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Original Article

The Power of Spiritual Well-Being: Its Relationship with Pain Intensity, Pain Management, and Pain Catastrophizing in Individuals with Chronic Pain

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ABSTRACT

Background: Chronic pain negatively affects human life. Chronic pain is multidimensional. Therefore, a multidimensional approach that focuses on the biologic, psychological, sociologic, and spiritual needs of patients is required in pain management.
Aim: This study was conducted to determine the relationship of spiritual well-being with the level of pain catastrophizing, pain intensity, and pain management in individuals with chronic pain.
Methods: The snowball sampling method was used in the research and the data were collected by individuals with ankylosing spondylitis and rheumatoid arthritis who had chronic pain via an online survey form. The study was completed between March and May 2023 with the participation of 399 people. The data of the study were collected using the Descriptive Characteristics Questionnaire, Pain Catastrophizing Scale, Three-Factor Spiritual Well-Being Scale, and Numerical Rating Scale.
Results: There was a negative, high-level correlation between the spiritual well-being and the Pain Catastrophizing Scale and its subscales. At the same time, there was a negative, weak level correlation between the levels of spiritual well-being and the pain intensity. Spiritual Well-Being Scale scores differ according to the method used in pain management. Spiritual well-being and pain intensity explain 68% of the total variance in pain catastrophizing.
Conclusions: The results of this research show that there may be a relationship between increased spirituality and reduced perceptions of pain in this population.

The sensation of pain is an experience that is shaped by the intertwining of emotions, thoughts, and even beliefs, as well as central nervous system activity (Dikmen & Ziyai, 2021). Chronic pain is a maladaptive process or disease that usually exists for more than 3 months, independent of the healing process, accompanied by affective, cognitive, and motivational disorders, leading to functional decline and deterioration in quality of life, and requiring multimodal treatment (Tom et al., 2022). Moreover, pain, especially chronic pain, has been recognized as an important public health problem (Bang et al., 2021).

The effects of chronic pain need to be considered broadly; it reduces the quality of life in patients by causing many physical and psychological effects such as anxiety, decreased mobility, appetite disorders, social disorders, depression, sleep disorders, and restrictions in work life (Tom et al., 2022). According to Moreira-Almeida and Koenig (2008), pain is more than a sensory experience; it includes immune, endocrine, meaning-making, emotional, and behavioral responses. Psychological factors such as depression and anxiety are frequently observed in individuals with chronic pain, which affects treatment results and impairs functionality (Lerman et al., 2015). Likewise, the effectiveness of cognitive behavioral therapies in the treatment of chronic pain supports the importance of cognitive factors in chronic pain (Bao et al., 2022). Catastrophizing, one of the cognitive factors, is defined as the tendency to magnify a perceived threat and exaggerate the seriousness of its potential consequences (Slawek et al., 2022). Pain catastrophizing refers to a series of exaggerated and brooding negative cognitions and emotions during actual or perceived painful stimulation. Pain catastrophizing is a marked phenomenon characterized by helplessness, rumination on pain, and exaggeration of perceptions and feelings about painful situations. Pain catastrophizing causes pain persistence and disability by affecting the individual's responses to pain and coping mechanisms (Petrini & Arendt-Nielsen, 2020). According to the schema activation model, individ-

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uals with pain catastrophizing behavior have a pain schema characterized by a cognitive distortion that includes overly pessimistic beliefs about pain, pain-related experiences, and coping abilities (Gilliam et al., 2010). Therefore, when they encounter even a minimally painful stimulus, this schema becomes active, worsening the pain experience, and over time, it turns into a learned expectation of high threat perception of pain and inadequacies in coping (Petrini & Arendt-Nielsen, 2020). In studies, pain catastrophizing has been identified as a risk factor for chronic pain and poor prognosis. In a systematic review on pain catastrophizing, it was stated that catastrophizing increases pain intensity and disability, reduces sleep and quality of life, and adversely affects treatment effectiveness (Slawek et al., 2022). For this reason, it is thought that it is of great importance to prevent the problems caused by pain catastrophizing on top of the negative effects caused by pain.

It is stated that spirituality plays an important role in coping with pain. Although there is no consensus on the definition of spirituality, spirituality can be explained as a multidimensional concept that encompasses the belief and inner peace of the individual. Spirituality is also defined as an effort to grasp and accept the purpose and meaning of life, which explains the individual's relationship with everyone and everything (Erol, 2020). Spirituality has often been viewed as a negative coping style in traditional psychology, as it is perceived as a passive coping strategy. However, current evidence suggests that spirituality can be viewed as an active and positive coping process with beneficial effects. It is stated that those who cope with chronic pain using positive spiritual coping practices are better able to adapt to the pain and have significantly better mental health (Siddall et al., 2015). Although there are studies on spirituality and pain, there are not enough studies on the effects of spiritual well-being on pain catastrophizing, pain intensity, and individuals' methods of coping with pain. Therefore, this study was conducted to determine the relationship of spiritual well-being with the level of pain catastrophizing, pain intensity, and pain management in individuals with chronic pain. The study sought answers to the following questions:

- Is there a relationship between the spiritual well-being and the level of pain catastrophizing of individuals with chronic pain?
- Is there a relationship between the spiritual well-being and the severity of pain of individuals with chronic pain?
- Is there a relationship between the spiritual well-being and the method used in pain management of individuals with chronic pain?

Methods

Design

This research is a descriptive and relational study.

Settings and Participants

The sample of the study consisted of patients with chronic pain living in Turkey, diagnosed with ankylosing spondylitis and rheumatoid arthritis. Only these two diseases were included in the study to limit the type of chronic painful disease. In order to determine the sample of the study, a calculation was made through the TURCOSA (Turcosa Analytics Ltd Co, Turkey, www.turcosa.com.tr) program with 0.05 confidence interval, 0.20 effect size, and 80% power, and it was determined that the sample size should be a minimum of 197 people. The snowball sampling method, which is one of the purposeful sampling methods, was used to determine the participants, and the online data collection forms were first sent to individuals with ankylosing spondylitis and rheumatoid arthritis who had chronic pain who agreed to participate in the study. Then, the participants were asked to forward these data collection forms to other individuals who met the inclusion criteria of the study. In addition, the research link created via Google Forms for the research was shared on social media networks related to these diseases and the form was asked to be filled out. In these social media groups, there are patients' relatives as well as patients. They were asked to fill out these forms for their relatives. The study was completed between March and May 2023 with the participation of 399 people.

The criteria for inclusion in the research are as follows: (1) aged from 18-65 years; (2) being literate; (3) not having severe vision; (4) having been diagnosed with ankylosing spondylitis and rheumatoid arthritis by a specialist physician; (5) experiencing pain for at least 3 months; (6) who have consulted a doctor at least once for pain; (7) volunteering to participate in the study. Individuals diagnosed with any psychiatric disease and receiving treatment for it were excluded from the study because of the concern that there might be problems in understanding and interpreting the questionnaire statements correctly.

Data Collection

The data of the study were collected by the researchers using the Descriptive Characteristics Questionnaire, Pain Catastrophizing Scale, Three-Factor Spiritual Well-Being Scale, and Numerical Rating Scale.

Descriptive Characteristics Questionnaire

In the Descriptive Characteristics Questionnaire created by the researchers, there are questions about some socio-demographic characteristics, chronic diseases, and pain experience of the patients.

Pain Catastrophizing Scale

The Pain Catastrophizing Scale is a 13-item questionnaire created to assess the extent of destructive thoughts and feelings associated with the sensation of pain. It consists of three subscales: helplessness, magnification, and rumination. Helplessness is defined as insufficiency in coping with pain at an effective level. Magnification is defined as the magnification of the negative expectations and discontentment concerned with pain, by excessively focusing to the negative aspects of pain. Rumination measures the ruminative thoughts, anxiety, and the insufficiency in preventing the thoughts related to pain and distracting the attention from these thoughts. Each item is scored on a 5-point Likert scale. Scores for the subscales are calculated by the sum of the items in the subscale. The total score is calculated by the sum of all items. The scale score ranges from 0 to 52 points (Sullivan et al., 1995). The Turkish validity and reliability study of the scale was conducted by Uğurlu et al. in 2017. A high total score indicates that the person has a high degree of pain catastrophizing. The total Cronbach α value in the Turkish validity and reliability study of the scale was found to be 0.995 (Uğurlu et al., 2017). The Cronbach-α value in this study was found to be 0.931.

Three-Factor Spiritual Well-Being Scale

This scale, which was developed by Ekşi and Kardaş (2017) to determine the spiritual well-being levels of adults, consists of 29 items. First of all, the scale was developed as the Spiritual Well-Being Scale. Since there are different scales with the same name in the literature, Ekşi and Kardaş (2017) changed the name of the scale they developed to "Three-Factor Spiritual Well-Being Scale"

in order to avoid confusion (Kardaş, 2019). The items are answered in a 5-point Likert type as: (1) not applicable to me at all; (2) not applicable to me; (3) somewhat applicable to me; (4) quite applicable to me; and (5) completely applicable to me. As a result of the explanatory factor analysis, three sub-dimensions as transcendence, harmony with nature, and anomie were revealed. Transcendence refers to the capacity of individuals to stand outside of their immediate sense of time and place to view life from a larger, more objective perspective (Piedmont, 1999). Harmony with nature means establishing a good relationship with nature and living in harmony (Çakır et al., 2015). Anomie is lawlessness, normless, irregularity, and confusion, and it is considered as guilt and assault to holy things in religious terms (Passas, 2019). The highest score that can be obtained from the scale is 145 and the lowest score is 29. When a total score is desired, items in the anomie subdimension are reverse scored. In the validity and reliability study, the total Cronbach-α value of the scale was found to be 0.886. In this study, the Cronbach-α value of the scale was found to be 0.964.

Numeric Rating Scale

Numeric Rating Scale is a scale scored between 0 and 10. The reliability and validity study of this scale was performed by Duncan et al., Paice et al., and Seymour (Wang & Keck, 2004). It was explained to the individuals that the number 0 on the scale means no pain, and the number 10 means the most severe pain. Individuals were asked to score the mean number of points they gave to the pain they experienced in the last month.

Data Analysis

The data obtained from the research were evaluated in the IBM SPSS Statistics 25.0 (IBM Corp, Armonk, NY). The descriptive characteristics of the participants are presented with number (n), percentages (%), and mean ± standard deviation (SD) values. Normality was assessed using the Shapiro-Wilk test and Q-Q charts. Independent samples *t* test and one-way analysis of variance were used in the analysis of the distribution of participants according to some characteristics of the Spiritual Well-Being Scale, Pain Catastrophizing Scale scores, and pain intensity. Pearson correlation coefficient was used for the correlation between Spiritual Well-Being Scale, Pain Catastrophizing Scale, and pain intensity. Relational questions were analyzed by Multiple Linear Regression analysis. $p < .05$ was accepted as significant.

Ethical Considerations

Ethical principles were followed at every stage of the research. Ethics committee approval (2023/79) was obtained from the University Ethics Committee before starting the study. In order to use the scales in the study, permission was obtained from the authors who conducted the validity and reliability study via e-mail. First, the purpose of the research was explained to the participants and information about the research was given. Afterwards, they were allowed to click on the link that they wanted to participate in the research and continue the research.

Results

The mean age of the participants was 49.43 ± 7.19. 62.2% of the participants were female, 72.7% were primary school graduates, 75.2% were not working in any job, and 68.9% had a middle-income level (Table 1). Most participants, 70.2%, had at least one additional chronic disease. The mean pain intensity of the participants in the last month was 6.88 ± 2.04, and 57.6% of them used pharmacologic method in the management of their pain (Table 2).

Table 1
Individual Characteristics of Participants

Characteristics	n(%)
Age (Mean ± SD)	49.43 ± 7.19
Sex	
Female	248(62.2)
Male	151(37.8)
Educational status	
Primary education	290(72.7)
High school	61(15.3)
University	34(8.5)
Master's/doctorate	14(3.5)
Working status	
Working	99(24.8)
Not working	300(75.2)
Income status	
Low	118(29.6)
Middle	275(68.9)
High	6(1.5)

SD = standard deviation.

Table 2
Characteristics of the Participants Regarding the Disease and Lifestyle

Characteristics	n(%)
Additional chronic diseases	
Yes	280(70.2)
No	119(29.8)
Chronic diseases[a]	
Diabetes mellitus	83(20.8)
Hypertension	165(41.3)
Chronic obstructive pulmonary disease	6(1.5)
Asthma	31(7.7)
Thyroid diseases	35(8.7)
Type of pain management	
Pharmacologic	230(57.6)
Nonpharmacologic	68(17.1)
Pharmacologic and nonpharmacologic	66(16.5)
None	35(8.8)
Mean pain intensity (Mean ± SD)	6.88±2.04

[a] More than one answer is given.SD = standard deviation.

The mean score of the Spiritual Well-Being Scale was 108.19 ± 25.84. The mean scores of Transcendence, Harmony with Nature and Anomie were 59.54 ± 15.60, 27.41 ± 7.15, and 21.23 ± 7.08, respectively. The mean score of the Pain Catastrophizing Scale was 25.05 ± 10.88. The mean scores of Helplessness, Magnification and Rumination were 11.30 ± 5.31, 5.87 ± 2.5, and 7.86 ± 3.60, respectively (Table 3). The scores of the Spiritual Well-Being Scale, Pain Catastrophizing Scale, and pain intensity according to some characteristics of the participants were examined. According to this review, the scores of the Spiritual Well-Being Scale differ according to income level and the method used in pain management. Spiritual well-being levels of those with a high income level and those who use non-pharmacologic methods in pain management were statistically significantly higher than the others. The Pain Catastrophizing Scale scores were found to differ according to the method used in pain management. According to this, pain catastrophizing levels of those who use non-pharmacologic methods in pain management were statistically significantly lower than the others (Table 4).

The correlation between the Spiritual Well-Being Scale, the Pain Catastrophizing Scale and its subscales, and the pain intensity were examined. Accordingly, there was a negative, high-level correlation between the Spiritual Well-Being and the Pain Catastrophizing Scale and its subscales. At the same time, there was a neg-

Table 3
Spiritual Well-Being Scale and Pain Catastrophizing Scale scores

Scale	Mean ± SD	Range (participants)	Range (scale)
Spiritual Well-Being Scale	108.19 ± 25.84	37-145	29-145
Transcendence	59.54 ± 15.60	19-75	15-75
Harmony with Nature	27.41 ± 7.15	8-35	7-35
Anomie	21.23 ± 7.08	8-35	7-35
Pain Catastrophizing Scale	25.05 ± 10.88	4-52	0-52
Helplessness	11.30 ± 5.31	2-24	0-24
Magnification	5.87 ± 2.59	0-12	0-12
Rumination	7.86 ± 3.60	1-16	0-16

Range: min-max.
SD = standard deviation.

Table 4
Distribution of Participants According to some Characteristics of Spiritual Well-Being Scale, Pain Catastrophizing Scale Scores and Pain Intensity

Characteristics	Spiritual Well-Being Scale (Mean ± SD)	Pain Catastrophizing Scale (Mean ± SD)	Pain Intensity (Mean ± SD)
Sex			
Female	109.41 ± 26.73	24.45 ± 10.89	6.89 ± 2.05
Male	106.18 ± 24.27	26.03 ± 10.85	6.88 ± 2.02
p[a]	0.227	0.160	0.961
Educational status			
Primary education	108.70 ± 26.90	24.94 ± 11.51	6.89 ± 2.12
High school	101.24 ± 23.51	26.63 ± 10.49	7.09 ± 1.65
University	111.44 ± 22.99	24.02 ± 7.42	6.55 ± 2.31
Master's/doctorate	119.85 ± 7.69	22.71 ± 3.58	6.57 ± 0.93
p[b]	0.051	0.520	0.602
Working status			
Working	103.83 ± 24.69	26.82 ± 10.32	6.86 ± 1.81
Not working	109.62 ± 26.09	24.46 ± 11.02	6.89 ± 2.11
p[a]	0.053	0.061	0.917
Income status			
Low	103.34 ± 23.74[c]	25.78 ± 10.19	6.88 ± 2.16
Middle	109.93 ± 26.66[c]	24.80 ± 11.27	6.86 ± 1.99
High	123.33 ± 4.13[c]	21.66 ± 2.73	8.00 ± 2.09
p[b]	0.024	0.534	0.406
Additional chronic diseases			
Yes	108.89 ± 25.54	25.29 ± 11.01	6.83 ± 1.97
No	106.64 ± 26.54	24.59 ± 10.64	6.99 ± 2.19
p[a]	0.419	0.571	0.490
Type of pain management			
Pharmacological	102.63 ± 27.10[c]	26.73 ± 11.76[c]	6.85 ± 2.09
Nonpharmacological	120.39 ± 12.41[c]	20.36 ± 5.46[c]	7.14 ± 1.85
Pharmacological and nonpharmacological	122.72 ± 11.43[c]	20.95 ± 6.90[c]	6.77 ± 1.95
None	93.60 ± 34.37[c]	30.80 ± 13.29[c]	6.80 ± 2.29
p[b]	0.000	0.000	0.703

[a] Independent sample *t* test.
[b] One-way analysis of variance.
[c] The same letters signified no difference and different letters signified.

Table 5
Correlation between Spiritual Well-Being Scale, Pain Catastrophizing Scale and Pain Intensity

	Spiritual Well-Being Scale r[a]	Transcendence r[a]	Harmony with Nature r[a]	Anomie r[a]
Pain Catastrophizing Scale	–.824[b]	–.809[b]*	–.797 [b]	–.420 [b]
Helplessness	–.794 [b]	–.775 [b]	–.764 [b]	–.418 [b]
Magnification	–.759 [b]	–.741 [b]	–.731 [b]	–.399 [b]
Rumination	–.773 [b]	–.768 [b]	–.755 [b]	–.365 [b]
Mean pain intensity	–.241 [b]	–.231 [b]	–.249 [b]	–.122 [b]

[a] r: Pearson correlation test.
[b] Correlation is significant at the 0.01 level.

ative, weak level correlation between the levels of spiritual well-being and the pain intensity. In other words, as spiritual well-being levels of individuals increase, their pain catastrophizing levels and pain intensities decrease (Table 5).

As a result of Multiple Linear Regression analysis, it was found that spiritual well-being and pain intensity had a high and significant relationship with pain catastrophizing (R: .82; R^2: .68; $p < .01$). Accordingly, spiritual well-being and pain intensity explain 68% of the total variance in pain catastrophizing (Table 6).

Discussion

Catastrophizing emerges as one of the strongest psychological markers of pain, leading to higher levels of discomfort and increased use of pain medication. Pain catastrophizing is a particular

Table 6
The predictive effect of spiritual well-being and experienced pain intensity on pain catastrophizing

	Pain catastrophizing							
	B	SE	β	t	p	95 % CI Lower-Upper	R^2	Durbin Watson
Constant	59.289	1.919		30.893	0.000	(55.516)-(63.062)	.68	1.900
Spiritual Well-Being	–0.340	0.012	–0.807	–27.703	0.000	(–0.364)-(–0.316)		
Mean pain level	0.370	0.155	0.070	2,387	0.017	(0.065)-(0.675)		

R: .82; F: 427.457; p<0.01

style of negative cognitive response to actual or anticipated painful experiences. It is characterized by a tendency to overthink that painful experience, exaggerates the threatening value of the feeling of pain, and adopts a helpless orientation towards pain (Petrini & Arendt-Nielsen, 2020; Slepian et al., 2020). Those who catalyze pain have negative perceptions about their psychosocial life (Galvez-Sánchez et al., 2020). Gellatly and Beck (2016) emphasized that catastrophic thinking can play a critical role in psychopathologic situations where an accelerating event activates catastrophic beliefs. Individuals magnify perceived threats, exaggerate their potential negative consequences, and imagine the worst possible outcome. Appropriate strategies need to be adopted to avoid this situation. The broaden-and-build theory in positive psychology suggests that positive emotions broaden one's awareness and encourage novel, exploratory thoughts and actions. Broadening attentional and perceptual abilities to identify opportunities with positive affect can help release negative emotional arousal, improve physical and emotional well-being, and deal effectively with pain (Algoe & Fredrickson, 2011; Sturgeon & Zautra, 2013).

The studies indicate that spiritual well-being is an important factor in coping with pain (Aydın Yıldırım & Kes, 2022; Ferreira-Valente et al., 2022). Lysne and Wachholtz (2011) stated in their literature review that individuals are likely to turn to an alternative source for help in coping when faced with an out-of-control situation such as pain. According to this view, spirituality puts people in contact with someone they perceive to be the controller and therefore it gives them a greater sense of control. Having a sense of control in the context of chronic illness can help counteract negative cognitions such as helplessness that often contribute to depressive symptoms (Johnson et al., 2011; Nsamenang et al., 2016). Spiritual practices are seen as a positive coping mechanism for pain tolerance and coping with pain (Aydın Yıldırım & Kes, 2022). In a study conducted by Bai et al. (2018), it was stated that there is a statistically significant negative relationship between spirituality and pain intensity. Similarly, in this study, there was a negative, high-level relationship between the Spiritual Well-Being and the Pain Catastrophizing Scale and its subscales. At the same time, there was a negative, weak level correlation between the levels of spiritual well-being and pain intensity. In other words, as spiritual well-being levels of individuals increase, their pain catastrophizing levels and pain intensities decrease. In addition, spiritual well-being and pain intensity explain 68% of the total variance in pain catastrophizing. Spiritual well-being is a dynamic form of energy that empowers individuals and reduces their stress, giving them inner strength to overcome physical and psychological pain. Spiritual well-being is also defined as evaluating life positively and feeling good. Spiritual well-being is connecting to something bigger than yourself and having a set of values, principles, morals, and beliefs that provide a sense of purpose and meaning to life, and then using these principles to guide your actions (Çevik, 2022). As a result of well-being in the spiritual field, it is thought that the perception of pain and the catastrophizing of pain are positively affected.

In order to increase people's comfort in life and control over their lives, many recent studies on coping with pain and bringing the person from a passive role to an active role focus on the effect of spirituality and spiritual well-being on the concept of pain, and it is known that they have a positive effect (Bai et al. al., 2018; Aydın Yıldırım & Kes, 2022). Spiritual well-being has the power and ability to facilitate our decisions and choices and to give us flexibility to survive with inner peace in the face of difficulties (Çevik, 2022). In this study, the Spiritual Well-Being Scale scores differed according to the method used in pain management. The spiritual well-being levels of those who use non-pharmacologic methods in pain management were statistically significantly higher than those who only used pharmacologic methods and did not use anything. In addition, the pain catastrophizing levels of those who use non-pharmacologic methods in pain management are statistically significantly lower than the others. It has been reported in the literature that people who are internally controlled are more interested in their health, want to use alternative methods more often, and pay more attention to positive behaviors related to being healthy (Dönmez, 1986). In addition, it was determined that Spiritual Well-Being Scale scores differ according to income level. In many studies, it has been stated that the spiritual well-being levels of those with high income levels are high (Amirmohamadi et al., 2017; Javanmardifard et al., 2020; Kavak et al., 2021). The fact that individuals with a good income level do not experience financial difficulties in the treatment of the disease can increase psychological resilience before physical. This is because that income level is an important factor that facilitates access to different treatments in the fight against the disease.

The implementation of health care practices with a holistic care approach in coping with chronic pain, which has multiple negative effects, will positively contribute to the individual in many ways (Kettyle, 2018; Pak & Özden, 2018). The spiritual dimension is one of the elements of holistic care that forms the basis of nursing care and is just as important as the physical, emotional, and social aspects of the person (Lalani & Chen, 2021). The International Nursing Council (ICN) emphasizes that the spiritual beliefs of individuals, families, and communities should be evaluated and respected in the health care setting (ICN Code of Ethics, 2012). In addition, there are many nursing diagnoses related to spirituality in the North American Nurses Diagnosis Association diagnostic list (Herdman et al., 2021). Spiritual care is a fundamental aspect of nursing care (Lalani & Chen, 2021).

Limitations

This research has some limitations. Although it was conducted with individuals living in more than one province in a country, the fact that it was conducted with individuals living in a single country and belonging to a certain religious belief is a limitation of the research. Another limitation is that the data were collected by the online survey, as it limits the participation of those who do not use social media and those who are illiterate in the research. One

important limitation is that cross-sectional research cannot point to causation. Another limitation was the exclusion of other types of chronic pain conditions and elderly patients.

Conclusions

The results of this research show that relationships may exist between increased spirituality and reduced perceptions of pain in this population.

Clinical Implications

Pain, which is commonly seen as a symptom of many diseases, may negatively affect many people's true cognitive evaluations such as pain catastrophizing. As the pain becomes chronic, the individual becomes vulnerable to many complications. For this reason, in nursing education, it should be explained that individuals are a holistic presence and nursing care should be given in a way that covers all their dimensions. It should be emphasized that spiritual well-being will relax individuals, making it easier for them to cope with pain and reduce the pain intensity. Nurses should be given in-service training. In these trainings, nurses should be reminded that pain management requires a multidimensional approach that focuses on the biologic, psychological, sociologic, and spiritual needs of patients. It is thought that trainings that will increase the interest of both patients and caregivers in this subject will also have positive effects. Nurses should support individuals to meet their spiritual needs and provide relief and empowerment of the individual with appropriate spiritual care approaches. It is thought that spiritual care will increase the coping power of individuals and therefore increase their quality of life. It is recommended that future nursing research should be conducted in other chronic painful conditions and in older individuals. In addition, it is recommended to study the effects of different spiritual care methods on individuals' spiritual well-being, pain intensity, and pain catastrophizing in chronic pain cases.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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