.00 [0–52]	

scale consists of coping styles sub-dimensions of focus on and venting of emotions, substance use, behavioural disengagement, positive reinterpretation, using emotional social support and planning. It also includes gender and education level as demographic data. These variables explain the depression level of caregivers at a rate of 17.8%. The variables that significantly affected the depression level of caregivers were planning ($\beta = -0.139$), gratitude scale ($\beta = -0.112$), focus on and venting of emotions ($\beta = 0.194$) and behavioural disengagement ($\beta = 0.153$), respectively (Table 5). The tolerance value is greater than 0.65 and VIF value varies between 1.084 and 1.520.

Discussion

This study was conducted to reveal the relationship of gratitude and coping styles with depression in caregivers of children with special needs. In our study, it was found that the caregivers' level of gratitude was high. In a study examining the relationship between the spiritual attitude and care burden of caregivers of paralyzed patients, it was determined that the spiritual attitudes of the caregivers were moderate (Chafjiri et al., 2017). In a qualitative study, it was stated that the siblings showed gratitude both verbally and behaviourally towards the questions related to



Table 3 Comparison of socio-demographic characteristics of caregivers and depression mean scores (n=330)

	Beck Depression Inventory			
	n	Mean ± SD	p	Test statistics
Gender*		,		
Female	273	11.88 ± 9.71	0.029	Z = -2.181
Male	57	9.39 ± 8.98		
Age				
20-29 years	25	9.48 ± 9.75	0.425	KW-H = 2.789
30-39 years	117	11.68 ± 9.37		
40-49 years	105	11.31 ± 9.97		
50 years and older	23	12.48 ± 10.12		
Education level*				
Primary education (a)	115	12.21 ± 9.79	0.002	KW-H = 14.951
Secondary education (b)	60	10.67 ± 9.76	a>d, c>b, c>d	
High school (c)	100	12.99 ± 9.84		
University (d)	55	7.93 ± 7.83		
Child's age				
1-10 years	190	11.29 ± 9.06	0.744	KW-H = 0.590
11-19 years	127	11.38 ± 9.94		
20 years and older	13	14.38 ± 14.05		
Child's special needs				
Physical	70	13.28 ± 11.78	0.475	KW-H = 1.490
Intellectual	161	10.56 ± 7.82		
Emotional	99	11.59 ± 10.46		

^{*}p < 0.05; Z, Mann–Whitney U test; KW-H, Kruskal Wallis–Dunn test; a, primary education; b, secondary education; c, high school; d, university

the caregivers (Amaro & Miller, 2016). Another study found that those who cared for cancer patients had high psychological and spiritual health (Yıldız et al., 2016). When the studies were examined, it was seen that some of the caregivers believed that this situation came from God, and thus they accepted it more quickly and coped with the situation more easily due to their beliefs (Cheng et al., 2016; Küçükgüçlü et al., 2017; Kutlu et al., 2021). As the majority of our country consists of a Muslim society and the caregivers are usually parents, it is believed that they may have the thought that their children with special needs came from God, and thus the level of spiritual gratitude is high. In our study, it was observed that the caregivers mostly used turning to religions as a coping style.

In our study, it was identified that the caregivers of children with special needs mostly used coping styles of turning to religion, planning, positive reinterpretation and using instrumental social support. Positive reinterpretation, active coping and planning were found to be the most commonly used coping styles in caregivers of schizophrenia patients (Köroğlu & Hocaoğlu, 2019). In another study conducted



Table 4	The correlation
between	study variables

		BECK Depression Inventory	p
Gratitude mean score	r	-0.349*	0.001
Expression of gratitude	r	-0.300^*	0.001
Gratitude as a value	r	-0.297^*	0.001
Transcendent gratitude	r	-0.306^*	0.000
Spiritual connection	r	-0.180^*	0.001
Using instrumental social support	r	-0.098	0.075
Humour	r	0.017	0.754
Focus on and venting of emotions	r	0.203^{*}	0.001
Substance use	r	0.154^{*}	0.005
Acceptance	r	-0.106	0.054
Suppression of competing activities	r	-0.029	0.601
Turning to religion	r	-0.102	0.063
Denial	r	0.059	0.286
Behavioural disengagement	r	0.203^{*}	0.001
Mental disengagement	r	0.056	0.313
Restraint coping	r	0.056	0.314
Positive reinterpretation	r	-0.177^{**}	0.001
Using emotional social support	r	-0.154^{**}	0.005
Planning	r	-0.288^{*}	0.000

p < 0.001, **p < 0.05 r: Spearman

 Table 5
 Multivariate linear regression analysis results for predicting the caregiver's depression level

	Model 1				_
	β	SE	Beta	t	p
Constant	20.379	4.298		4.742	0.001*
Gender	-0.737	1.325	-0.029	-0.140	0.578
Education level	-0.065	0.465	-0.008	-0.140	0.889
Gratitude	-0.073	0.035	-0.112	-2.072	0.039
Focus on and venting of emotions	1.008	0.284	0.194	3.545	0.001*
Substance use	1.196	0.623	0.101	1.919	0.056
Behavioural disengagement	0.862	0.322	0.153	2.678	0.008*
Positive reinterpretation	-0.519	0.439	-0.073	-1.181	0.238
Using emotional social support	-0.571	0.335	-0.099	-1.704	0.089
Planning	-1.006	0.454	-0.139	-2.217	0.027*

 $[\]beta$, regression coefficients



^{*}p < 0.05; R^2 : 18%, F for model significance: 7.682, p = 0.001

with caregivers of patients with neurodegenerative disorders, it was revealed that using spiritual coping had a positive effect on depression and stress in caregivers using that coping style (González-Rivera & Rosario-Rodríguez, 2018). The coping attitudes of caregivers of acute lymphoblastic leukaemia patients were examined, and it was determined that mothers used coping styles such as using emotional social support, using instrumental social support and turning to religion more, while fathers used substance use and acceptance as coping strategies (Chivukula et al., 2018). The high levels of spiritual gratitude in caregivers participated in our study may have led them to use the turning to religion coping style. In nursing care, it is aimed to provide support to each other by sharing experiences and feelings of individuals with similar problems and thus strengthen mental health. In this regard, it can be thought that the caregivers participating in our study may have been relieved by sharing their experiences with each other in the special education and rehabilitation centres where their children with special needs receive education and support.

In our study, it was found that the caregivers' depression level was mild. In a study conducted with parents of a disabled child, it was determined that 48% of the families showed symptoms of severe depression (Ören & Aydın, 2020). In another study conducted with individuals of disabled children, it was found that the depression level of caregivers was moderate (Aytekin et al., 2021). It was established that the caregivers of elderly individuals had high levels of depression and anxiety. In caregivers who used problem-focused and emotion-focused coping strategies, it was found that there was a weak negative correlation between these coping strategies and depression levels (Ay et al., 2017). In our study, it is believed that the level of depression may have been mild due to the high level of spiritual gratitude of the caregivers. Turning to religion coping style is seen as a common coping style used by caregivers in our country. For example, using positive coping methods such as praying and accepting that this situation comes from God may have resulted in low-level depression.

Among the caregivers participating in the study, it was seen that the depression level of women was higher than that of men. In a study, it was found that the depression level of fathers was higher than that of mothers (Ören & Aydın, 2020). In caregivers of patients who received chemotherapy, it was seen that the State-Trait Anxiety Inventory mean score of women was significantly higher than that of men (Çıtlık Sarıtaş & Büyükbayram, 2016). In caregivers of cancer patients, it was found that women had higher depression levels than men (Ateş et al., 2018). According to the literature, it is believed that women may have a higher level of depression as caregivers usually consist of mothers, fathers accept the situation later than mothers, and behaviours such as reflection and sharing the burden of care are mostly undertaken by mothers.

In our study, it was seen that education level affected the depression level of caregivers. It was determined that caregivers with university education had the lowest depression level. In a study, it was established that the burden of care and depression levels of caregivers decreased significantly along with the increasing education level (Ören & Aydın, 2020). It was found that the education level of caregivers of Alzheimer's patients significantly affected the burden of care (Mahdavi et al., 2017). It was established that the burden of care in caregivers of children with chronic diseases decreased along with



the increasing education level (Doğan et al., 2021). It is believed that with the increasing education level of the caregivers, the level of depression may decrease as individuals get to know the mechanisms of receiving support better and this affects their ability to access information about coping methods and receive professional support.

Table 4 shows the variables associated with the depression level of the caregivers. In our study, it was determined that there was a relationship between the level of depression and the caregivers' level of gratitude, planning, behavioural disengagement, focus on and venting of emotions coping styles. In a study examining gratitude and coping in caregivers of dementia patients, it was stated that using focus on emotions coping style had a positive effect on psychological distress (Lau & Cheng, 2017). In a study examining the relationship between coping attitude and depressive symptoms in caregivers of disabled children with care burden, it was established that there was a weak but significant positive correlation between caregivers' depression level and dysfunctional coping attitude (Ulusoy et al., 2020). A study conducted with caregivers of cancer patients found that the quality of life of caregivers with high spiritual well-being was higher than that of the other group, and the burden of care was less (Spatuzzi et al., 2019). It is seen that the results of our study are similar to the literature.

As a result of the study, it was found that the gender, education level, level of gratitude and coping styles of the caregivers affected the depression level by 17.8% (Table 5). In an experimental study examining the effect of spiritual group therapy on burden of care in caregivers of elderly individuals with Alzheimer's disease, it was found that spiritual care reduces the burden of care (Mahdavi et al., 2017). In another study conducted with caregivers of advanced cancer patients, it was determined that spiritual care had a positive effect on the caregivers' level of depression (Douglas & Daly, 2013). In a randomized controlled trial conducted with individuals with haematological malignancies and their caregivers, it was found that there was a significant difference between the level of spiritual well-being, family integrity, anxiety and depression levels in the experimental and control groups after the intervention (Wang et al., 2021). In another study conducted with caregivers of paediatric cancer patients, it was found that spiritual/religious coping explained the level of depression at a rate of 16.1% (Vitorino et al., 2018). The results of our study are similar to the literature.

Limitations

Since it was challenging to reach caregivers during the pandemic period, stratification sampling could not be used. As many caregivers as possible were included in the study without using any samples.

Conclusion

This study examined the relationship of gratitude and coping style with depression in caregivers of children with special needs. It was determined that the caregivers of children with special needs had high levels of gratitude, and they mostly used



coping styles of turning to religion, planning, positive reinterpretation and using instrumental social support. It was found that the depression level of the caregivers was mild. It was revealed that the caregivers' gratitude and planning, focus on and venting of emotions, behavioural disengagement, using emotional social support coping styles had an effect on depression. While evaluating the caregivers, it is important for nurses to evaluate the spiritual care needs in line with the holistic approach. Therefore, in order to protect and improve caregivers' mental health, their spiritual care, spiritual needs and religious needs should be evaluated by nurses and other health professionals. It is very important to work with a multidisciplinary team for caregivers, to cooperate with non-governmental organizations, to bring together other people with the same problems and caregivers, and to engage in interventional activities to help them adopt positive coping styles. In the future, it is believed that attempts to strengthen spiritual well-being for caregivers and revealing its impact on depression will contribute to the literature on this issue.

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Declarations

Conflict of interest No conflict of interest has been declared by the authors.

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