



Religious Coping and Fatalism on Perception of Care Burden in Caregivers of Patients with Cerebral Palsy in Turkey: A Cross-Sectional and Correlational Study

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Accepted: 2 April 2023

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Abstract

Providing care to a patient with cerebral palsy can have many negative impacts upon caregivers. This study was carried out to define caregiving burden in the caregivers of cerebral palsy patients and determine the relationships between religious coping, fatalism, and burden of care. This cross-sectional and correlational study included 132 caregivers. Data were obtained using the Religious Coping Scale, the Fatalism Scale, and the Caregiver Burden Scale. It was determined that 18.9% of the participants experienced a heavy care burden. The luck and pessimism dimensions of the Fatalism Scale were positively and weakly correlated with caregiving burden ($p < 0.01$), while there was no correlation between caregiving burden and positive or negative religious coping styles ($p > 0.05$). Perception of fatalism explained 10% of the total variance in caregiving burden ($R = 0.329$, $R^2 = 0.109$, $F = 5.195$, $p = 0.002$). It is recommended that caregivers be supported by religious experts to strengthen positive religious coping styles and advisable fatalism perceptions.

Keywords Caregiver burden · Cerebral palsy · Fatalism · Religious coping

Introduction

Cerebral palsy (CP) is a non-progressive, permanent disorder in the development of movement and posture, resulting from a lesion or anomaly in the brain (Berberoglu & Calisir, 2020). CP is one of the most common motor disorders in childhood (Akpinar, 2021; Pushpalatha & Shivakumara, 2016). Today, despite the advancement of technology, early diagnosis, and guidance of families, it is seen that there is

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no significant decrease in the incidence of CP, and this incidence even increases due to the increase in the life expectancy of preterm infants (Ceran & Ceylan, 2021). The prevalence of CP in Turkey has been reported as 1.1 per 1000 live births (Oztürk et al., 2007) and 0.44% in children aged 2–16 years (Serdaroglu et al., 2006).

Many patients with CP may experience limitations in self-care functions such as feeding, bathing, dressing, and walking and face communicative, sensory, and mental disorders (Albayrak et al., 2019). The patient with CP cannot fully meet their needs due to problems such as unsuitable and uncorrectable body posture, pain, muscle spasms, involuntary movements, swallowing or digestive problems, accompanying medical ailments, and inability to use the affected extremities (Berberoglu & Calisir, 2020). Because of the deficiencies or problems caused by the disease, patients with CP need special attention and care throughout their lives (Calisir et al., 2018).

Caregiver Impact

A caregiver is a person who help the care recipient with their activities of daily living to resolve their existing problems and needs (Fertelli & Tuncay, 2019). Additionally, the caregiver helps the patient manage and cope with their illness during treatment (Rafati et al., 2020). Caregivers regularly provide healthcare for a person for whom they are responsible (Heath et al., 2018). Caregivers have undertaken the management of almost all activities of daily living of patients with CP (Yildirim et al., 2020). However, providing care for and attending to a patient with CP can have many negative impacts on the lives of parents or caregivers and create an additional burden (Guillamón et al., 2013; Pushpalatha & Shivakumara, 2016).

After diagnosis, due to the disease and its secondary complications, frequent visits to the hospital, being with the individual constantly, and taking care of the patient may cause the caregiver to not be able to spare time for oneself and one's environment (Calisir et al., 2018; Heath et al., 2018). Moreover, caregivers may have to choose between their own needs, the needs of other members of the family, and the needs of the CP patient (Aydin, 2019). Additionally, caregivers may have difficulty in effectively managing the chronic health problems of the CP patient (Olawale et al., 2013) and may be concerned about the future of the patient (Calisir et al., 2018). This may cause problems such as anxiety, financial problems, career development problems, limitations in social and cultural activities, and a decrease in self-care functions in the caregivers of CP patients over time (Ceran & Ceylan, 2021; Park & Nam, 2019; Ulusoy et al., 2021). In this regard, the caregiving process puts the caregiver's life in distress, can turn into a one-way, dependent, and intense obligation, and lead to a caregiving burden (Farajzadeh et al., 2018; Yildirim et al., 2020).

Caregiving burden is expressed as the degree of financial or biopsychosocial difficulties experienced by a caregiver (Yildirim et al., 2020). While some caregivers easily manage to adapt to and cope with the limitations of patients with CP, others have difficulties in this process (Calisir et al., 2018). Therefore, the evaluation of

coping strategies in the caregivers of CP patients may be important to understanding how these patients adjust to their condition (Guillamón et al., 2013).

Religious Coping

Today, one of the methods used to cope with many problems in life is religious coping. Religious coping is an individual's religious behaviors aimed at reducing or eliminating psychological conflicts caused by stress and anxiety in general. In the religious coping method, the individual attempts to relax and find peace by using religious feelings, thoughts, and behaviors within the integrity of the religious system/beliefs in situations that they cannot control or overcome (Altintas, 2015).

Religious beliefs are a source of refuge and consolation for many people after sudden changes in the natural flow of their lives or traumatic events (Karaca & Sener, 2021). In this respect, religious coping can help people endure difficulties. It was stated in the literature that religion is one of the important forms of social support that helps families accept the situation of their children with CP (Dezoti et al., 2015). Studies have also demonstrated that parents tend to seek moral support to cope (Krstić & Oros, 2012), and religious coping reduces the stress of parents with disabled children (Chinnavan & Kumari, 2020).

The perception of fatalism, like religious coping, can offer a different perspective in the search for solutions to the problems of individuals. Fatalism, which is a cultural characteristic, is the explanation of any event that people encounter in their lives by the will of God, a supernatural power. It is accepted that destiny cannot be changed by the power and efforts of people, and the events that occur are inevitable (Bobov & Capik, 2020). In fatalism, it is thought that "if there is destiny, there is nothing that can be done to prevent or change it." In the relevant literature, it was reported that the perception of fatalism positively affects mental health and psychology and is a factor that motivates people (Kizilarlan, 2020).

In the caregivers of CP patients, who need care throughout their lifetime, the perception of caregiving burden may increase over time (Calisir et al., 2018; Kiani et al., 2021; Pushpalatha & Shivakumara, 2016; Yildirim et al., 2020). It was seen in the relevant literature that perceptions of religious coping and fatalism as coping behaviors were not examined in the fight against the caregiving burden that may develop in the caregivers of patients with CP. In this regard, it is considered that this study will fill a significant gap and contribute to healthcare providers and the literature in reducing the caregiving burden of individuals who provide care for CP patients and improving the quality of care.

Methods

Aim and Design

This study was carried out as a cross-sectional and correlational study to determine caregiving burden in the caregivers of patients diagnosed with CP and

identify the impact of religious coping styles and fatalism on perceptions of care burden. The hypothesis of this study was that positive religious coping and the perception of fatalism are correlated with caregiving burden and predict caregiving burden.

Population and Sample

The population of the study consisted of the relatives (mother, father and sibling) who were primarily responsible for the care of individuals with CP who received health services in a private rehabilitation center between April and July 2022. These individuals were also caregivers who were responsible for the activities of daily living patients with CP in their home environments. The sample size of the study was calculated as a minimum of 117 using the sampling method formula for an unknown population ($n = t^2pq/d^2$). In this regard, by the random sampling method, 132 caregivers who were primarily involved in the care of CP patients for at least one year, were 18 years of age or older, were at least literate, had no verbal communication barriers, and agreed to participate in the study were included in this study. Individuals who wanted to stop participating in the study and filled in the data collection forms incompletely were not included in the study.

Data Collection Tools

Data were obtained using a personal information form, the Religious Coping Scale (Table 1), the Fatalism Scale (Table 2), and the Caregiver Burden Scale.

Table 1 Religious coping scale

After reading the statements below, consider how you generally behave when you encounter a problem in life, and choose the option that best reflects your situation

(1) *Almost never* (2) *Rarely* (3) *Sometimes* (4) *Often*

1	When I encounter a problem in life, I try to be closer to God	1	2	3	4
2	When I encounter a problem in life, I think it is a test from God to deepen my faith	1	2	3	4
3	When I encounter a problem in life, I seek the love and patronage of God	1	2	3	4
4	When I encounter a problem in life, I read the Quran to find solace	1	2	3	4
5	When I encounter a problem in life, I ask God's forgiveness	1	2	3	4
6	When I encounter a problem in life, I remind myself that God has commanded me to be patient	1	2	3	4
7	When I encounter a problem in life, I do my best and leave the rest to God's discretion	1	2	3	4
8	When I encounter a problem in life, I believe that I am punished by God for the sins I have committed	1	2	3	4
9	When I encounter a problem in life, I wonder what I did to cause God to punish me	1	2	3	4
10	When I encounter a problem in life, I think God punishes me because I am not devoted enough servant	1	2	3	4

Table 2 Caregiver burden scale

After reading the statements below, tick the option that best describes you
 (1) I strongly disagree (2) I disagree (3) I'm undecided (4) I agree (5) I strongly agree

1	If someone is meant to have a serious disease, it doesn't matter what kinds of food they eat, they will have that disease anyway	1	2	3	4	5
2	If someone is meant to have a serious disease, they will have it no matter what they do	1	2	3	4	5
3	If someone has a serious disease, that's the way they were meant to die	1	2	3	4	5
4	If someone is meant to have a serious disease, they will have that disease	1	2	3	4	5
5	If someone has a serious disease and gets treatment for it, they will probably still die from it	1	2	3	4	5
6	If someone was meant to have a serious disease, it doesn't matter what doctors and nurses tell them to do, they will have the disease anyway	1	2	3	4	5
7	How long I live is predetermined	1	2	3	4	5
8	I will die when I am fated to die	1	2	3	4	5
9	My health is determined by fate	1	2	3	4	5
10	My health is determined by something greater than myself	1	2	3	4	5
11	I will have diseases if I am unlucky	1	2	3	4	5
12	My health is a matter of luck	1	2	3	4	5
13	How long I live is a matter of luck	1	2	3	4	5
14	I will stay healthy if I am lucky	1	2	3	4	5
15	Everything that can go wrong for me does	1	2	3	4	5
16	I will have a lot of pain from illness	1	2	3	4	5
17	I will suffer a lot from bad health	1	2	3	4	5
18	I often feel helpless in dealing with the problems of life	1	2	3	4	5
19	Sometimes I feel that I'm being pushed around in life	1	2	3	4	5
20	There is really no way I can solve some of the problems I have	1	2	3	4	5

Personal Information Form

This form was prepared by the researchers, and it included 18 questions on personal characteristics (e.g., age, gender, marital status, education), caregiving characteristics (e.g., closeness to the patient, duration of care), and characteristics of the individual with CP (e.g., disease duration, age, cause of disease).

Religious Coping Scale

This scale was developed by Abu-Raiya et al. (2008) to understand the approach of individuals to religious coping behaviors when facing a problem in life. The Turkish validity and reliability study of the scale was carried out by Eksi and Sayin (2016). This scale is a 4-point Likert-type scale and consists of 10 items.

The scale has two dimensions: positive religious coping and negative religious coping. Positive and negative religious coping scores are calculated separately in the scale, and a total religious coping score is not used. The scores that can be obtained from the positive religious coping dimension vary between 7 and 28, and the scores that can be obtained from the negative religious coping dimension vary between 3 and 12. A high score on the positive religious coping dimension reflects more positive religious coping, while a high score on the negative religious coping dimension reflects more negative religious coping (Eksi & Sayin, 2016).

In this study, the Cronbach's alpha internal consistency coefficients of the scale were determined as 0.88 for the positive religious coping dimension and 0.92 for the negative religious coping dimension.

Fatalism Scale

The scale developed by Shen et al. (2009) is a 5-point Likert-type scale and includes 20 items. The Turkish validity and reliability study of the scale was carried out by Kizilarслан (2020). The scale has three dimensions: predetermination, chance, and pessimism. The scale is evaluated by dividing the sum of the scores obtained from all items by the number of items. The minimum and maximum possible scale scores are 1 and 5. A high score on the scale indicates the perception of high levels of fatalism (Kizilarслан, 2020). In this study, the Cronbach's alpha coefficient of the scale was determined to be 0.83.

Caregiver Burden Scale

This scale was developed by Zarit et al (1980). Its Turkish validity and reliability study was conducted by Inci and Erdem (2008). It is a 5-point Likert-type scale that consists of 22 items developed to determine the impact of caregiving on the life of the individual. A minimum of 0 and a maximum of 88 points can be obtained from the scale. In the scoring of the scale, 0–20 points indicate “no care burden,” 21–40 points indicate “mild care burden,” 41–60 points indicate “moderate care burden,” and 61–88 points indicate “severe care burden.” The items in the scale are generally related to the social and emotional domain, and a high score indicates a high level of

distress (Inci & Erdem, 2008). In this study, the Cronbach's alpha coefficient of the scale was determined to be 0.87.

Implementation and Ethical Aspects

Before starting the study, written approval was obtained from the ethics committee of a university (approval dated 30/03/2022 and numbered 21/26), and permission was obtained from the institution where the study was conducted. Additionally, written and verbal consent was obtained from the individuals who agreed to participate in the study.

The data were collected by the researchers using the face-to-face interview technique in a special room in the rehabilitation center. The forms were given to the individuals who wanted to fill in the data forms on their own and were then taken back. Before the study, it was explained to the participants that the data to be collected would only be used within the scope of the study and that their confidentiality would be strictly ensured. Filling out the data forms took approximately 20–25 min for each participant.

Data Analysis

The SPSS 22.0 program was used to analyze the data that were obtained in the study. The normality of the distribution of the data was evaluated with the Kolmogorov–Smirnov test, and it was determined that the distribution of the data was not normal. The distributions of the sociodemographic characteristics of the participants, their scale scores, and the disease-related characteristics of their patients were evaluated with percentage and mean values. Spearman's correlation analysis was used to analyze the correlations between the Caregiver Burden Scale, Religious Coping Styles Scale, and Fatalism Scale scores of the participants. The Mann–Whitney U test and the Kruskal–Wallis test were used to compare the religious coping styles and perceived fatalism levels of the participants based on some quantitative characteristics. In addition to these, multiple linear regression analysis (stepwise) was used to determine the explanatory effect of religious coping and fatalism on caregiving burden. Statistical significance was evaluated at the level of 0.05.

Results

The mean age of the individuals participating in this study was 38.98 ± 10.18 years, 78% of them were the mothers of the individuals they provided cared for, and 18.2% were the fathers. While 79.5% of the participants were women, 42.4% were primary school graduates, 81.1% were married, and 69.7% were not working. It was stated by 77.3% of the participants that they had medium-level income, 31.8% of the participants reported that they were currently smokers, and 9.8% reported that they consumed alcohol. While 30.3% of the participants reported that they had at least one chronic disease, 50% reported that they perceived their general health as good.

It was found that 40.2% of the participants had been providing care to CP patients for 1–5 years, 28.8% had been providing care for 6–10 years, and 35.6% of them reported that there was no individual helping them in the care of their patients. Additionally, 10.6% of the participants reported that there was another individual they cared for besides the CP patient.

The mean age of the CP patients who were being provided with care by the participants was 10.05 ± 7.81 years, and 63.6% of these patients were male. It was determined that 80.3% of the patients were diagnosed as congenital cases, 11.4% were diagnosed in relation to another disease, and 8.3% had experienced accidents. According to the reports of the participants, 21.2% of the patients were completely dependent on others in eating and drinking, 31.1% were dependent on others in bathing and using the toilet, 25% were dependent on other in dressing, and 23.5% were dependent on others in walking.

The mean Caregiver Burden Scale score of the participants (50.26 ± 11.85) was above average. The mean positive religious coping score of the participants (23.37 ± 4.40) was above average, and their mean negative religious coping score (6.12 ± 2.79) was moderate. The mean total Fatalism Scale score of the participants (2.60 ± 0.49) was determined to be moderate. They had the highest mean score in the predictiveness dimension (3.17 ± 0.72) and the lowest mean score in the chance dimension (2.24 ± 0.82). In this study, a weak, positive, and statistically significant relationship was found between caregiving burden and the luck and pessimism dimensions of the Fatalism Scale, while there was no correlation between caregiving burden and religious coping styles ($p < 0.01$) (Table 3).

In this study, it was determined that the participants who were 40 years old or older had higher positive religious coping levels ($p < 0.05$). It was found that the positive religious coping levels of the participants who were secondary school graduates were higher, while perceptions of negative religious coping and fatalism were higher in the participants who were primary school graduates ($p < 0.01$). Furthermore, the positive religious coping levels of the participants with chronic diseases were higher, and the negative religious coping levels of the participants who were not working in any job were higher ($p < 0.05$). Additionally, 18.9% of

Table 3 Distribution and correlation of the mean scores of the caregivers on the Religious Coping Scale, the Fatalism Scale, and the Caregiver Burden Scale

Scales	Min–Max	$X \pm SD$	Caregiver burden scale
Caregiver burden scale	31–84	50.26 ± 11.85	–
Religious coping scale			
Positive religious coping	11–28	23.37 ± 4.40	$r = -0.111; p = 0.205$
Negative religious coping	3–12	6.12 ± 2.79	$r = 0.080; p = 0.359$
Fatalism scale	1–5	2.60 ± 0.49	$r = 0.126; p = 0.150$
Predetermination	1–4	3.17 ± 0.72	$r = 0.110; p = 0.208$
Chance	1–5	2.24 ± 0.82	$r = 0.364; p = 0.000^*$
Pessimism	1–4	2.40 ± 0.68	$r = 0.295; p = 0.001^*$

* $p < 0.01$

the participants perceived a heavy care burden, and these individuals had higher perceived fatalism levels ($p < 0.01$). It was also determined that the degree of kinship to the patient and the duration of caregiving were not associated with religious coping or fatalism ($p > 0.05$) (Table 4).

Table 4 presents the results of the regression analysis of the caregiving burden levels of the participants. Accordingly, the perceptions of the participants about fatalism were a factor that significantly affected their perceptions of caregiving burden ($R = 0.329$, $R^2 = 0.109$, $F = 5.195$, $p = 0.002$) and explained 10% of the total variance in their caregiving burden. On the other hand, the variables referring to perceptions of positive or negative religious coping were excluded from the regression model in relation to the caregiving burden variable (Table 5).

Discussion

Cerebral palsy is a health problem that typically imposes a caregiving burden on the individual, their family, and all family members (Park & Nam, 2019). In this study, the caregiving burden levels of the caregivers of patients diagnosed with CP were determined, and the impact of religious coping and fatalism on their perceptions of caregiving burden was examined.

The long-term and continuous care process in chronic diseases can cause a caregiving burden (Yildirim et al., 2020). In this study, it was determined that the participants were mostly mothers, their caregiving burden levels were high in general, and approximately one-fifth of the participants perceived a heavy care burden. The findings of this study were in parallel with the literature.

Caregivers fulfill their care responsibilities according to the traditions and expectations of their society, religion, and culture (Ummuhan et al., 2022). Caregiving is perceived as a natural role of mothers in many societies. In developing countries such as Turkey, most children with CP are provided with care by their mothers, who are their primary caregivers (Albayrak et al., 2019; Farajzadeh et al., 2018; Garip et al., 2017). Nevertheless, being a caregiver for an individual with functional limitations and long-term dependency can negatively affect the quality of life of the caregiver, especially in terms of physical and emotional functionality (Garip et al., 2017).

In a previous study, it was determined that 58.9% of mothers had a heavy care burden, and both parents as caregivers had high care burden levels (Yildirim et al., 2020). In another study, it was observed that 78% of mothers had difficulties in providing care for their children (Calisir et al., 2018). In a study conducted by Albayrak et al. (2019), the caregiving burden levels of mothers who provided care for CP patients were found to be higher than those of mothers of healthy children. In other studies, it has been reported that the caregivers of individuals with CP have high levels of caregiving burden (Kiani et al., 2021; Pushpalatha & Shivakumara, 2016). These findings demonstrated that the caregivers of individuals with CP experience high levels of caregiving burden. These findings revealed that caregivers need support to alleviate their physical and psychological burdens and feel better.

Table 4 Comparison of some individual and caregiver characteristics of caregivers and the mean scores of the religious coping scale and the fatalism scale

Characteristics	<i>n</i>	%	Positive religious coping <i>X</i> ± <i>SD</i>	Negative religious coping <i>X</i> ± <i>SD</i>	Fatalism <i>X</i> ± <i>SD</i>
Age (year)					
<40	75	56.8	22.66 ± 4.68	5.74 ± 2.65	2.59 ± 0.41
≥40	57	43.2	24.31 ± 3.84	6.63 ± 2.90	2.62 ± 0.58
Test (Z/p)			-2.128/0.033*	-1.601/0.109	-0.402/0.688
Gender					
Female	27	20.5	22.66 ± 5.28	6.18 ± 2.94	2.50 ± 0.61
Male	105	79.5	23.56 ± 4.15	6.11 ± 2.76	2.63 ± 0.46
Test (Z/p)			-0.554/0.580	0.020/0.984	-1.295 /0.195
Education status					
Primary school	56	42.4	22.32 ± 3.98	7.16 ± 3.03	2.70 ± 0.52
Middle School	40	30.3	25.28 ± 3.21	5.82 ± 2.41	2.67 ± 0.31
High school and above	36	27.3	21.58 ± 5.32	4.86 ± 2.17	2.38 ± 0.55
Test (KW/p)			18.688/0.000**	14.412/0.001**	9.509/0.009**
Working					
Yes	40	30.3	22.45 ± 4.81	5.37 ± 2.40	2.54 ± 0.55
No	92	69.7	23.78 ± 4.17	6.45 ± 2.89	2.63 ± 0.46
Test (Z/p)			-1.553/0.120	-1.995/0.046*	0.743/0.458
Has a chronic illness					
Yes	40	30.3	24.65 ± 3.86	6.80 ± 2.97	2.61 ± 0.51
No	92	69.7	22.82 ± 4.52	5.83 ± 2.67	2.60 ± 0.49
Test (Z/p)			-2.176/0.030*	-1.673/0.094	-0.025/0.980
The degree of closeness to the person receiving					
Mother	103	78.0	23.64 ± 4.14	6.22 ± 2.82	2.64 ± 0.46
Father/brother	29	22.0	22.44 ± 5.19	5.79 ± 2.69	2.47 ± 0.59
Test (Z/p)			-1.101/0.271	-0.744/0.457	-1.781/0.075
Duration of caregiving					
1–5 years	53	40.2	22.58 ± 4.71	5.67 ± 2.62	2.56 ± 0.44
6–10 years	38	28.8	23.71 ± 3.52	6.44 ± 2.85	2.65 ± 0.53
11 years or longer	41	31.1	24.09 ± 4.65	6.41 ± 2.92	2.61 ± 0.52
Test (KW/p)			3.532/0.171	2.104/0.346	0.356/0.838
Caregiver burden					
Mild	33	25.0	22.72 ± 4.77	6.06 ± 2.52	2.40 ± 0.56
Moderate	74	56.1	24.09 ± 4.25	5.89 ± 3.09	2.64 ± 0.44
Severe	25	18.9	22.12 ± 4.06	2.92 ± 2.01	2.76 ± 0.49
Test (KW/p)			4.908/0.086	5.118/0.077	9.755/0.008**

p* < 0.05; *p* < 0.01; Z: Mann–Whitney U test; KW Kruskal–Wallis test

Table 5 Stepwise multiple regression analysis of predictors of caregiver burden levels

Variables	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>P</i>
Positive religious coping	-0.426	0.236	-0.158	-1.803	0.074
Negative religious coping	0.471	0.373	0.111	1.263	0.209
Fatalism	6.508	1.995	0.273	3.263	0.001*
R=0.329, R ² =0.109, F=5.195, p=0.002*					

* $p < 0.01$

In Turkey, which is a Muslim-majority country, religious practices such as praying, reading the Qur'an, and praying with prayer beads can facilitate coping with difficulties that occur in the natural flow of life (Karaca & Sener, 2021). Although the positive religious coping levels of the participants of this study were high, there was no correlation between religious coping styles and caregiving burden. In a study examining the religiosity of mothers of children with CP, a high level of religiosity was determined in the participants (Mehmedinovic et al., 2011). In another study, it was reported that half of the families of patients with CP resorted to religion/spiritualism as an alternative or complementary treatment method for their children, and 10% experienced despair (Olawale et al., 2013).

In a qualitative study, it was determined that for the parents of children with CP, belief in Allah was the most important factor in preventing hopelessness. In the same study, it was reported that the participants believed that their problems would not continue and that there was a logic behind everything (Alibakhshi et al., 2021). In a qualitative study conducted by Banja and Muzata (2021), it was determined that moral support was needed to cope with the psychological problems of having a child with CP. According to the authors of the same study, some parents thought that accepting and showing effort for the disabled child would get them a reward from God (Banja & Muzata, 2021). In another study, it was observed that families turned to spiritual beliefs to reduce the psychological impact of the diagnosis of CP and cope with uncertainties about the future (Dezoti et al., 2015). It has been revealed that the caregivers of children with developmental disabilities frequently use spirituality as a coping method (Karaca & Sener, 2021; Krstić & Oros, 2012; Rentinck et al., 2007).

In this study, it was determined that the perceptions of the participants about luck and pessimism were positively related to their caregiving burden, and their perceptions of fatalism significantly predicted their perceptions of caregiving burden. This finding revealed that caregivers who believe in luck or think pessimistically may perceive a high level of caregiving burden. According to the Islamic belief, even the worst conditions stem from Allah's will, and believers are being tested. Therefore, they obey Allah (Karaca & Sener, 2021). Although there were limited studies of fatalism in the field of health, it was revealed that individuals generally resorted to fate for their health, and they concluded that there was nothing they could do to solve their health problems, and this situation could not be changed (Kizilarlan, 2020). This finding was important in terms of determining

the negative emotions, thoughts, and perceptions increasing the caregiving burden of individuals.

In this study, the positive religious coping levels of the participants who were 40 years old or older, those who were secondary school graduates, and those who had chronic diseases were found to be higher, and the negative religious coping levels of the participants who were primary school graduates and those who were not working in any job were higher. It was also determined in this study that as age increased, the participants focused on religious practices, and having a disease in their family supported their tendency toward religion. Nonetheless, it was thought-provoking that the participants with low education levels adopted ineffective religious coping practices. This finding may have resulted from the differences in the religious knowledge levels of the individuals who were included in the study.

The elderly, minority communities, and patients with low income or low education levels tend to adopt beliefs in fatalism to a large extent (Keeley et al., 2009). In this study, it was seen that the participants who were primary school graduates and those who perceived a heavy care burden perceived higher levels of fatalism. Gutierrez et al. (2017) reported that the levels of perceived fatalism were higher in women and individuals with low levels of education, while there was no correlation between age and perceptions of fatalism. The findings obtained in this study revealed that the perception of fatalism should also be addressed in reducing the caregiving burden of individuals providing care to patients.

Limitations of the Study

This study had some limitations. This study had a limited sample and time restriction as it was conducted with the first-degree relatives of individuals with CP who received healthcare services in a single rehabilitation center for a certain period. In addition to this, the information collected in this study on caregiving burden, religious coping, and fatalism was based on the self-reports of the participants. Not evaluating the caregiving burden of the participants from the first moment they started to provide care was another important limitation of this study. However, this study is the only study in Turkey to investigate the correlation between caregiving burden and perceptions of religious coping and fatalism in the caregivers of CP patients. It was considered that it would shed light on interventions to reduce the caregiving burden of caregivers, strengthen positive religious coping styles, and provide an advisable perception of fatalism.

Conclusion

In this study, it was determined that the caregivers of CP patients perceived high levels of caregiving burden, and their religious coping styles did not affect their perceptions of care burden significantly. It was also observed that the participants' perceptions of fatalism, including the luck and pessimism aspects of it, significantly affected their perceptions of caregiving burden.

This study sheds light on spiritual approaches toward caregiving burden in the caregivers of patients with CP in a Muslim-majority country. In this regard, the caregivers of patients with CP who need lifelong care by health professionals can be supported in the biopsychosocial sense by healthcare professionals, and awareness about the positive impact of religious coping can be raised. In addition to these issues, religious experts can support caregivers in health institutions, especially in rehabilitation centers, to strengthen their positive religious coping styles and positive fatalism perceptions. It is recommended to conduct experimental studies with larger samples to investigate the impact of positive religious coping approaches on caregiving burden.

Funding The authors have not disclosed any funding.

Declarations

Conflict of interest All authors declare that they have no conflict of interest.

Ethical Approval Written authorizations were obtained from the Sakarya University of Applied Sciences Ethics Committee (decision dated 30/03/2022 and numbered 21/26) and the administration of the rehabilitation center where the study was conducted.

Informed Consent Informed consent was obtained from all individuals included in the study.

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