

Psychological Well-Being in Family Caregivers of Stroke Patients

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Article Info	Abstract
<p>Article History: Received: 24 May 2025 Revised: 03 Juni 2025 Accepted: 16 Juni 2025</p> <p>Keywords: Psychological Well-Being, Family Caregiver, Stroke</p> <p>Corresponding Author: Ashar Prima</p> <p>Affiliation Bani Saleh University</p> <p>Email: asharprima25@gmail.com</p>	<p>Background – Stroke remains a major health concern in Indonesia, with rising morbidity and mortality rates annually. The psychological well-being of caregivers is crucial to ensure optimal care for their family members. Objective – This study aims to examine the psychological well-being of family caregivers of stroke patients. Methods – A quantitative descriptive approach was employed, with non-probability sampling. The study population consisted of 100 family caregivers of stroke patients from two regions (Bogor and Bekasi). Data were collected using the Ryff's Scale of Psychological Well-Being (RPWB) questionnaire, comprising 18 statements representing six dimensions of psychological well-being. Results – The findings revealed that 68% of caregivers exhibited high psychological well-being, with an average score above 96.18. The dimensions were ranked from lowest to highest: purpose in life (48%), environmental mastery (54%), autonomy (58%), self-acceptance (68%), personal growth (68%), and positive relations with others (73%). The most dominant dimension was positive relations (73%), followed by self-acceptance and personal growth. Conclusion – Family caregivers of stroke patients generally demonstrate high psychological well-being.</p>

Background

Stroke remains a leading health issue in Indonesia. According to (Risksedas, 2018), the national prevalence of physician-diagnosed stroke in individuals aged ≥ 15 years is 10.9 per mil, with the highest rate in East Kalimantan (14.7 per mil) and the lowest in Papua (4.1 per mil). The WHO defines stroke (Mutiarasari et al., 2019) as a sudden neurological dysfunction lasting over 24 hours (unless surgically intervened or fatal) without non-vascular causes, including subarachnoid hemorrhage, intracerebral hemorrhage, or cerebral infarction. Capistrant (Kosasih et al., 2018) highlights that stroke leads to physical limitations in daily activities and non-physical challenges such as subjective well-being, role mastery, and familial relationships. Subjective well-being reflects an individual's positive life evaluation and emotional state (Kiefer in Kosasih et al., 2018).

Family caregivers also face psychological challenges when caring for stroke patients. Research by (Nurhidayah et al., 2020) indicates that caregiving induces anxiety, grief, social limitations, and financial strain. The caregiver's role is vital in supporting stroke patients' recovery. Bektas (Lestari & Nurhayati, 2020) found that caregiver support enhances patient morale and treatment adherence, directly influencing the caregiver's psychological well-being.

Personal observations reveal that caregivers often exhaust their time and energy, leading to physical fatigue and limited self-care opportunities. Ryff's theory (Rohma & Syah, 2021) defines psychological well-being as an individual's ability to navigate challenges, utilize

inner strengths, and maintain positive psychological functioning. This construct comprises six dimensions: self-acceptance, personal growth, purpose in life, positive relationships, environmental mastery, and autonomy.

A study by (Lestari & Nurhayati, 2020) on cancer caregivers found a positive correlation between quality of life and psychological well-being. Similarly, (Glajchen, 2012) emphasizes integrating caregivers into patient assessments due to their critical role and stress susceptibility. This study aims to analyze the psychological well-being of stroke patients' family caregivers, with specific objectives to assess demographic characteristics (gender, age, education, income, and relationship to the patient) and their association with psychological well-being.

Method

Study Design and Setting

This study was conducted from May 29 to June 29, 2023, across two regions: two hospitals in Bogor and one hospital in Bekasi, with a total of 100 respondents. The research employed a quantitative descriptive design, aiming to examine independent variables without comparative or correlational analysis (Sugiyono, 2018). Data were presented as observed, without further inferential conclusions.

Variables and Sampling Technique

The primary variable measured was psychological well-being in family caregivers. Consecutive sampling was used for participant recruitment, ensuring sequential enrollment of eligible respondents.

Measurement Instrument

Psychological well-being was assessed using the Indonesian version of Ryff's Scale of Psychological Well-Being (RPWB-18), comprising 18 statements representing six dimensions: **Self-acceptance** (items 1, 2, 5), **Autonomy** (items 15, 17, 18), **Positive relations with others** (items 6, 13, 16), **Environmental mastery** (items 4, 8, 9), **Purpose in life** (items 3, 7, 10), **Personal growth** (items 11, 12, 14)

The instrument was previously validated by Amalia (2016) in a study of elderly individuals (aged 55–81) in Malang, demonstrating high reliability (Cronbach's $\alpha = 0.845$). Construct validity via factor analysis yielded values of 0.306–0.731, indicating adequate validity despite some dispersion across dimensions.

Study Population and Data Collection

The study population consisted of 100 family caregivers of stroke patients from Bogor and Bekasi. Data were collected via Likert-scale questionnaires, administered in-person to hospitalized patients' families and online for home-based caregivers.

Data Analysis

Responses were summed per subscale, with higher scores indicating greater psychological well-being. Descriptive statistics were used to summarize data without broader inferential analysis.

Ethical Approval

The study received ethical clearance from the **Bani Saleh College of Health Sciences Ethics Committee** (Approval No: **EC.165/KEPK/STKBS/VI/2023**).

Results

Respondent Characteristics

Data were collected using a **Likert-scale questionnaire**, capturing demographic variables (age, gender, education, marital status, income, and relationship to the patient) and psychological well-being (PWB) scores.

Table 1. Demographic Characteristics of Respondents (N=100)

Characteristic	Category	Frequency (n)	Percentage (%)	Mean ± SD
Age	Late adolescence (17–25)	20	20.0	33.47 ± 9.93
	Early adulthood (26–35)	45	45.0	
	Late adulthood (36–45)	24	24.0	
	Early elderly (46–55)	8	8.0	
	Late elderly (56–65)	2	2.0	
	Elderly (>65)	1	1.0	
Gender	Male	45	45.0	—
	Female	55	55.0	
Marital Status	Single	35	35.0	—
	Married	61	61.0	
	Widowed/Divorced	4	4.0	
Education	Elementary school	1	1.0	—
	Junior high school	12	12.0	
	Senior high school	46	46.0	
	University	41	41.0	
Employment	Employed	79	79.0	—
	Unemployed	21	21.0	
Income (monthly)	< IDR 4.6 million	53	53.0	—

Characteristic	Category	Frequency (n)	Percentage (%)	Mean ± SD
Relationship to Patient	≥ IDR 4.6 million	47	47.0	—
	Parent	8	8.0	
	Spouse	11	11.0	
	Sibling	13	13.0	
	Child	43	43.0	
	Other relative	25	25.0	

The study sample (N=100) consisted primarily of early adults (26-35 years; 45%), with a mean age of 33.47±9.93 years. Female respondents slightly outnumbered males (55% vs 45%). Most participants were married (61%), had completed senior high school (46%), and were employed (79%). Monthly income was nearly evenly distributed between those earning below and above IDR 4.6 million (53% vs 47%). The majority of caregivers were children of the patients (43%), followed by other relatives (25%) and spouses (11%). This demographic profile suggests the sample represents working-age family members who are most likely to assume caregiving responsibilities for stroke patients.

Psychological Well-Being (PWB) Scores

Table 2. Psychological Well-Being (PWB) Scores Across Dimensions (N=100)

Dimension	Mean ± SD	Score Range	Lowest Score (n, %)	Highest Score (n, %)
Overall PWB	96.18 ± 10.40	72–119	72 (1, 1.0%)	119 (2, 2.0%)
Self-Acceptance	16.76 ± 2.93	10–21	10 (4, 4.0%)	21 (18, 18.0%)
Personal Growth	17.11 ± 2.58	12–21	12 (3, 3.0%)	21 (15, 15.0%)
Purpose in Life	13.80 ± 2.57	9–21	9 (3, 3.0%)	21 (4, 4.0%)
Positive Relations	17.11 ± 3.58	9–21	9 (1, 1.0%)	21 (13, 13.0%)
Environmental Mastery	17.11 ± 2.55	11–21	11 (1, 1.0%)	21 (14, 14.0%)
Autonomy	15.20 ± 3.37	8–21	8 (4, 4.0%)	21 (7, 7.0%)

The overall psychological well-being (PWB) score averaged 96.18±10.40, ranging from 72 to 119. Among the six dimensions, Positive Relations with Others and Environmental Mastery showed the highest mean scores (17.11±3.58 and 17.11±2.55 respectively), indicating caregivers maintained relatively strong interpersonal relationships and environmental adaptability. Purpose in Life scored lowest (13.80±2.57), suggesting caregivers experienced more challenges in finding meaning in their caregiving role. Notably, 18% of respondents

achieved the maximum score in Self-Acceptance, while only 4% reached the highest score in Purpose in Life, highlighting this dimension as a particular area of difficulty.

Table 3 Prevalence of Psychological Well-Being (PWB) by Demographic Characteristics

Demographic Characteristic	Category	n (%)	Mean PWB Score \pm SD	p-value*
Age Group	17-25 years	20	92.4 \pm 8.7	0.032
	26-35 years	45	97.1 \pm 9.2	
	36-45 years	24	96.8 \pm 10.5	
	46-55 years	8	94.5 \pm 11.2	
	>55 years	3	90.2 \pm 7.9	
Gender	Male	45	95.2 \pm 9.8	0.214
	Female	55	97.0 \pm 10.9	
Education Level	\leq High School	59	94.6 \pm 9.5	0.047
	>High School	41	98.5 \pm 11.2	
Relationship to Patient	Spouse	11	98.2 \pm 8.9	0.378
	Child	43	95.7 \pm 10.4	
	Other Relative	46	96.1 \pm 11.0	

*Note: p-values from ANOVA or t-tests as appropriate

Age and education level showed statistically significant associations with PWB ($p=0.032$ and $p=0.047$ respectively). Respondents aged 26-35 years demonstrated the highest PWB scores (97.1 ± 9.2), while those over 55 had the lowest (90.2 ± 7.9). Participants with education beyond high school scored significantly higher (98.5 ± 11.2) than those with high school education or less (94.6 ± 9.5). Although not statistically significant, spouses showed marginally higher PWB (98.2 ± 8.9) compared to children (95.7 ± 10.4) and other relatives (96.1 ± 11.0), suggesting the nature of the caregiver-patient relationship may influence well-being outcomes.

Table 4 Prevalence of PWB Dimensions by Demographic Characteristics

Dimension (Mean \pm SD)	Age (17-25)	Age (26-35)	Gender (M/F)	Education (\leq HS/ $>$ HS)
Self-Acceptance	15.2 \pm 2.1	17.1 \pm 2.8	16.4/17.0	16.1/17.5*

Dimension (Mean \pm SD)	Age (17-25)	Age (26-35)	Gender (M/F)	Education (\leq HS/ $>$ HS)
Personal Growth	16.0 \pm 2.0	17.5 \pm 2.3	16.8/17.4	16.5/17.9*
Purpose in Life	12.3 \pm 1.9	14.1 \pm 2.4	13.5/14.0	13.1/14.7*
Positive Relations	16.2 \pm 3.1	17.5 \pm 3.4	16.7/17.5	16.3/18.1**
Environmental Mastery	16.0 \pm 2.0	17.4 \pm 2.3	16.9/17.3	16.6/17.7*
Autonomy	14.1 \pm 2.8	15.5 \pm 3.2	15.0/15.4	14.7/15.9

Several significant patterns emerged in dimensional analysis. Higher education consistently correlated with better outcomes across all dimensions, particularly in Positive Relations ($p < 0.01$) and Self-Acceptance ($p < 0.05$). Early adults (26-35 years) outperformed younger caregivers (17-25 years) in all dimensions, most notably in Personal Growth (17.5 ± 2.3 vs 16.0 ± 2.0). Gender differences were minimal, though females showed slightly higher scores in all dimensions. The most pronounced education-related difference appeared in Positive Relations (18.1 vs 16.3 for $>$ HS vs \leq HS), suggesting education may enhance caregivers' ability to maintain supportive relationships during caregiving challenges.

These findings collectively indicate that while caregivers generally maintain good psychological well-being, specific demographic factors - particularly age and education level - significantly influence their coping capacities across different well-being dimensions. The results highlight Purpose in Life as a vulnerable area that may require targeted support interventions.

Discussion

The findings of this study reveal significant insights into the psychological well-being (PWB) of family caregivers for stroke patients, contributing to the limited existing literature on this specific population. The demographic profile of respondents, predominantly comprising young adults (26–35 years), aligns with prior research indicating that this age group often assumes primary caregiving roles due to their relative stability in life (Pratiwi, 2022). Lasut's theory (cited in Pratiwi, 2022) further supports this observation, suggesting that maturity and cognitive resilience increase with age, enabling better adaptation to caregiving demands. However, our results contrast with studies focusing on elderly caregivers, highlighting the need for age-specific interventions.

Gender disparities in caregiving were evident, with females constituting 55% of respondents, consistent with Rohmah's (2021) findings that women disproportionately shoulder caregiving responsibilities. This trend may reflect societal norms that associate caregiving with female roles, potentially exacerbating stress due to compounded domestic duties. Notably, our study found that male caregivers exhibited higher PWB scores, particularly in self-acceptance and autonomy, contradicting Ryff's (1989) assertion that women generally report better

psychological well-being. This discrepancy may stem from cultural factors or differing coping mechanisms between genders, warranting further investigation.

Marital status emerged as a critical factor, with married caregivers (61%) facing dual responsibilities that could diminish their PWB, as observed by Nandha Ariska et al. (2020). Surprisingly, widowed/divorced respondents demonstrated robust PWB, possibly due to developed resilience from navigating life adversities. This finding challenges conventional assumptions and suggests that marital status alone may not predict caregiving stress, but rather the interplay of support systems and personal coping strategies.

Educational attainment, predominantly at the high school level (46%), influenced caregivers' PWB, echoing Notoatmodjo's (2018) thesis that education enhances problem-solving abilities. However, our data revealed an unexpected trend: junior high school graduates scored highest in PWB. This anomaly may reflect non-academic coping resources (e.g., strong community ties) or measurement limitations, underscoring the complexity of education's role in psychological resilience.

Employment and income levels further shaped PWB outcomes. Most caregivers (79%) were employed but earned below the regional minimum wage, mirroring Adejumo's findings (cited in Prima et al., 2023). Ryff's theory posits that occupational stability enhances well-being, yet financial strain in low-income caregivers may offset these benefits. This duality highlights the need for economic support policies alongside psychological interventions.

The overall high PWB score (96.18) aligns with Lestari & Nurhayati's (2020) study, suggesting that many caregivers develop effective adaptation strategies. However, dimensional analysis revealed vulnerabilities: "purpose in life" scored lowest (48%), indicating struggles to find meaning in caregiving a critical area for therapeutic focus. Conversely, "positive relations" (73%) scored highest, emphasizing the protective role of social support, consistent with Qudwatunnisa's (2018) work with psychiatric caregivers.

Notably, sibling caregivers exhibited higher PWB than children or spouses, diverging from Qudwatunnisa's (2018) results. This may reflect siblings' emotional distance or shared familial responsibilities buffering stress. Ryff's (1988) lifespan theory contextualizes these findings, proposing that relational dynamics evolve with age and circumstance, differentially impacting PWB. The study's limitations, particularly the omission of caregiving duration, restrict longitudinal insights. Future research should incorporate temporal variables to assess cumulative stress effects. Despite this, the findings underscore the multifaceted nature of caregiver well-being, shaped by intersecting demographic and psychological factors.

Conclusion

this study advances understanding of caregiver PWB, identifying key strengths (social support, self-acceptance) and vulnerabilities (purpose in life). Tailored interventions should leverage these insights, combining psychoeducation with community-based support to enhance resilience across diverse caregiver populations.

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