

Factors Influencing Family Resilience in Caring for Patients with Schizophrenia: A Cross-Sectional Study

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Abstract: Families play a crucial role in the care of patients with schizophrenia, as patients often require long-term treatment and experience decreased ability to carry out daily activities independently. Families face various challenges that may affect their quality of life. Therefore, they must remain resilient in order to endure, adapt, and continue providing support to patients despite physical, emotional, and social pressures. This study aimed to analyze the factors influencing resilience among families caring for patients with schizophrenia. A descriptive cross-sectional design was employed, involving 203 families selected through multi-stage random sampling. Data collection was conducted in June 2025 using the General Self-Efficacy Scale, Caregiver Burden Inventory, Affiliate Stigma Scale, Social Support Scale, and the Family Resilience Assessment Scale. Data were analyzed using descriptive statistics and bivariate analysis with Spearman's rank correlation. Of the 203 participants surveyed, 68.5% were aged 30–59 years, 59.6% were female, 56.2% had completed senior high school (SMA/SMK), 89.2% were married, 37.9% worked as laborers, 37.4% were the patient's siblings, and 46.8% had been caring for the patient for more than 10 years. Bivariate analysis showed a positive correlation between social support ($r = 0.256$, $p < 0.001$), self-control ($r = 0.210$, $p = 0.003$), and self-efficacy ($r = 0.618$, $p < 0.001$) with family resilience. Internal factors influencing family resilience were self-efficacy and self-control, while external factors included social support. Strengthening the role of nurses through family-based psychosocial interventions may contribute to improving care quality and treatment outcomes for patients with schizophrenia..

1 INTRODUCTION

Schizophrenia is a serious mental disorder influenced by heterogeneous genetic and neurobiological factors, which affect brain development and cause the emergence of psychotic symptoms such as hallucinations, delusions, disorganization, motivational, and cognitive dysfunctions (McCutcheon, Reis Marques, and Howes 2020). A total of 24 million people, or 1 in 300 individuals worldwide, experience schizophrenia (WHO 2022). The impacts of schizophrenia include social isolation, stigma, and unemployment. Patients often engage in unhealthy behaviors such as smoking, poor diet, and substance abuse. These factors shorten life expectancy by 13 to 15 years and increase the risk of suicide by 5 to 10 times (Hany and Rizvi 2024).

Patients with schizophrenia experience a decline in functioning, making them dependent on caregivers to help manage treatment, provide food, assist with self-care, and prevent relapse (Behrouian et al. 2021) such as mothers, fathers, and spouses (Zoladl et al. 2020); (Fernandes et al. 2021). This condition aligns

with cultural norms in Asia, where close family members are expected to serve as primary caregivers when a family member is ill (Stanley, Bhuvaneshwari, and Bhakyalakshmi 2016). Negative experiences reported by families during caregiving include a lack of support, feelings of self-loss, and caregiver burden (Gunawan et al. 2024). Families also experience stress, which affects their psychological well-being (Arni Nur Rahmawati, Ita Apriliyani, and Tri Sumarni 2023). Additionally, they often feel overwhelmed, frustrated, angry, anxious, irritable, emotionally distressed, pressured, suicidal, and experience poor quality of life (Kasan, Dwidiyanti, and Kaloeti 2023). Caregiver stigma further increases caregiver burden, worsens mental health, and lowers quality of life (Becerra Carrillo, Guasconi, and Barelo 2024).

Family resilience is needed to reduce the physical, emotional, social, and economic burdens faced by families. Caregiving burden may, in fact, enhance resilience, as families learn to develop skills and improve social interactions. This is consistent with conflict theory, which posits that social changes resulting from conflict can lead to new agreements that

differ from previous conditions (Syahas 2019). When the caregiving burden decreases, resilience tends to increase (Li et al. 2018), (Shao et al. 2024). Family resilience refers to the family's ability to withstand and recover to their previous condition before experiencing stress, which is characterized by positive emotions, clear life goals, a sense of security, and the ability to work together under various conditions (Rutten et al. 2013), (Hashemi Z, Mahmood A 2011), (Behprouian et al., 2021).

Resilience serves as a risk-reducing factor for families by preventing negative outcomes. It also functions as a protective factor, as resilient families possess problem-solving abilities (Fitryasari et al. 2018). Families with higher resilience are more likely to seek help, making caregiving roles lighter and adaptive capacity stronger. Conversely, families lacking resilience tend to feel burdened by caregiving responsibilities, even when the patient does not require assistance (Joling et al. 2016), (Ong et al. 2018), (Gómez-Trinidad et al. 2021), (Kim et al. 2018), (Buanasari, Rahman, and Gannika 2023), (Mao et al. 2021). Families also demonstrate higher resilience when they have health insurance (Lopez and Magaña 2020). Resilience acts as a source of emotional strength for families, providing positive impacts such as reducing patient relapse, increasing patient satisfaction, and lowering anxiety among family members (Fitryasari et al. 2020), (Zhang et al. 2024), (Ao et al. 2024). This study aims to identify the factors influencing family resilience in caring for patients with schizophrenia, including social support, self-control, and self-efficacy.

2 METHODS

This study employed a cross-sectional design to examine the factors influencing family resilience in caring for patients with schizophrenia in the community. The respondents in this study were families caring for patients with schizophrenia in the working areas of Seyegan, Turi, and Ngemplak II Public Health Centers, Sleman Regency, Yogyakarta Special Region. The sampling technique used was simple random sampling. Respondents were selected based on criteria determined by the researchers: (1) families living with the patient and providing direct and continuous care, and (2) families able to read and write.

The sample size was determined using the "10 times rule." This study involved 13 indicators, and based on the calculation, the minimum sample

required was 85 and the maximum was 130 participants. To reduce the risk of error, the sample size was set at $13 \text{ indicators} \times 14 = 182$ participants. To anticipate dropout, an additional 10% was added, resulting in a total of 203 families caring for patients with schizophrenia.

Five instruments were used in this study, each of which was tested for validity with 50 respondents from locations different from the study sites.

1. Respondent demographic questionnaire, consisting of age, gender, marital status, education level, relationship to the patient, and length of caregiving.
2. Social Support Questionnaire, modified from Fitriyasari et al. (2020). This questionnaire consisted of 13 items with four response options: 0 = never, 1 = rarely, 2 = sometimes, 3 = always, 4 = always. Higher scores indicated greater social support received. Validity testing showed that 5 items were invalid and excluded from the study. Cronbach's Alpha: 0.813.
3. General Self-Efficacy Scale, used to measure self-efficacy. This questionnaire consisted of 10 items with four response options: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. Validity testing showed that all items were valid. Cronbach's Alpha: 0.924.
4. Family Resilience Assessment Scale, used to measure family resilience. This questionnaire consisted of 32 items with four response options: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. Higher scores indicated greater family resilience. Validity testing showed that all items were valid. Cronbach's Alpha: 0.924.

Data were analyzed using SPSS version 27 with a significance level set at 0.05. Demographic data and study variables were analyzed using descriptive statistics. Spearman's rank correlation analysis was used to explore the relationship between self-efficacy, family support, self-control, and family resilience. This study was approved by the Health Research Ethics Committee of Dr. Moewardi General Hospital (No: 732/IV/HREC/2025). Prior to participation, respondents were provided with information about the study's objectives, procedures, and benefits. The researchers ensured the confidentiality of respondent data. In addition, respondents had the right to withdraw or decline participation. Informed consent was obtained both verbally and in writing before the study commenced.

3 DISCUSSION

Demographic Characteristics

Table 1 presents the characteristics of the study respondents, the majority of whom were female (59.6%), with a mean age of 51.9 years (SD = 11.9). Most respondents had completed senior high school (56.2%), were married (87.2%), worked as laborers (37.9%), and were the patient's siblings (37.4%). Nearly half had been providing care for more than 10 years (46.8%). Social support was mostly in the moderate category (70.9%), self-control was in the moderate category (55.7%), self-efficacy was in the moderate category (71.4%), and family resilience was predominantly in the moderate category (73.4%).

Table 1. Demographic Characteristics of Respondents (N = 203)

Characteristics	n	%	Mean \pm SD
Gender			
Woman	121	59.6	
Man	82	40.4	
Age			
20-29 years	8	3.9	51.9 \pm 11.9)
30-59 years	139	68.5	
Above 60 years	56	27.6	
Education Level			
Elementary School	40	19.7	
Junior High School	37	18.2	
Senior High School	114	56.2	
Higher Education	12	5.9	
Marital Status			
Married	181	89.2	
Unmarried	13	6.4	
Widowed/ Divorced	9	4.4	
Occupation			
Unemployed	28	13.8	
Laborer	77	37.9	
Self-employed	15	7.4	
Farmer	57	28.1	
Private employee	25	12.3	
Civil servant	1	0.5	
Relationship to the Patient			
Spouse	53	25.6	
Child	25	12.3	
Sibling	76	37.4	
Parent	50	24.6	
Duration of Caregiving			
Less than 1 year	2	1.0	
1-5 years	40	19.7	
6-10 years	66	32.5	
More than 10 years	95	46.8	
Social Support			
Low	34	16.7	

Characteristics	n	%	Mean \pm SD
Moderate	141	69.5	23.33 \pm
High	28	13.8	6.34
Self-Control			
Low	88	43.3	32.12 \pm
Moderate	113	55.7	4.50
High	2	1.0	
Self efficacy			
Low	35	17.2	29.25 \pm
Moderate	145	71.4	4.6
High	23	11.3	
Family Resilience			
Low	31	15.3	97.16 \pm
Moderate	149	73.4	9.79
High	23	11.3	

Table 2 presents the correlation between factors influencing family resilience in caring for patients with schizophrenia.

Table 2. Correlation Results of Factors Influencing Family Resilience in Caring for Patients with Schizophrenia

Variable	r	p	Result
Social Support	0.268	< 0.001	Positive correlation, significant
Self efficacy	0.618	< 0.001	Positive correlation, significant
Self-Control	0.210	0.003	Positive correlation, significant

Table 1 describes the demographic characteristics of the study respondents, including age, gender, education, marital status, occupation, relationship to the patient, and duration of caregiving. The results showed that the average age of respondents was 51.9 years \pm 11.9. This finding is supported by a previous study which reported that the average age of caregivers of patients with mental disorders was 48.6 years (Cantillo-Medina, Perdomo-Romero, and Ramírez-Perdomo 2022) which falls within the adult age stage (30–59 years) and is classified as the productive age range. This condition is consistent with demographic data in Indonesia, where the productive age group has the highest percentage compared to other age groups, accounting for 69.13% (BKKBN 2024). Respondents' characteristics based on gender showed that the majority were female (59.6%). Previous research also found that patients with mental disorders were more often cared for by women, such as mothers or sisters (Cantillo-Medina, Perdomo-

Romero, and Ramírez-Perdomo 2022). The high proportion of caregiving roles undertaken by women may be influenced by cultural norms, particularly in Indonesia, where women are expected to take on greater caregiving responsibilities compared to men. The majority of respondents had completed senior high school (56.2%). This reflects the general educational development in Indonesia. In 2023, 30.22% of the population aged over 15 years had completed senior high school or its equivalent (BKKBN 2024).

Respondents' characteristics based on marital status showed that most were married (89.2%). This finding is in line with the fact that the majority of respondents were of productive age. At this stage of life, people usually begin to marry. In Nusa Tenggara, Indonesia, it was recorded that the average age of first marriage for women who were already working was over 21 years (Cahyono 2023). The majority of respondents worked as laborers (37.9%). Occupation is related to family income. According to KBBI, a laborer is a person who works for others to earn wages. Most respondents in this study worked for others within their local community, leading to uncertain income. This is consistent with previous research showing that the majority of caregivers of patients with mental disorders had low income (Livana, Daulima, and Mustikasari 2020).

Some patients were cared for by their siblings (37.4%). Based on field conditions, the inability of parents due to aging factors caused caregiving responsibilities to be taken over by close family members such as siblings. This finding is consistent with previous research which showed that caregiving roles were most commonly undertaken by mothers or sisters (Cantillo-Medina, Perdomo-Romero, and Ramírez-Perdomo 2022). Caregivers had been providing care for more than 10 years (46.8%). This is related to the duration of schizophrenia, which ranged from 1 to 38 years, with patients being cared for between 3 and 30 years (Demirbas and Kizil 2017).

Family self-efficacy in caring for patients with schizophrenia in this study was mostly in the moderate category, totaling 145 respondents (71.4%). The strength dimension of self-efficacy among families caring for people with mental disorders was influenced by the magnitude of problems experienced, such as stigma, which shaped either adaptive or maladaptive mechanisms in the strength dimension, and limited behaviors in the generality dimension. In addition, self-efficacy was also influenced by

families' expectations of patient recovery and their interpretation of the condition (Farina, Yusuf, and Wahyuni 2020). The majority of social support for families caring for patients with schizophrenia was also in the moderate category (63.5%). Social support measured in this study included support from extended family, community, and health professionals. Families had received support from relatives and significant others, but support from friends was still lacking (Makhtar et al. 2023). Insufficient social support received by families increases the risk of depressive symptoms (Gutiérrez-Sánchez et al. 2023).

The majority of respondents' self-control was in the moderate category, with 145 respondents (71.4%), and the least in the high category, with 27 respondents (13.3%). Research on self-control in families caring for patients with schizophrenia remains limited. Previous studies explained that caregiving burden can affect self-control (Intrieri and Rapp 1994). Caregiver self-control consisted of four thematic categories: caregiver insight, values in caregiving, acceptance of caregiving responsibility, and committed caregiving (Nikrouz et al. 2020).

In this study, the majority of family resilience was in the moderate category, with 149 respondents (73.4%), while the fewest were in the high category, with 23 respondents (11.3%). This finding is consistent with previous research, which also showed that family resilience was in the moderate category (Wenny et al. 2023). Strong resilience within families was achieved through several strategies such as religious approaches, receiving support from extended family, and willingness to adopt behavioral changes. Families also demonstrated optimism, effective problem-solving, and the ability to make good use of available support, thereby enabling them to overcome challenges (Saputro, Wicaksono, and Paramita 2025).

Family resilience in caring for patients with schizophrenia was influenced by both internal and external factors. Internal factors affecting family resilience included self-efficacy ($r = 0.618$, $p < 0.001$) and self-control ($r = 0.210$, $p = 0.003$), while social support ($r = 0.256$, $p < 0.001$) served as an external factor. Research conducted by Nihayati et al. (2020) showed that increasing self-efficacy can enhance the resilience of families with schizophrenia (Nihayati, Isyuniarsasi, and Tristiana 2020). Self-efficacy is an individual's belief in their own capabilities. Caregivers with high self-efficacy are better able to cope with stress, maintain a positive outlook, and strengthen their self-control.

This study also showed that self-control is related to family resilience in caring for patients with schizophrenia. Self-control is defined as the skills, capacities, and behaviors necessary for self-regulation (Gillebaart 2018). Self-control has been found to have a positive relationship with resilience among teachers, meaning that the better an individual's self-control, the higher their resilience (Enes 2021). Self-control is a component of self-regulation and plays an important role in developing resilience. Individuals with good self-control are characterized by their ability to manage emotions effectively, apply constructive coping strategies, maintain consistent life goals, and persist in solving problems. These characteristics represent the core aspects of resilience—the capacity to recover and rise from adversity. Therefore, self-control serves as a crucial foundation in the development of resilience.

4 CONCLUSIONS

Research on family resilience among caregivers of patients with schizophrenia has been conducted by linking several factors. However, this study not only analyzed the relationships among self-efficacy, social support, and societal stigma but also examined a rarely studied variable, namely self-control, in families caring for patients with schizophrenia. This approach provides broader contributions to understanding the internal and external factors that may influence family resilience in this context. Nevertheless, some limitations should be considered. First, this was a quantitative study; therefore, it did not explore the subjective experiences of the studied variables in depth. Second, the study employed a cross-sectional design, which only illustrates the relationships among variables at a single point in time, and thus cannot explain direct causal relationships.

This study identified the factors influencing family resilience, particularly among families caring for patients with schizophrenia. The findings have practical implications for service providers as efforts to enhance family resilience through structured psychosocial interventions. Such interventions can help families manage stress, improve coping abilities, strengthen social support, and reduce the negative impacts of social stigma and caregiving burden. Therefore, nurses are expected to design and implement family-based intervention programs that holistically support both emotional and psychological well-being. These programs may include family- and

community-based health education as well as patient rehabilitation.

For future research, it is recommended to use a longitudinal design in order to observe changes, developments, or causal relationships among the studied variables over time. In addition, future studies may incorporate a qualitative approach to gain deeper insights into the lived experiences of families providing care for patients with schizophrenia. Such an approach would allow researchers to comprehensively understand the emotional dynamics, meaning of caregiving, and challenges faced by families. The findings from qualitative research could enrich quantitative results and serve as a foundation for developing relevant family-based nursing interventions.

The findings of this study demonstrate that self-efficacy, self-control, and social support are significantly associated with family resilience in caring for patients with schizophrenia. The analysis revealed that self-efficacy is the strongest predictor of resilience in these families. Strong self-efficacy can help families manage stress and cope with the pressures that arise during patient care. Therefore, enhancing self-efficacy can serve as the primary focus in family-based nursing interventions to improve resilience.

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