The Journal of Neurological and Neurosurgical Nursing
Pielęgniarstwo Neurologiczne i Neurochirurgiczne

Wydawnictwo Państwowej Akademii
Nauk Stosowanych we Włocławku
ul. Mechaników 3, pok. 20
87-800 Włocławek

eISSN 2299-0321 ISSN 2084-8021
https://apcz.umk.pl/PNIN

DOI: 10.15225/PNN.2023.12.3.1 JNNN 2023;12(3):103–111 Original

Acceptance of Illness and Life Satisfaction in Patients after Ischemic Stroke

Akceptacja choroby i zadowolenie z życia u chorych po udarze niedokrwiennym

Ewelina Bąk[1], **Magdalena Żywczak**[2], **Sylwia Krzemińska**[3]

❶ Department of Nursing and Rescue, Faculty of Health Sciences, Technical and Humanities University in Bielsko-Biała, Poland
❷ Beskid Medical and Rehabilitation Center in Jaworze, Poland
❸ Department of Nursing and Obstetrics, Faculty of Health Sciences, Wrocław Medical University, Poland

Abstract

Introduction. Stroke is a disease that ranks highest in terms of mortality worldwide. It is a chronic condition that affects functioning and social roles. Advanced diagnostic capabilities, appropriate care, and systematic and early rehabilitation significantly reduce mortality. The quality of life of stroke survivors changes as a result.

Aim. The aim of the study was to assess the acceptance and satisfaction of patients after an ischemic stroke.

Material and Methods. The study was conducted between September 2019 and December 2019 among 91 patients from the Outpatient Clinic of the Independent Municipal Health Care Facility in Zembrzyce, the Independent Public Health Care Facility in Mucharz, and patients hospitalized in the Beskid Rehabilitation and Medical Center in Jaworzno in the Neurological Rehabilitation Subunit. Two questionnaires were used for the study: the Acceptance of Illness Scale (AIS) and the Satisfaction with Life Scale (SWLS).

Results. In terms of life satisfaction, 56% of the participants had low levels of satisfaction, while only 25% reported high satisfaction. The average acceptance of illness score among patients aged 40–60 was 24.2, indicating a good level of acceptance. The average score for satisfaction with life was 17.19, reflecting low levels of satisfaction.

Conclusions. Higher levels of acceptance of illness were associated with increased satisfaction with life. Acceptance of illness significantly influenced life satisfaction. Chronic conditions such as stroke make acceptance of illness more challenging. **(JNNN 2023;12(3):103–111)**

Key Words: acceptance of illness, life satisfaction, stroke

Streszczenie

Wstęp. Udar mózgu jest chorobą, która odznacza się największą liczbą zgonów na świecie. Jest to choroba przewlekła, która ma wpływ na funkcjonowanie i pełnienie ról społecznych. Duże możliwości diagnostyczne, odpowiednia pielęgnacja oraz systematyczna i wczesna rehabilitacja w znaczący sposób zmniejszają śmiertelność. Jakość życia pacjenta, który uległ udarowi zmienia się.

Cel. Celem pracy była ocena akceptacji i satysfakcji pacjentów po udarze niedokrwiennym mózgu.

Materiał i metody. Badania wykonano w okresie od września do grudnia 2019 r. wśród 91 pacjentów z przychodni Samodzielnego Gminnego Zakładu Opieki Zdrowotnej w Zembrzycach, Samodzielnego Publicznego Zakładu Opieki Zdrowotnej w Mucharzu oraz pacjentów hospitalizowanych w Beskidzkim Zespole Leczniczo-Rehabilitacyjnym w Jaworzu w Pododdziale Rehabilitacji Neurologicznej. Do wykonania badań wykorzystano dwa kwestionariusze: Akceptacji Choroby AIS oraz kwestionariusza Satysfakcji z Życia SWLS.

Wyniki. W skali Satysfakcji Życiowej, aż 56% badanej populacji miało niskie poczucie zadowolenia z życia. 25% respondentów miała wysokie poczucie zadowolenia z życia. Średnia z akceptacji choroby pośród pacjentów w przedziale wiekowym 40–60 lat wyniosła 24,2 co daje wynik dobry. Średnia z Satysfakcji z Życia wyniosła 17,19. Daje to wynik niski w odniesieniu do poczucia zadowolenia z życia.

Wnioski. Im wyższa była akceptacja choroby, tym poczucie zadowolenia z życia wzrastało. Akceptacja choroby wpływa na poczucie zadowolenia z życia. Choroba przewlekła jaką jest udar utrudnia akceptację choroby. **(PNN 2023;12(3): 103–111)**

Słowa kluczowe: akceptowanie choroby, satysfakcja życiowa, udar mózgowy

Introduction

Stroke is one of the most serious health problems worldwide, ranking third in terms of global mortality. It is estimated that one in four individuals who experience a stroke die within the first month after its occurrence. Patients who survive beyond four weeks of a stroke are often reliant on the care of others [1,2].

The quality of life for stroke patients undergoes significant changes and is dependent on various factors and the type of stroke experienced by the patient. Problems for stroke survivors frequently arise upon returning home, where they face daily struggles. Their quality of life diminishes, often accompanied by a change in material circumstances. These individuals often feel misunderstood, lack support from loved ones, and feel helpless. Interpersonal relationships become strained. Stroke patients are often isolated and significantly limit their social interactions. Recognizing these issues at the right time and providing assistance in specific areas can greatly improve the patient's quality of life. This assistance can encompass the domains in which the patient functions, including social functioning, psychological well-being, physical abilities, social status, and mobility. Assessing an individual's quality of life allows for an evaluation of their life situation at a given moment, which is compared to an ideal situation. Many stroke researchers concur that stroke diminishes the functional and psychological aspects of a patient's quality of life. The quality of life for patients who have independent mobility is significantly better than those who require the assistance of others. This has an impact on an individual's functionality and the performance of basic activities of daily living. Certain tasks that pose no problem for a healthy person can become significant challenges for a stroke patient. On a daily basis, these patients encounter various problems that impede their success. These can include communication issues, economic challenges, and psychological problems [1–5].

Anxiety, depression, and deterioration in functional status significantly influence the quality of life. There is a correlation between a stroke patient's knowledge regarding appropriate management, proper nutrition, and stroke prevention and their sense of satisfaction, leading to a change in their quality of life [6–8].

Many researchers who have studied the level of life satisfaction argue that it is crucial when it comes to coping with illness. This, in turn, promotes the well-being of the patient. We live in an aging society, and the number of older adults is increasing. The life satisfaction demonstrated by older individuals provides some insight into how they function in the face of illness. The family plays a significant role in the level of disease acceptance, often acting as a motivating factor. There is a correlation between the level of satisfaction and the degree of disease acceptance [2].

Stroke survivors often struggle with symptoms resulting from the underlying disease. Its complications and consequences often lead to various limitations. These limitations frequently affect both the physical and psychological aspects of the patient. Affected individuals often struggle to adapt to their environment, economic conditions, daily life, and simply do not accept their illness. Every stroke carries the possibility of complications. These may include disturbances in water-electrolyte balance, increased intracranial pressure, and circulatory system disorders. Patients who are immobilized have an increased risk of developing conditions such as pneumonia or respiratory distress. They also face reduced immunity, which predisposes them to infections. Activities such as eating, muscle spasms, muscle atrophy, or performing basic self-care tasks become challenging for them. All these problems contribute to the growing difficulties in accepting the illness and adapting to the environment and new living conditions. Patients struggle to accept their disabilities and worry about experiencing another stroke. They often find themselves in a situation where their health status limits their functioning and their ability to engage in activities they enjoy the most [2].

Lack of disease acceptance leads to significant psychological discomfort for the patient, making it more challenging for them to adapt to their surroundings. The more they accept the disease, the fewer negative emotions they experience. This applies to both care and emotions associated with the illness. Disease acceptance can also be seen as an activating element for the patient. The level of disease acceptance is related to various factors such as the duration of the illness, the patient's condition, and their ability to cope with stress. It is an important aspect of a holistic approach to the patient [8].

Stroke impairs many aspects of life and often leads to various types of disabilities. Improving the quality of life also involves regaining a sense of independence and functionality, despite any limitations [9].

Acceptance of the illness involves acknowledging limitations. When the level of acceptance is higher, patients exhibit greater adaptation to life and experience less psychological discomfort. Every patient who recognizes and tries to understand their limitations caused by the illness has a chance to accept them. If a person believes they are responsible for their life, makes their own decisions, they can have an impact on certain negative events and their environment, and they can perceive their internal state. This phenomenon is referred to as perceived control by Wallston. The sense of control explains the relationship between stress, behavior, and health. Their combined effect can lead to changes in the immune, endocrine, and autonomic systems. There is a close relationship between lifestyle and human health. One of the indicators used to monitor population health is indeed health. According to Juczyński, health is divided into four categories: prevention, health habits, dietary habits, and positive psychological attitude [10].

Every stroke patient should be approached holistically. Only such an approach guarantees therapeutic success. To ensure effective rehabilitation, the patient should be viewed holistically. Many researchers emphasize the role of biopsychosocial factors that influence the treatment and recovery after a stroke. Albert Bandura introduced the concept of self-efficacy, which is a driving force for action even in the face of increasing failures. When we have a low sense of self-efficacy, it is often associated with fear, depression, or helplessness. As the patient grows older, they gain new experiences, which in turn impacts the increase in the level of self-efficacy. However, it is always important to consider the individual capabilities of each patient. Every stroke is accompanied by certain limitations, affecting both the physical and psychological aspects. The sense of self-efficacy can influence the outcome of rehabilitation. Very often, hospitalized patients feel unwell due to their hospitalization. Additionally, individuals who suddenly fall ill have difficulty adapting to the new and changed conditions. They often feel helpless in the face of the new situation they have been placed in and perceive themselves as a burden to their families. The realm of interpersonal relationships is crucial to them. While the patient's physical condition is important, their well-being in the present moment holds even greater significance. It impacts their entire life. The functional state at home or in society cannot be evaluated using biomedical indicators. That is why research on the quality of human life has been initiated. Patients are often admitted to the ward too late, accompanied by fear and anxiety about the unknown [11,12].

The aim of the study was to assess the acceptance and satisfaction of patients after an ischemic stroke in the Primary Health Care Clinic in the Independent Municipal Health Care Center in Zembrzyce, the Independent Public Health Care Center in Mucharz, and patients hospitalized in the Beskid Medical and Rehabilitation Center in Jaworze in the Neurological Rehabilitation Subunit.

Material and Methods

The study was conducted from September 2019 to December 2019 among hospitalized patients without early stroke in the Beskid Medical and Rehabilitation Center in Jaworze and two Primary Health Care Clinics in Kalwaria Zebrzydowska and Mucharz. The research was conducted anonymously and voluntarily. All patients were informed about the purpose of the study. To participate in the study, patients had to meet the inclusion criteria, including: duration of the disease — at least one year, assessment time — 2nd or 3rd day of the patient's admission to the ward, the assessment focused on the past 4 weeks, considering acceptance and satisfaction with life, expressing consent to participate in the study.

The study was conducted among 91 individuals. There were 39 women, accounting for 42.9%, and 52 men, accounting for 57.1%. These were patients who had experienced an ischemic stroke. The largest group consisted of patients aged 51–60 years (81%). Regarding education, 6 individuals had primary education (6.6%), 38 had vocational education (41.8%), 33 had secondary education (36.3%), and 14 had higher education (15.4%). 56% of the respondents lived in urban areas, while 44% lived in rural areas. Among all the respondents, 13.2% were single, 8.8% were divorced, 57.1% were married or in a relationship, and 20.9% were widowed. Furthermore 17.6% of the respondents had a normal weight. 47.3% were overweight, and 35.2% were obese. Among the respondents, a significant 86.5% had hypertension, 19.5% had atrial fibrillation, 15.8% had a history of heart attack, 26.8% had diabetes, 12.2% had a previous stroke, and 12.2% had other conditions not specified in the questionnaire. The study showed that 62.6% of the respondents did not smoke, while 37.4% were still smokers. 12.1% of the respondents still abused alcohol, and 27.5% consumed alcohol sporadically. The most common location of paralysis among the respondents was the right side of the body, accounting for 31.9%. 28.6% had paralysis on the left side of the body. 11% had only the right upper limb affected, while 16.5% had the left upper limb affected. The left lower limb was paralyzed in 6.6% of the patients, and the right lower limb in 5.5% of the respondents. When asked about when they had their first stroke, 34.1% of the respondents answered that it was this year. 31.9% had their first stroke over a year ago, and 34.1% had it several years ago. 74.7% of the respondents had experienced one stroke, 22% had two strokes, and three patients (3.3%) had three or more strokes. Detailed results are presented in Table 1.

Table 1. Characteristics of the study group (N=91)

Variable	N	%
1	2	3
Gender		
Men	52	57.10
Woman	39	42.90
Education		
Primary	6	6.60
Vocational	38	41.80
Secondary	33	36.30
Higher	14	15.40
Age		
40–50	15	16.50
51–60	76	83.50
Place of residence		
Urban	51	56.00
Rural	40	44.00
Marital status		
Single	12	13.20
Divorced	8	8.80
In relationship	52	57.10
Widow/Widower	19	20.90
BMI		
Correctly	16	17.60
Overweight	43	47.30
Obesity	32	35.20
Comorbidities		
Hypertension	71	86.59
Atrial fibrillation	16	19.51
Myocardial infarction	13	15.85
Diabetes	22	26.83
Stroke	10	12.20
Other	10	12.20
Smoking		
Yes	34	37.40
No	57	62.60
Alcohol abuse		
Yes	11	12.10
No	55	60.40
Occasionally	25	27.50
Place of paresis		
Right upper limb	10	11.00
Left upper limb	15	16.50
Right lower limb	5	5.50
Left lower limb	6	6.60
Right half of the body	29	31.90
Left half of the body	26	28.60
First stroke		
This year	31	34.10
Over a year	29	31.90
A few years ago	31	34.10
Number of strokes		
One	68	74.70
Two	20	22.00
Three or more	3	3.30

N — number of observations; % — percent

Written consent to conduct the research was obtained from all the centers where the study was conducted. The study was conducted among patients aged 40–60 years. The group consisted of women and men with various levels of education residing in rural or urban areas. 110 questionnaires were distributed, and 91 were received.

The diagnostic survey method was used in the study. The research was conducted using the AIS, SWLS questionnaires, and a self-designed questionnaire. Written, positive consent was obtained from the Psychological Testing Laboratory for the use of the questionnaires. The first part of the questionnaire was based on anonymous completion of 14 questions regarding health status and sociodemographic data such as gender, age, and place of residence. The second part of the self-designed questionnaire contained questions about when the patient had their first stroke, the number of strokes experienced, the presence of any coexisting conditions, and whether they abused alcohol or cigarettes. The last part contained questions about the location of paralysis and the type of rehabilitation applied to the patient. The next part of the study involved completing the AIS and SWLS questionnaires.

The SWLS questionnaire (The Satisfaction with Life Scale) is used to assess life satisfaction, and the AIS questionnaire (Acceptance of Illness Scale) measures the acceptance of the illness. Both scales were adapted to Polish conditions by Juczyński [13].

Calculations were performed using the PSPP and MS Office 2019 software in the R statistical environment, version 3.6.0. A significance level of p=0.05 was adopted. The significance level defines the maximum acceptable probability of a type I error, which involves rejecting the true null hypothesis H0. H0 assumes that the groups being studied do not differ in terms of the variable of interest. Accordingly, $p<0.05$ will indicate the presence of significant relationships between variables. Two nonparametric tests (Mann–Whitney U test or Kruskal–Wallis test) were used to analyze quantitative variables. The choice of tests was based on the distribution of variables, which was verified using the Shapiro–Wilk test.

Results

Results of the AIS Questionnaire

In the study group (N=91), the acceptance of illness had a mean score of M=24.20, indicating good acceptance of the illness. The lowest score was Min=8.00, and the highest was Max=40.00 (Table 2).

Results of the SWLS Questionnaire

The patients obtained an average score of M=17.19 (on a scale of 1–35), indicating low life satisfaction (Table 2).

The Influence of Sociodemographic Factors on the Level of Acceptance and Life Satisfaction

Half of the men in the study group had illness acceptance scores not lower than Me=23.00 and life satisfaction scores not lower than Me=14.50. Half of the women had illness acceptance scores not lower than Me=28.00 and life satisfaction scores not lower than Me=16.00. These differences are not statistically significant ($p>0.05$).

Half of the individuals with primary or vocational education had illness acceptance scores not lower than Me=24.00 and life satisfaction scores not lower than Me=14.50. Half of the individuals with secondary or higher education had illness acceptance scores not lower than Me=23.00 and life satisfaction scores not lower than Me=16.00. These differences are not statistically significant ($p>0.05$).

Half of the individuals aged 40–50 had illness acceptance scores not lower than Me=18.00 and life satisfaction scores not lower than Me=15.00. Half of the individuals aged 51–60 had illness acceptance scores not lower than Me=25.50 and life satisfaction scores not lower than Me=15.50. These differences are not statistically significant ($p>0.05$).

Half of the individuals living in urban areas had illness acceptance scores not lower than Me=25.00 and life satisfaction scores not lower than Me=16.00. Half of the individuals living in rural areas had illness acceptance scores not lower than Me=22.50 and life satisfaction scores not lower than Me=14.00. These differences are not statistically significant ($p>0.05$).

Half of the individuals in a relationship had illness acceptance scores not lower than Me=26.00 and life satisfaction scores not lower than Me=19.00. Half of the individuals not in a relationship had illness acceptance scores not lower than Me=21.00 and life satisfaction scores not lower than Me=14.00. These differences are not statistically significant ($p>0.05$). Detailed results are presented in Table 3.

Table 2. Results of the AIS and SWLS questionnaires (N=91)

		M	SD	Me
Acceptance of illness		24.20	9.40	24.00
Satisfaction with Life Scale (SWLS)	SWLS — point score	17.19	7.09	15.00
	SWLS — sten score	4.39	2.53	4.00

M — average; SD — standard deviation; Me — median

Table 3. Influence of sociodemographic factors on the level of acceptance and satisfaction with life

		Descriptive statistics				
		U	p	M	SD	Me
1	2	3	4	5	6	7
	Gender					
Acceptance of illness	Men	813.50	0.108	22.83	9.39	23.00
	Women			26.03	9.20	28.00
SWLS	Men	937.50	0.542	16.75	6.86	14.50
	Women			17.77	7.43	16.00

Table 3. Continued

1	2	3	4	5	6	7
	Education					
Acceptance of illness	Primary or vocational	969.00	0.608	23.61	9.06	24.00
	Secondary or higher			24.74	9.77	23.00
SWLS	Primary or vocational	1003.00	0.808	16.93	6.65	14.50
	Secondary or higher			17.43	7.54	16.00
	Age					
Acceptance of illness	40–50 years	420.00	0.109	20.60	9.83	18.00
	51–60 years			24.91	9.21	25.50
SWLS	40–50 years	536.50	0.724	17.80	6.91	15.00
	51–60 years			17.07	7.16	15.50
	Place of residence					
Acceptance of illness	Urban	780.50	0.056	25.88	9.03	25.00
	Rural			22.05	9.53	22.50
SWLS	Urban	887.00	0.289	17.84	7.02	16.00
	Rural			16.35	7.17	14.00
	Maritial status					
Acceptance of illness	In relationship	769.00	0.050	25.88	8.35	26.00
	Single			21.95	10.31	21.00
SWLS	In relationship	846.50	0.180	18.13	7.31	19.00
	Single			15.92	6.66	14.00

U — test statistics; p — statistical significance; M — medium; SD — standard deviation; Me — median

Evaluation of the Relationship Between Illness Acceptance and Life Satisfaction

A statistically significant correlation ($p<0.05$) was observed between illness acceptance and life satisfaction. The correlation was strong. as indicated by the value of the rho coefficient <=0.7. It was a positive correlation, indicating that as the level of illness acceptance increased, so did the level of life satisfaction. In other words, the higher the illness acceptance scores of the participants, the more satisfied they were with life. The distribution of variables is presented in a graph.

Based on the above, there is a significant relationship ($p<0.05$) between illness acceptance and life satisfaction. Detailed results are presented in Table 4.

Table 4. Assessment of the relationship between illness acceptance and life satisfaction

Acceptance of illness	SWLS
rho	0.519
p	<0.001

rho — Spearman's correlation coefficient, p — level of statistical significance

Discussion

Stroke ranks third in terms of mortality rates in developed countries. It is a life-threatening condition that requires immediate hospitalization. Many patients become dependent on their families. Every chronic illness comes with limitations. Patients often struggle with functioning and fulfilling their social roles as they did before. The limitations imposed by the disease prevent them from performing their daily tasks.

Strokes can lead to permanent disability. Lack of acceptance of the disease worsens the individual's psychological well-being and affects their ability to adapt to life. Disease acceptance is related to the patient's condition, mood, and duration of the illness. Stroke has a significant impact on the quality of life of patients. Striving for improvement and assisting in regaining functionality and independence are factors that contribute to improved well-being. Acceptance of the disease can lead to a better quality of life. Many patients struggle with adapting to the changed conditions of their daily lives or living conditions.

Research has shown a correlation between disease acceptance and life satisfaction. The higher the level of disease acceptance among the participants, the more satisfied they were with their lives.

The aim of the study conducted by Kamusińska et al. [8] was to analyze the level of disease acceptance among individuals who have experienced a stroke. The study included 74 patients from the Rehabilitation Center for Movement Organs in Krzeszowice. The Acceptance of Illness Scale (AIS) was used in this study. The study population obtained an average value of 21.54, which is similar to the findings of our own research. When asked whether they feel like full-value human beings, Kamusińska et al. [8] obtained an average value of 3.01, which is very similar to the results presented in our own study. This indicates that respondents were unable to give a definitive answer to this question. Stroke survivors experience various dysfunctions that significantly impact their daily functioning and psychological well-being. Regarding the statement "I have difficulty adapting to the limitations imposed by the disease", as many as 35% of respondents agreed with this statement. For the statement "the disease makes me a burden to others", the largest number of respondents (28%) agreed, indicating a problem with disease acceptance. The results obtained by Kamusińska et al. show that stroke survivors find it most difficult to accept their disability caused by the disease.

Mobility impairment, which often occurs after a stroke, leads to functional limitations. This has significant implications for social roles and, consequently, life satisfaction. Interesting research was conducted by Ścisło et al. [14], which shows that family support is the main source of support for patients, and positive relationships with loved ones contribute to improved life satisfaction. The study included 50 physically disabled individuals residing in Tarnów. The researchers used their own questionnaire, the Barthel and Lawton scales, and the SWLS scale. Ischemic stroke was the predominant disease in the study group (38%). Among the factors that most hindered functioning, 60% mentioned architectural barriers, 10% mentioned lack of social acceptance, and dependence on others. Physical disability leads to impairment in the psychological sphere. 48% of the respondents were "rather satisfied with life", and 20% claimed to be "satisfied with life". The study found no significant correlation between the degree of disability and the level of life satisfaction.

Similar results are described by Załuski [15] in his article. The study included 52 patients from the Rehabilitation and Orthopedics Center and the Hematology and Internal Medicine Department at the Specialist Hospital named after Ludwik Rydygier in Krakow. The group consisted of patients undergoing rehabilitation due to the consequences of stroke, as well as other neurological diseases. The Resilience Scale (SR), the Acceptance of Illness Scale (AIS), and the Posttraumatic Growth Inventory (PTGI) were used in the study. The average level of disease acceptance is comparable to the results presented in our own study and was 23.11. The level of disease acceptance was not related to gender or marital status, which is consistent with our own findings. Disease acceptance is associated with the absence of adaptation problems. Stroke survivors often experience stressful situations and negative emotions, which influence their level of acceptance. The study presented by Załuski shows that the level of disease acceptance has a negative relationship with thinking about the meaning of life and disease symptoms. A positive relationship occurs when the patient recognizes the value of life and plans to solve current problems.

Further research was conducted by Tasiemski et al. [16] at the Rehabilitation Hospital in Kiekrz. The research tools used were a questionnaire consisting of 37 questions about quality of life, sociodemographic data, and satisfaction in various areas of life. The majority of the study group had experienced an ischemic stroke, accounting for 64% of the respondents. The research shows that patients after a stroke rated their life satisfaction low, which is confirmed by our own research. Only 24% of the study group reported being fully satisfied with life. Numerous studies have demonstrated that individuals who receive support from their families and have positive relationships with their partners have a greater chance of recovery. Support is an essential factor that increases the level of satisfaction.

The presence of chronic illness requires patients to adapt to a new reality. Patients enter a new role, which involves accepting or denying the disease. The study presented by Kurpas et al. [17] aimed to determine the level of disease acceptance. A total of 150 patients from Vito-Med Healthcare Center in Gliwice and a healthcare center in Knurów were surveyed. The patients were divided into three groups: 50 individuals with cardiovascular diseases, 50 with neurological diseases, and 50 with diabetes. The Acceptance of Illness Scale (AIS) was used as the research tool. The average acceptance of their own illness among patients with neurological diseases was 27.02. All participants achieved a high level of disease acceptance. Based on the data analysis, it can be concluded that the higher the level of acceptance, the better patients evaluated their health, as evidenced by the conducted research.

Another study was conducted by Stelmach et al. [18]. The study group consisted of 95 patients after a stroke. The research tools used were the Ferrans & Power Quality of Life Index, which assesses quality of life in terms of health-functional, socio-economic, psychological-spiritual, and family aspects, as well as two other scales: the Acceptance of Illness Scale (AIS) and the Functional

"Repty" Index. It is important to pay attention to patients' emotions and take a holistic approach. The conducted research shows differences in disease acceptance among individuals who function to varying degrees and can be independent. As many as 91.6% of respondents considered the ability to continue working as a very important aspect. Good relationships with loved ones were important for 84.2% of respondents.

Slightly lower in importance are family happiness, religious practices, and pain relief. These studies have shown that the more independent a patient can be in their daily life, the more capable they are of accepting their illness.

Conclusions

There was a statistically significant relationship between disease acceptance and life satisfaction in the study group. This relationship was positive, indicating that the higher the acceptance of the disease, the more satisfied the participants were with their lives.

Sociodemographic factors do not influence the level of disease acceptance and life satisfaction.

Implications for Nursing Practice

In summary, the statistically significant positive relationship between disease acceptance and life satisfaction highlights the need for nurses to focus on promoting acceptance, providing patient education and support, conducting psychosocial assessments, adopting a holistic care approach, and delivering culturally sensitive care. By incorporating these implications into their practice, nurses can contribute to improved outcomes and enhance the overall well-being of patients.

References

[1] Nalepa D., Weber D., Rogala R., Charzyńska-Gula M. Jakość życia chorych w warunkach domowych po przebytym udarze mózgu. *J Educ Health Sport*. 2015;5(11): 99–110.

[2] Bodzek S., Franek G., Nowak Kapusta Z. Wybrane aspekty jakości życia chorych po niedokrwiennych udarach mózgu. *Pielęg Neurol Neurochir*. 2016;5(2): 69–75.

[3] Pasek J., Opara J., Pasek T., Sieroń A. Ocena czynności życia codziennego w zależności od przebytego podtypu udaru niedokrwiennego mózgu i przeprowadzonej wczesnej rehabilitacji. *Udar Mózgu*. 2009;11(2):41–49.

[4] Dębińska M., Mraz M. Jakość życia osób po udarze mózgu. *Med Rodz*. 2016;1:14–18.

[5] Zielińska-Więczkowska H., Ćwiok M., Sas K. Evaluation of the quality of life of patients after ischemic stroke. *Gerontol Pol*. 2019;27(2):106–111.

[6] Jarosławska B., Błaszczyk B. Jakość życia chorych po przebytym udarze niedokrwiennym mózgu leczonych w rejonie szpitala powiatowego. *Stud Med*. 2012;26(2): 19–29.

[7] Kowalczyk B., Zawadzka B., Lubińska-Żądło B. Ocena związku poziomu wiedzy w zakresie prozdrowotnego postępowania po wystąpieniu udaru z jakością życia osób po udarze mózgu. *Rehabil Med*. 2018;22(1):22–31.

[8] Kamusińska E., Rojowska A. Akceptacja niepełnosprawności przez osoby po przebytym udarze mózgu. *Stud Med*. 2012;25(1):37–42.

[9] Basińska M.A., Andruszkiewicz A. Cechy osobowości typu D a funkcjonowanie w chorobie pacjentów ze schorzeniami przewlekłymi. *Pol Forum Psychol*. 2016; 21(2):221–237.

[10] Guzek Z., Lubczyńska A., Kowalska J. Ocena poczucia własnej skuteczności u pacjentów po udarze mózgu objętych systematyczną rehabilitacją. *Rozprawy Naukowe AWF we Wrocławiu*. 2019;65:93–102.

[11] Mazurek J., Lurbiecki J. Skala Akceptacji Choroby i jej znaczenie w praktyce klinicznej. *Pol Merkuriusz Lek*. 2014;36(212):106–108.

[12] Nadulska A. Lokomocja i samoobsługa u pacjentów po przebytym udarze niedokrwiennym mózgu usprawnianych kinezyterapeutycznie. *Zeszyty Naukowe Wyższej Szkoły Społeczno-Przyrodniczej im. Wincentego Pola w Lublinie*. 2013;17:97–106.

[13] Juczyński Z. *Narzędzia pomiaru w promocji i psychologii zdrowia* (wyd. 2). Pracownia Testów Psychologicznych Polskiego Towarzystwa Psychologicznego, Warszawa 2009.

[14] Ścisło L., Puto G., Ptak A., Walewska E., Czupryna A. Psychospołeczne aspekty funkcjonowania osób niepełnosprawnych ruchowo. *Hygeia Public Health*. 2014; 49(3):596–601.

[15] Załuski M. Radzenie sobie skoncentrowane na tworzeniu znaczenia i adaptacja pacjenta do choroby przewlekłej — doniesienie z badań. *Probl Pielęg*. 2014;22(2):209–215.

[16] Tasiemski T., Knopczyńska A., Wilski M. Jakość życia osób po udarze mózgu — badania pilotażowe. *Gerontol Pol*. 2010;18(3):128–133.

[17] Kurpas D., Kusz J., Jedynak T., Mroczek B. Stopień akceptacji choroby przewlekłej wśród pacjentów. *Fam Med Prim Care Rev*. 2012;14(3):396–398.

[18] Stelmach A., Lorencowicz R., Jasik J., Turowski K. Czynniki determinujące ocenę jakości życia dokonaną przez pacjentów, którzy przebyli udar mózgu. *Pielęg Neurol Neurochir*. 2016;5(4):136–143.

Corresponding Author:
Sylwia Krzemińska
Department of Nursing and Obstetrics,
Faculty of Health Sciences,
Wrocław Medical University
Bartla 5 street, 51-618 Wrocław, Poland
e-mail: sylwia.krzeminska@umw.edu.pl

Conflict of Interest: None
Funding: None
Author Contributions: Ewelina Bąk[A, C, D, F, H],
Magdalena Żywczak[B–F], Sylwia Krzemińska[C, F–H]

A — Concept and design of research, B — Collection and/or compilation of data, C — Analysis and interpretation of data, D — Statistical analysis, E — Writing an article, F — Search of the literature, G — Critical article analysis, H — Approval of the final version of the article

Received: 20.06.2023
Accepted: 24.07.2023