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Relationship between Illness Perception and Spirituality Levels and Their Influencing Factors in Stroke Patients

Związek między percepcją choroby a poziomem duchowości i czynnikami wpływającymi na nią u pacjentów po udarze mózgu

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Abstract

Introduction. A stroke can cause lasting brain damage, long-term disability, or even death. Although the symptoms experienced by patients due to stroke can vary, it is important to determine the patients' illness perception and spirituality levels.
Aim. This study aimed to examine the relationship between stroke patients' illness perception and their levels of spirituality, as well as the factors influencing this relationship.
Material and Methods. This descriptive study included 350 stroke patients hospitalized in a teaching and research hospital's neurology department between June and October 2022. Data were collected using an Individual Identification Form, the Illness Perception Scale, and the Spiritual Well-Being Scale. Study data were analyzed using SPSS, with the Shapiro–Wilk test applied to assess normality for percentages, means, and standard deviations. Two-category variables were analyzed using the Mann–Whitney U test, whereas variables with more than two categories were assessed via the Kruskal–Wallis H test.
Results. The mean age of participants was 62.9 years; 56.9% were male, 83.4% were married, 31.1% had completed primary school, 61.4% had chronic diseases, 93.1% were first-time stroke patients, and 64.3% suffered ischemic stroke. Most patients experienced balance problems and reported prayer as their primary coping mechanism for stroke-related challenges.
Conclusions. Participants exhibited high spiritual well-being levels (123.77±5.56). A weak positive correlation was observed between Spiritual Well-Being Scale scores and each of the following Illness Perception Scale dimensions: disease type, duration (acute vs. chronic), consequences, personal control, treatment control, illness coherence, and emotional representations ($p<0.05$). Participants demonstrated both high anxiety and negative illness perceptions alongside elevated levels of spiritual well-being. **(JNNN 2025;14(3):103–110)**
Key Words: illness perception, spirituality level, stroke

Streszczenie

Wstęp. Udar mózgu może powodować trwałe uszkodzenie mózgu, długotrwałą niepełnosprawność, a nawet śmierć. Chociaż objawy odczuwane przez pacjentów w wyniku udaru mogą się różnić, ważne jest określenie poziomu postrzegania choroby i duchowości pacjentów.
Cel. Niniejsze badanie miało na celu ocenę związku między postrzeganiem choroby przez pacjentów po udarze a ich poziomem duchowości, a także czynników wpływających na ten związek.
Materiał i metody. To opisowe badanie objęło 350 pacjentów po udarze hospitalizowanych na oddziale neurologii szpitala klinicznego i badawczego w okresie od czerwca do października 2022 r. Dane zbierano przy użyciu Indywidualnego Formularza Identyfikacyjnego, Skali Postrzegania Choroby (Illness Perception Scale) oraz Skali Dobrostanu Duchowego (Spiritual Well-Being Scale). Dane z badania przeanalizowano za pomocą programu SPSS, stosując test Shapiro–

Wilka do oceny normalności dla wartości procentowych, średnich i odchyleń standardowych. Zmienne dwukategorialne analizowano za pomocą testu U Manna–Whitneya, natomiast zmienne z więcej niż dwiema kategoriami oceniano za pomocą testu H Kruskala–Wallisa.
Wyniki. Średni wiek uczestników wynosił 62,9 lat; 56,9% stanowili mężczyźni, 83,4% było w związkach małżeńskich, 31,1% ukończyło szkołę podstawową, 61,4% cierpiało na choroby przewlekłe, 93,1% doświadczało udaru po raz pierwszy, a 64,3% miało udar niedokrwienny. Większość pacjentów doświadczała problemów z równowagą i zgłaszała modlitwę jako główny mechanizm radzenia sobie z wyzwaniami związanymi z udarem. Uczestnicy wykazali wysoki poziom dobrostanu duchowego (123,77±5,56). Obserwowano słabą pozytywną korelację między wynikami Skali Dobrostanu Duchowego a każdym z następujących wymiarów Skali Postrzegania Choroby: typ choroby, czas trwania (ostra vs. przewlekła), konsekwencje, kontrola osobista, kontrola leczenia, spójność choroby i reprezentacje emocjonalne (p<0,05).
Wnioski. Biorąc pod uwagę fizyczne, społeczne i psychologiczne wyzwania, z jakimi borykają się pacjenci po udarze w naszym badaniu, uważa się, że radzenie sobie z tymi trudnościami przyczynia się do wzrostu poziomu dobrostanu duchowego. Uczestnicy wykazywali zarówno wysoki lęk i negatywne postrzeganie choroby, jak i podwyższony poziom dobrostanu duchowego. **(PNN 2025;14(3):103–110)**
Słowa kluczowe: percepcja choroby, poziom duchowości, udar

Introduction

Stroke is a common and increasingly prevalent chronic disease with a tendency to recur [1]. In the United States, stroke prevalence increases with age, and approximately 795,000 individuals experience a first-time or recurrent stroke each year [2]. In Turkey, according to the Turkish Statistical Institute, stroke ranks fourth among causes of death and accounts for approximately 35,800 deaths annually [3].

According to the World Health Organization (WHO), 15 million people suffer a stroke each year; five million die, and another five million are left with permanent disabilities [4]. The permanent sequelae of stroke vary depending on the affected brain region and may include visual, speech, and cognitive impairments; motor and muscle coordination disorders; and bowel or bladder dysfunction [5]. Since stroke is a sudden and rapidly progressing condition, individuals may perceive it as a crisis when confronted with its sequelae. As a result, their material and spiritual lives, self-perception, and interpersonal relationships are inevitably affected in multiple ways [6].

Illness perception holds significant importance for stroke patients undergoing a challenging recovery process. Illness perception refers to the cognitive framework through which individuals interpret their experience of illness. Given the emotional changes experienced by stroke patients, it is inevitable that their illness perception will be affected [7].

Health problems can also lead individuals to experience emotional stress. This stressful process may impair individuals' ability to cope effectively with illness. If spirituality is what gives meaning to human life, it may foster the development of effective coping mechanisms by strengthening an individual's sense of self. Understanding individuals' illness experiences may support value-based treatment decision-making [8]. Considering the emotional changes experienced by individuals diagnosed with depression, it is assumed that there is a direct relationship between their illness perception and spiritual well-being.

This study was conducted to examine socio-demographic and clinical factors affecting stroke patients' illness perception and spiritual well-being, and to determine the relationship between these two constructs.

Material and Methods

The research employed a descriptive correlational design to assess the relationship between stroke patients' perception of their illness and their spirituality levels, as well as the factors influencing this relationship.

The study population comprised patients hospitalized with a stroke diagnosis in the neurology clinic of a teaching and research hospital. The sample size was determined using the formula for an unknown population ($n=p\cdot q\cdot t^2/d^2$). With a 95% confidence level ($\alpha=0.05$) and a 5% margin of error ($d=0.05$), the minimum required sample size was calculated as 307 individuals. Accounting for potential data loss, the final sample comprised 350 participants. The study included individuals who were hospitalized in the neurology clinic of the research hospital with a stroke diagnosis, were over 18 years of age, had no psychiatric diagnoses or communication problems, and voluntarily agreed to participate in the study.

Data were collected using an Individual Identification Form, the Illness Perception Scale, and the Spiritual Well-Being Scale. Individual Identification Form, developed by the researchers following a literature review, contained 17 items: eight sociodemographic questions (e.g., age, gender, marital status) and nine medical history questions [9–11].

Illness Perception Scale (IPS), Weinmann's scale, originally developed in 1996, was validated and its reliability tested in Turkish by Kocaman et al. in 2007. The scale comprises three dimensions: illness type, illness perceptions, and illness causes. Reported Cronbach's

alpha coefficients for the subscales of the Illness Perception Scale range from 0.25 to 0.81 [11]. In this study, Cronbach's alpha coefficients for those subscales ranged from 0.60 to 0.98.

Spiritual Well-Being Scale (SWBS) was developed by Ekşi and Kardaş. This scale includes three subdimensions: transcendence, harmony with nature, and anomie. Additionally, it yields a total spiritual well-being score. When calculating the total score, items in the anomie subscale are reverse-scored. As the score on the scale increases, the level of spiritual well-being also increases [11]. Reported Cronbach's alpha for the scale was 0.95 for transcendence, 0.86 for harmony with nature, 0.85 for anomie, and 0.88 for the total spiritual well-being score [10]. In this study, Cronbach's alpha coefficients were 0.80 for transcendence, 0.62 for harmony with nature, 0.73 for anomie, and 0.84 for the total well-being score.

The researcher conducted face-to-face interviews with consenting stroke patients to complete the data collection form. The interviews were conducted in patient rooms and lasted approximately 25–30 minutes. The questions on the form were read aloud by the researcher, and the participants' responses were recorded.

The data were analyzed using IBM SPSS Statistics Standard Concurrent User Version 26 (IBM Corp., Armonk, NY, USA). Descriptive statistics are presented as frequency (N), percentage (%), mean±standard deviation (Mean±SD), median (M), and range (min–max). The normality of numerical variables was assessed using the Shapiro–Wilk test. Since the data obtained in the study were not normally distributed, non-parametric tests were used for statistical analysis. Comparisons of scale scores between two-category variables were conducted using the Mann–Whitney U test, whereas comparisons across variables with more than two categories employed the Kruskal–Wallis H test. Relationships between numerical variables were assessed using Spearman's rank correlation coefficient, with $p<0.05$ denoting statistical significance.

This study was conducted in accordance with the principles of the Declaration of Helsinki and adhered to research and publication ethics guidelines. Ethical approval was obtained from the Aksaray University Faculty of Medicine Non-Interventional Clinical Research Ethics Committee (Decision no. 2022/11-09; June 9, 2022) prior to study initiation. Written permission was obtained from the hospital where the study was conducted (dated May 10, 2022; decision number: 61). Written permission was also obtained from the developers of the IPS and SWBS scales used in the study. The first section of the data collection form included an informed consent form, and only individuals who voluntarily agreed to participate were included in the study. The data collected during the study were not used outside the scope of the research, and access by third parties was strictly prevented.

Results

The characteristics of the 350 individuals with acute stroke who participated in the study are presented in Table 1. The mean age of participants in the study sample was 62.9 years, and 56.9% were male. It was found that 69.1% of participants had an elementary school education or below, 83.4% were married, 87.1% were unemployed, 55.7% perceived their income level as middle class, and 42.3% reported having a smoking or drinking habit.

Table 1. Findings regarding descriptive characteristics of stroke patients (N=350)

Variable	N (%)
Age	
Meant±SD	62.90±11.94
Gender	
Female	151 (43.1)
Male	199 (56.9)
Educational status	
Illiterate	48 (13.7)
Literate	85 (24.3)
Primary school graduate	109 (31.1)
Secondary school graduate	62 (17.7)
High school or above	46 (13.2)
Marital status	
Married	292 (83.4)
Single	58 (16.6)
Working status	
Not working	305 (87.1)
Working	45 (12.9)
Occupation	
Retired	171 (48.9)
Housewife	120 (34.3)
Civil Servant	23 (6.6)
Worker	22 (6.2)
Self-employed	14 (4.0)
Income perception (Self-assessment)	
Good	73 (20.9)
Moderate	195 (55.7)
Poor	82 (23.4)
Smoking and/or alcohol use	
Yes	148 (42.3)
No	202 (57.7)

N — number of observations; % — percent; SD — standard deviation

A total of 61.4% of stroke patients had a chronic illness. The most common chronic illness was hypertension, reported by 45.8% of participants. A total of 70.9% of

participants were on continuous medication, with amlodipine, an antihypertensive drug, being the most commonly used. It was found that 64.3% of participants had been diagnosed with ischemic stroke. A total of 93.1% of participants had experienced their first stroke, and 47.7% had upper extremity involvement. The majority of patients (69.4%) were hospitalized for one week or less (Table 2).

Table 2. Descriptive statistics regarding disease characteristics of stroke patients (N=350)

Variable	N (%)
1	2
Having chronic diseases other than stroke	
Yes	215 (61.4)
None	135 (38.6)
Distribution of chronic diseases*	
Hypertension	138 (45.8)
Diabetes	96 (31.9)
Heart diseases	36 (12)
COPD	15 (5)
Asthma	8 (2.7)
Other	8 (2.7)
Medication use	
Yes	248 (70.9)
None	102 (29.1)
Type of medication**	
Antihypertensives	100 (24.8)
Antidiabetics	72 (17.8)
Anticoagulants	59 (14.7)
Beta-blockers	13 (3.2)
Corticosteroids	13 (3.2)
Other	147 (36.3)
Stroke type	
Ischemic	225 (64.3)
Hemorrhagic	125 (35.7)
Number of strokes	
First time	326 (93.1)
Two or more	24 (6.9)
Presence of affected area	
Yes	167 (47.7)
None	183 (52.3)
Affected area/extremity	
Right arm	71 (27.4)
Right leg	63 (24.3)
Left arm	69 (26.6)
Left leg	56 (21.6)
Hospital stay	
1–7 days	243 (69.4)
8–15 days	98 (28)
16–29 days	5 (1.4)
30 days and above	4 (1.1)

N — number of observations; % — percent; *Other chronic diseases: Kidney diseases, joint diseases, migraine etc.; **Other types of drugs used: Proton pump inhibitors, paracetamols, statin group drugs etc.

The most commonly reported problem among patients was loss of balance, observed in 47.1% of cases. The most frequently used coping method was praying (32.1%), whereas the preferred relaxation activity during hospitalization was watching television (28.5%) (Table 3).

Table 3. Descriptive statistics regarding the problems experienced by stroke patients (N=350)

Variable	N (%)
Problem situation*	
Balance	321 (47.1)
Sleep	96 (14.1)
Walking	90 (13.2)
Nutrition	74 (10.9)
Excretion	63 (9.3)
Speaking	18 (2.6)
Seeing	17 (2.5)
Other	2 (0.3)
Coping method**	
Praying	308 (32.1)
Worshiping Quran reading	236 (24.6)
Being alone	165 (17.2)
Chatting	140 (14.6)
Watching TV	56 (5.8)
Listening to music	53 (5.5)
Other solutions	2 (0.2)
Relaxation method in hospital***	
Watching TV	119 (28.5)
Praying	104 (24.9)
Sleeping	94 (22.5)
Chatting	36 (8.6)
Crying	32 (7.7)
Other	32 (7.7)

N — number of observations; % — percent; *Problem situation other situations: anxiety etc.; **Problem coping method other situations: reading a book etc.; ***Relaxation method in hospital: spending time on social media etc.

It was found that stroke patients scored highest on the emotional representations subscale of the Illness Perception Scale (23.60±5.06) and lowest on the illness type subscale (2.15±1.19). The mean total score on the Spiritual Well-Being Scale for the participants included in this study was 123.77, with a standard deviation of 5.56 (Table 4).

When examining the relationship between the Illness Perception Scale (IPS) and the Spiritual Well-Being Scale (SWBS), a statistically significant negative correlation was observed between the IPS illness type dimension and each SWBS subdimension (transcendence, harmony with nature, anomie), and a statistically significant positive correlation was found with the SWBS total score (p<0.05). There was a statistically significant negative correlation between the duration dimension (acute/chronic) of the illness perception scale and the anomie dimension, and a positive correlation with the total well-being scale score (p<0.05). The results dimension of the Illness Perception Scale showed a statistically significant negative correlation with the transcendence, harmony with nature, and anomie dimensions, and a positive correlation with the total Well-Being Scale score (p<0.05). Similarly, the personal control dimension was positively associated with transcendence, harmony with nature, and anomie, while demonstrating a significant negative correlation with the total well-being score (p<0.05). There was a statistically significant relationship between the treatment control, illness understanding, and emotional representation dimensions of the illness perception scale and the total well-being scale score (p<0.05). No statistically significant relationship was found between the cyclical duration, psychological attributions, risk factors, immunity, accident-chance dimensions, and the total well-being scale score (p<0.05) (Table 5).

Table 4. Distribution of mean total scores of IPS and SWBS sub-dimensions

Variable	Statistics	
	Mean±SD	Median (Min-Max)
IPS		
Type of disease	2.15±1.19	2 (0–6)
Duration (Acute/Chronic)	18.73±1.71	18 (12–24)
Results	21.12±3.81	22 (10–27)
Personal control	16.77±3.45	16 (10–26)
Treatment control	15.39±2.38	17 (9–21)
Understanding the disease	18.54±3.69	21 (7–22)
Duration (Cyclic)	14.10±4.85	16 (4–20)
Emotional representations	23.60±5.06	26 (8–27)
Psychological attributions	13.81±4.68	14 (6–30)
Risk factors	13.85±3.76	14 (7–27)
Immunity	6.39±2.49	7 (3–15)
Accident Chance	5.00±1.58	6 (2–7)
SWBS		
Transcendence	2.15±1.19	75 (44–75)
Harmony with nature	33.27±3.33	35 (19–35)
Anomie	23.98±5.79	25 (7–33)
SWBS	123.77±5.56	124 (98–143)

SD — standard deviation; Min — minimum value; Max — maximum value

Table 5. Relationships Between Total Scores of the SIOÖ and the WHO-5 Subdimensions

Variable	Transcendence	Harmony with Nature	Anomie	Total Score of Well-Being Scale
1	2	3	4	5
Type of Illness	r=–0.126	r=–0.130	r=–0.284	r=0.161
	p=0.018	p=0.015	p<0.001	p=0.002
Duration (Acute/Chronic)	r=–0.060	r=–0.091	r=–0.176	r=0.151
	p=0.260	p=0.089	p=0.001	p=0.005
Consequences	r=–0.397	r=–0.163	r=–0.490	r=0.189
	p<0.001	p=0.002	p<0.001	p<0.001
Personal Control	r=0.249	r=0.154	r=0.377	r=–0.141
	p<0.001	p=0.004	p<0.001	p=0.008
Treatment Control	r=0.233	r=0.200	r=0.474	r=–0.216
	p<0.001	p<0.001	p<0.001	p<0.001
Illness Coherence	r=–0.147	r=0.008	r=–0.171	r=0.111
	p=0.006	p=0.881	p=0.001	p=0.037
Duration (Cyclical)	r=0.029	r=0.094	r=0.084	r=0.019
	p=0.595	p=0.080	p=0.116	p=0.719

Table 5. Continued

1	2	3	4	5
Emotional Representations	r=–0.220	r=–0.084	r=–0.355	r=0.208
	p<0.001	p=0.119	p<0.001	p<0.001
Psychological attributions	r=–0.222	r=–0.171	r=–0.194	r=–0.026
	p<0.001	p=0.001	p<0.001	p=0.622
Risk factors	r=0.016	r=–0.017	r=–0.040	r=0.027
	p=0.772	p=0.748	p=0.451	p=0.615
Immunity	r=–0.017	r=–0.061	r=–0.058	r=–0.013
	p=0.751	p=0.252	p=0.278	p=0.801
Accident/Luck	r=–0.115	r=–0.079	r=–0.120	r=0.049
	p=0.032	p=0.143	p=0.024	p=0.363

r: Spearman correlation coefficient. The bolded values indicate statistically significant results (p<0.05)

Discussion

Although the incidence of stroke is increasing worldwide, it ranks third among the leading causes of mortality. Stroke predominantly affects older adults, and age is considered the primary risk factor for its occurrence. Consistent with our findings, several studies conducted on stroke patients in Türkiye have also reported that the average age is generally above 60 years [12,13].

It was found that 61.4% of the individuals who participated in our study had chronic diseases, with hypertension being the most common, observed in 45.8% of participants. Previous studies have shown that hypertension is a major risk factor for stroke and significantly increases the risk of its occurrence. When stroke patients were examined in the literature, the findings were consistent with those of our study, identifying hypertension as the most common chronic disease among stroke patient groups [12,14]. Considering that atherosclerosis associated with aging leads to hypertension, it is believed that the high proportion of individuals aged 65 and above in the sample contributed to hypertension being the most common disease in the study group.

In our study, 93.1% of patients had experienced their first stroke, 64.3% had ischemic stroke, and 35.7% had hemorrhagic stroke. A review of the literature supports our findings, showing that ischemic stroke is more prevalent than hemorrhagic stroke [14,15].

In our study, analysis of the affected areas in individuals with stroke revealed that 51.7% had right-side extremity involvement. A review of the literature reveals findings consistent with the results of our study [14–16]. Post-stroke symptoms may improve over time; however, permanent sequelae can also occur. Feigin and colleagues (2021) conducted a Global Burden of Disease study highlighting that falls are a major cause of lifelong disability worldwide [17].

When examining the post-stroke problems experienced by individuals in our study, balance problems were identified as the most common, affecting 47.1% of participants. In a study conducted by Ünal and colleagues (2019) on the effect of stroke on balance disorders, significant differences were observed between healthy and stroke-affected individuals, confirming that stroke impacts balance function [18]. A review of the literature indicates that various studies on stroke patients have found balance disorders to be common after stroke, consistent with the findings of our study [19,20]. Motor function loss may occur in individuals following a stroke. Deviations in gait and balance disorders may result from increased muscle tone, reduced joint range of motion, and diminished power transferred to the affected area [18].

In our study, it was found that 32.1% of stroke patients prayed as a coping mechanism. A study analyzing 87 studies conducted between 1990 and 2020 across various patient populations on the relationship between illness and prayer found that prayer was the most commonly preferred coping strategy, which aligns with the findings of our study [21]. Throughout history, individuals from various religious and spiritual backgrounds have turned to prayer as a means of communicating with a divine power. Considering that the individuals in the study were experiencing a stressful period due to illness, it is believed that turning to a higher power for matters beyond their control helped them feel better.

Individuals with stroke-affected extremities tend to perceive their illness as more chronic than those without such involvement. Approximately 50% of individuals who experience a stroke are left with permanent sequelae. Permanent sequelae can limit daily living activities and negatively impact individuals physically, socially, and psychologically. Individuals who require assistance from

others to perform daily activities may experience increased feelings of dependence, which can significantly impact their self-perception and quality of life. Considering the process individuals undergo, it is believed that those with affected areas perceive their illnesses as more chronic compared to those without affected areas following a stroke. Consistent with our findings, studies examining illness perception in different patient populations have also reported that individuals tend to perceive their illnesses as chronic [22,23].

An analysis of the total IPS scores of stroke patients in our study revealed that the highest score was obtained in the emotional representations dimension (23.60±5.06). This finding indicates that individuals harbor excessive concerns and negative thoughts about their illnesses. Studies have shown that individuals often experience increased anxiety, elevated worry levels, and cognitive impairments following a stroke [24,25]. In line with our findings, studies on individuals with chronic obstructive pulmonary disease, type 2 diabetes, undergoing hemodialysis, cancer, and chronic cardiovascular disease have shown that participants scored highest on the emotional representations subscale [23,26–29]. It has been observed that individuals across various disease groups tend to hold excessively negative thoughts about their illnesses.

Participants scored the lowest on the disease type subscale of the IPS, with a mean score of 2.15±1.19. The majority of participants in our study did not associate the symptoms they experienced during the course of illness with their disease. Although studies on stroke patients and illness perception in Türkiye are limited, research on other patient groups and illness perception is available. Studies assessing illness perception in individuals with diabetes, hypertension, chronic obstructive pulmonary disease, renal failure, and chronic cardiovascular disease have found that these individuals generally perceive their illnesses as chronic, do not associate their symptoms with their conditions, experience high levels of anxiety and negative emotions, have difficulty understanding their illnesses, yet maintain a strong belief in their treatability [22,26,28,29].

An average total score of 87 or above on the SWBS indicates a high level of spiritual well-being. In this context, the average scores of participants in our study indicated a high level of spiritual well-being. Considering the physical, social, and psychological challenges faced by stroke patients in our study, it is believed that coping with these difficulties contributes to an increased level of spiritual well-being. Chronic diseases affect individuals physically, socially, and emotionally over extended periods of time. The importance of spirituality in developing effective coping strategies through acceptance of a condition that affects all aspects of life and is perceived as a major stressor cannot be overstated. It is believed that focusing on inner peace and seeking spiritual strength positively influences the spiritual well-being scores of patients undergoing difficult experiences. Studies on spiritual well-being in various patient groups have similarly reported high levels of spiritual well-being among patients, consistent with the findings of our study [9,30].

Conclusions

The study revealed that patients had high levels of spiritual well-being but also significant anxiety and negative thoughts about their illness. A weak positive correlation was found between patients' level of spiritual well-being and the dimensions of illness type, duration (acute/chronic), outcomes, personal control, treatment control, understanding of the illness, and emotional representations. The study recommends further assessment of patients' spiritual well-being and anxiety levels related to their illness, identification of these needs, provision of necessary support to patients in need, and the conduct of multicenter studies.

Implications for Nursing Practice

To support stroke patients in managing their illness process in a healthy manner, psychological assistance should be provided throughout the process. It has been observed that spiritual well-being positively influences patients' understanding of their illness, as well as their belief in and adherence to treatment. Therefore, evaluating nurses' perceptions of illness, their knowledge of spiritual care, and their approach to patients and enhancing their knowledge through in-service training will benefit both patients and nurses.

We believe that evaluating stroke patients' illness perception and spiritual well-being levels, planning and implementing appropriate nursing interventions, and sharing the results with other nurses will benefit stroke patients. Based on our study findings, healthcare professionals should pay greater attention to stroke patients' illness perception and spiritual needs particularly among those who have experienced multiple strokes, been hospitalized for more than seven days, are female, have affected areas, possess an education level of elementary school or below, or have low income levels.

Limitations of the Study

Conducting the research at a single center represents a limitation of this study.

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