



Correlation between Family Support and Quality of Life Among Post-Stroke Patients

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ABSTRACT

Stroke is one of the leading causes of disability that can reduce patients' quality of life. Post-stroke patients often experience physical, psychological, and social limitations, thereby requiring family support to manage their daily lives. Family support plays a crucial role in assisting the care process, rehabilitation, and patients' adaptation to post-stroke conditions. This study aimed to determine the relationship between family support and quality of life among post-stroke patients. This research design uses a quantitative research approach. The approach method taken is a cross-sectional approach with analysis using Spearman's rank. The study results, with a p-value of $0.001 < 0.05$, showed that there was a relationship between family support and quality of life among post-stroke patients. The correlation coefficient ($r = 0.712$) indicated a strong positive relationship, suggesting that greater family support is associated with improved quality of life. In conclusion, according to the findings of this study, there is a correlation between family support and quality of life among post-stroke patients. A recommendation of the research is that family support can be used to help post-stroke patients with medication.

Keywords: Post-Stroke, Family Support, Quality of Life.

ABSTRAK

Stroke merupakan salah satu penyebab utama disabilitas yang dapat menurunkan kualitas hidup pasien. Pasien pasca stroke sering mengalami keterbatasan fisik, psikologis, dan sosial sehingga memerlukan dukungan keluarga dalam menjalani aktivitas sehari-hari. Dukungan keluarga berperan penting dalam membantu proses perawatan, rehabilitasi, serta adaptasi pasien terhadap kondisi pasca stroke. Penelitian ini bertujuan untuk mengetahui hubungan antara dukungan keluarga dan kualitas hidup pada pasien pasca stroke. Penelitian ini menggunakan pendekatan kuantitatif dengan desain cross-sectional, sedangkan analisis data dilakukan menggunakan uji korelasi *Spearman's rank*. Hasil penelitian menunjukkan nilai $p = 0,001 (< 0,05)$, yang berarti terdapat hubungan yang signifikan antara dukungan keluarga dan kualitas hidup pasien pasca stroke. Nilai koefisien korelasi ($r = 0,712$) menunjukkan hubungan positif yang kuat, yang mengindikasikan bahwa semakin tinggi dukungan keluarga, semakin baik kualitas hidup pasien. Berdasarkan temuan tersebut, dapat disimpulkan bahwa terdapat hubungan yang bermakna antara dukungan keluarga dan kualitas hidup pada pasien pasca stroke. Oleh karena itu, keluarga diharapkan memberikan dukungan yang optimal, termasuk dalam membantu kepatuhan pasien terhadap pengobatan, sebagai bagian dari upaya meningkatkan kualitas hidup pasien pasca stroke.

Kata Kunci: Pascastroke, Dukungan Keluarga, Kualitas Hidup.

INTRODUCTION

Stroke is a disorder of the cerebrovascular system (cerebral blood vessels), characterized by a reduction or obstruction of blood flow and oxygen supply to the brain, resulting in brain tissue damage or death and impaired brain function. According to the World Stroke Organization (WSO) in 2022, more than 12.2 million new stroke cases occur annually worldwide, and one in four individuals over the age of 25 will experience a stroke during their lifetime (World Stroke Organization, 2022). Feigin (2022) also reported that more than 62% of all stroke cases occur in individuals under the age of 70. Data reported by the Ministry of Health of the Republic of Indonesia in collaboration with the Indonesian Stroke Society indicated that the prevalence of stroke in Indonesia increased from 7 per 1,000 population in 2020 to 10.9 per 1,000 population in 2022. Data from the 2018 Indonesian Basic Health Research (Riskesdas) showed that the highest prevalence of stroke occurred in East Kalimantan Province (14.7%), while the lowest was found in Papua Province (4.1%) (Kementerian Kesehatan Republik Indonesia, 2019). The incidence of stroke increases with age, with the majority of cases occurring in individuals aged 75 years and older (50.2%) and the lowest incidence among those aged 15–24 years (0.6%). Based on sex, the prevalence of stroke in men (11.0%) was nearly similar to that in women (10.95%) (Kementerian Kesehatan Republik Indonesia, 2019). This increasing trend reflects a growing burden of post-stroke cases in the community.

The impact of stroke on post-stroke patients is often difficult to prevent and manage and can be highly disruptive, requiring time for patients to adjust to changes in their lifestyle and psychological condition. Individuals who experience stroke are often unable to perform activities as they did prior to the illness and require considerable time to adapt. Coping abilities vary among individuals; therefore, post-stroke patients demonstrate different levels of recovery success, depending on their positive internal strengths in responding to the situation. These physical and psychological changes may lead to discomfort and reduced patient independence, making the family the primary source of emotional support and practical assistance. The impact of stroke is not only experienced by patients but also by family members, who serve as the main caregivers during the recovery process. Post-stroke patients often undergo various physical, psychological, social, and economic changes that require comprehensive family involvement. Families play a crucial role in providing emotional, informational, and instrumental support to help patients adapt to post-stroke conditions (So & Park, 2024).

The quality of life of post-stroke patients refers to a state of physical, psychological, social, and environmental well-being that reflects the patient's ability to adapt to changes resulting from stroke. Quality of life is determined not only by medical conditions but also by social support, particularly from family members. Family support plays a crucial role in assisting patients during rehabilitation, motivating recovery, and reducing psychological burdens such as stress and depression. Studies have shown that post-stroke patients who receive strong family support demonstrate higher levels of independence and better quality of life compared to those who receive inadequate family support. Family support consists of emotional, instrumental, informational, and appraisal support, each contributing differently to patient outcomes. Family support has been consistently reported as a significant determinant of quality of life among post-stroke patients. Emotional support helps reduce psychological distress such as anxiety and depression, thereby improving patients' psychological well-being. Instrumental support facilitates assistance in activities of daily living, enhances functional independence, and supports access to healthcare services. Informational support improves patients' understanding of stroke management, increases adherence to treatment, and promotes effective self-care behaviors. In addition, appraisal support strengthens patients' self-efficacy and motivation through positive reinforcement and encouragement. Overall, these forms of family support facilitate better adaptation to post-stroke conditions and have been consistently associated with improved quality of life among stroke survivors (Chen et al., 2025).

Family support is a crucial element in the healing and recovery process of disease. After a stroke, patients experience various physical limitations; however, self-acceptance can help mitigate the impact of these limitations. To prevent further deterioration of the patient's condition, strong social support from family members and close relatives is essential. Such support is

expected to provide positive guidance, encouragement, motivation, and to demonstrate openness and care toward the patient (Okwaraji, 2025)

Family support has a significant influence on the quality of life of stroke patients, as the family represents the closest social environment for individuals with stroke. Actions and behaviors exhibited by family members can affect both recovery and health deterioration in stroke patients. Therefore, family support is critically needed to improve health status and enhance the quality of life of stroke patients (Alshahrani, 2020). Previous studies have extensively examined the quality of life of post-stroke patients from the perspectives of physical functioning and medical rehabilitation. However, research specifically investigating the role of family support as a psychosocial factor in improving patients' quality of life at the primary healthcare level remains limited. Most previous studies have been conducted in referral hospitals, whereas research in primary healthcare facilities such as community health centers remains very limited.

RESEARCH METHODS

This study employs a quantitative research design with a cross-sectional plan. The sample in this study was 45. Sampling using the of total sampling. Following the respondent's signature on the informed consent and consent sheet, Respondents completed the Perceived Social Support-Family (PSS-Fa) scale, which has demonstrated validity with moderate to strong correlations ($r = 0.40-0.85$) for assessing family support, as well as the Stroke-Specific Quality of Life (SS-QOL) scale, which also shows validity with moderate to strong correlations ($r = 0.40-0.85$) for evaluating quality of life. The *Spearman Rank* bivariate analysis was used in this study. This research was carried out at the Mangkurawang Community Health Center, Tenggara City, Kutai Kartanegara, East Kalimantan, from January to February 2026. Inclusion criteria were post-stroke patients diagnosed by a physician, aged ≥ 18 years, registered at the Mangkurawang Community Health Center, living with their families, able to communicate effectively, and willing to participate in the study. Exclusion criteria included patients with severe cognitive impairment, acute medical conditions requiring immediate medical attention, and respondents who did not complete the questionnaire. This study was conducted after obtaining ethical approval with reference number 18/KEPK-FK/I/2026 from the Faculty of Medicine, Mulawarman University, Samarinda.

RESULTS

Table 1. Sociodemographic characteristics, family support, and quality of life of respondents (N = 45).

Variables	Categories	n	%
Age (years)	40–49	4	8.9
	50–59	14	31.1
	60–69	18	40.0
	70–83	9	20.0
Gender	Male	24	53.3
	Female	21	46.7
Education	No formal schooling	2	4.4
	Elementary school	9	20.0
	Junior high school	22	48.9
	Senior high school	12	26.7
Family Support	Low	11	24.4
	Moderate	24	53.3
	High	10	22.2
Quality of Life	Low	30	66.7
	Moderate	10	22.2
	High	5	11.1

The respondents were predominantly aged 60–69 years (40.0%), followed by those aged 50–59 years (31.1%), indicating that most participants belonged to the older adult age group. Male respondents slightly outnumbered females, accounting for 53.3% and 46.7% of the sample, respectively. Regarding educational attainment, nearly half of the respondents had completed

junior high school (48.9%), suggesting a relatively low educational background among the study population. Most respondents reported moderate levels of family support (53.3%), whereas approximately one-quarter experienced low family support (24.4%). Furthermore, the majority of respondents demonstrated a low quality of life (66.7%), indicating that diminished well-being remains a significant concern among older adults in this population.

Table 2. Correlations between family support and quality of life.

Variable	r_{xy}	p-value	95% CI
Family support Quality of Life	0.712	0.001	0.555 – 0.822

Based on Table 2, the results of the analysis of the relationship between family support and quality of life, it was carried out using Spearman rank with a significance level of $\alpha = 5\%$ with $p\text{-value} = 0.001 < \alpha = 0.05$ and the strength of the relationship was 0.712, the correlation was strong category with a positive direction. This means that there is a significant relationship between family support and quality of life among post-stroke patients. This indicates that the better the family support received by post-stroke patients, the higher their perceived quality of life. Conversely, patients who receive low family support tend to have a lower quality of life. The 95% confidence interval ranged from 0.555 to 0.822, confirming the stability and statistical significance of the correlation.

DISCUSSION

Optimal family support, including emotional, informational, instrumental, and appraisal support, plays a crucial role in helping post-stroke patients adapt to physical and psychological limitations and subsequently improve their overall quality of life (Van Nimwegen et al., 2023). These findings are consistent with Tanua et al. (2023), who reported that patients receiving strong family support demonstrated better quality of life because family members contribute to meeting physical needs, providing motivation, and supporting rehabilitation processes; similarly, family support has been recognized as an important determinant of physical functioning, psychological well-being, and social adaptation among post-stroke patients (Kokorelias et al., 2019; Zhang et al., 2023; Stolwyk et al., 2024), with emotional, informational, instrumental, and appraisal support collectively facilitating recovery and adaptation (Dewi et al., 2025).

Emotional support, such as encouragement, attention, and reassurance, can reduce stress, anxiety, and depression while increasing patients' motivation to participate actively in rehabilitation programs (Mare et al., 2025; Seok & Lee, 2025), resulting in greater treatment adherence and psychological stability that ultimately improves quality of life (Wibowo, 2021; Rawung & Rantepadang, 2024). Furthermore, informational support regarding medication use, self-care practices, and rehabilitation exercises improves patients' understanding of their condition, enhances adherence to therapeutic recommendations, and reduces uncertainty associated with post-stroke conditions (Bakas et al., 2022; Fiscarina et al., 2023), thereby promoting active participation in health management and better quality-of-life outcomes (Zhachrani et al., 2024; Pangaribuan et al., 2026).

Instrumental support, including assistance with activities of daily living such as eating, bathing, and mobility, contributes to physical independence, reduces complications, and facilitates access to continuous rehabilitation and healthcare services (O'Callaghan et al., 2022; Sun et al., 2023). In addition, appraisal support through recognition, encouragement, and positive feedback from family members strengthens self-confidence and social adaptation, enabling patients to maintain their commitment to recovery and resulting in better quality of life across physical, psychological, social, and environmental domains (Israfil, 2024; Israfil et al., 2024; Okwaraji, 2025).

This study has several limitations that should be considered when interpreting the findings. The cross-sectional design precludes the establishment of causal relationships between family support and quality of life, while the relatively limited sample size and the absence of multivariable adjustment for potential confounders such as age, sex, educational level, stroke severity, and duration since stroke may have influenced the observed associations. Therefore, future studies are recommended to employ longitudinal or interventional designs with larger

samples and multivariate analyses to provide more robust evidence regarding the effect of family support on quality of life among post-stroke patients.

CONCLUSION

There is a correlation between family support and quality of life among post-stroke patients. Family support is an important factor associated with better quality of life of post-stroke patients. Therefore, nursing interventions should adopt a family-centered approach, actively involving family members in daily care, providing education regarding rehabilitation, monitoring the patient's condition, and offering emotional support and counseling. This approach may contribute to have a positive impact on patients' physical, psychological, and social well-being, as well as their adaptive abilities in managing daily life after a stroke.

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