Impact of Family Closeness and Care Duration on Schizophrenia Caregiver Burden

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Abstract. Schizophrenia is a condition that requires long-term care and often imposes significant physical, emotional, and financial burdens on families as primary caregivers. Understanding factors that may reduce caregiving burden is essential to enhance family resilience and decrease the risk of patient relapse. This study aimed to analyze the relationship between family closeness and duration of care with caregiving burden among families of patients with schizophrenia. A cross-sectional study was conducted in June 2025 involving 203 family caregivers selected through proportional random sampling. Data were collected using structured questionnaires and analyzed using Kendall's Tau test. The results showed significant negative relationships between caregiving burden and family closeness ($\tau = -0.144$, $p = 0.003$) and duration of care ($\tau = -0.133$, $p = 0.014$), indicating that greater emotional closeness and longer caregiving experience were associated with lower perceived caregiving burden. These findings suggest that a strong emotional bond and long-term adaptation processes act as protective factors in reducing the caregiving burden for patients with schizophrenia. Therefore, healthcare professionals should prioritize early psychosocial interventions and family-strengthening programs, particularly for new caregivers who lack adaptive capacity and long-term caregiving experience, to prevent burnout and support sustained patient recovery.

Keywords: Family Closeness, Duration of Care, Caregiving Burden, Schizophrenia

1 Introduction

Schizophrenia is a mental disorder described as a "chronic, hopeless brain disease (1), characterized by psychotic symptoms such as hallucinations, delusions, cognitive impairment, and uncontrolled behavior, which lead to increased disability and dependency

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in patients (2). This condition affects not only patients but also their families, who serve as the primary caregivers responsible for the patient's treatment. The family's role in providing care increases the caregiving burden, including physical, emotional, social, and economic burdens. In addition to patient-related factors, other factors influencing the family's caregiving burden include environmental factors and family function (3).

This caregiving burden varies among families; factors such as family closeness and the duration of care influence the burden perceived by the family. Family closeness can be a protective factor because a strong emotional bond between the family caregiver and the patient can increase patience, empathy, and motivation in providing care. However, family closeness can also become a stressor if the family becomes too immersed in the patient's problems. Furthermore, the duration of care also affects the emergence of the caregiving burden. This aligns with previous research indicating that family relationships and the duration of care are related to the caregiving burden in families caring for schizophrenia patients. Caregiving burden is defined as a health condition. It represents a response to emotional distress such as anxiety and depression, financial strain resulting from medical and transportation costs, and social strain arising from the caregiving process for individuals with schizophrenia (4). Concerns related to aggressive behavior and patient safety constitute a subjective burden frequently reported by caregivers, whereas the costs of daily living represent another objective burden (5).

Caregiver burden is also influenced by family relationships and the amount of time spent caring for individuals with schizophrenia (6). Families face various problems related to caregiving responsibilities, the caregiving process, and challenges in obtaining mental health services (7), these challenges may affect quality of life (8) and the family's ability to provide patient care (9,10). Some families report high levels of caregiving burden, while others report low levels (10,11). aregiving burden can trigger family crises. Ruben Hill's ABC-X model explains family dynamics in this context. It posits that a family crisis (X) is not caused solely by schizophrenia as the stressor event (A). Instead, crises result from the interaction between family resources (B), such as cohesion, and the family's perceptions of the illness (C), including the burden they feel (12,13).

Analyzing the caregiving burden in families caring for patients with schizophrenia is important because each family has different experiences and levels of burden. Factors such as family closeness and the duration of caregiving help explain these differences. This study aims to analyze the relationship between family closeness, the duration of caregiving, and caregiving burden among families of patients with schizophrenia. The findings are expected to provide a comprehensive overview of the dynamics of home-based care for these patients.

2 Methods

This study employed a descriptive analytic design with a cross-sectional approach. The study population included 373 families caring for patients with schizophrenia in the working areas of Seyegan, Turi, and Ngemplak II Primary Health Centers in Sleman Regency. From this population, a sample of 203 families was selected; these families lived with and cared for patients with schizophrenia, could read and write, and served

as the primary caregivers. Proportional random sampling was used to select participants.

Data were collected in June 2025 using the Zarit Interview. Prior to this, the questionnaire underwent a validity test at a location different from the study site, which identified five invalid items (items 1, 2, 6, 11, and 14). The valid items showed correlation coefficients ranging from 0.311 to 0.767, and the reliability test yielded a Cronbach's alpha of 0.801, indicating strong internal consistency. These invalid items were then removed to ensure that only valid items were used for data collection.

The questionnaire employed a Likert scale with six response options: never, rarely, sometimes, often, very often, and always. Data analysis was performed using Kendall's tau. This study received ethical approval from the Health Research Ethics Committee of Dr. Moewardi Regional General Hospital. The approval number was 732/IV/HREC/2025.

3 Results

Table 1 shows the characteristics of the respondents. Most were female (59.6%) with a mean age of 51.9 years (SD ± 11.9). A majority completed senior high school (56.2%), were married (89.2%), worked as laborers (37.9%), and were siblings of the patients (37.4%). Almost half (46.8%) had cared for the patient for more than 10 years. The caregiving burden was mostly moderate (63.05%), with a mean score of 29.98 ± 11.35.

Table 2 shows the results of Kendall's tau correlation analysis. Duration of caregiving ($\tau = -0.144$, $p = 0.003$) and family closeness ($\tau = -0.133$, $p = 0.014$) both had negative correlations with caregiving burden among families caring for patients with schizophrenia. This means that longer caregiving and stronger family closeness are linked to a lower caregiving burden.

Table 1. Characteristics of Families Caring for Schizophrenia Patients (N = 203)

Characteristics	**n**	**%**	**Mean ± SD**
Gender			
Female	121	59.6	
Male	82	40.4	
Age			(51.9 ± 11.9)
20-29 years	8	3.9	
30-59 years	139	68.5	
More than 60 years	56	27.6	
Education Level			
Elementary School	40	19.7	
Junior High School	37	18.2	

Characteristics	n	%	Mean ± SD
Senior High School	114	56.2	
University	12	5.9	
Marital Status			
Married	181	89.2	
Single	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 Patient			
Spouse	53	25.6	
Child	25	12.3	
Sibling	76	37.4	
Parent	50	24.6	
Duration of Care			
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	
Caregiving Burden			29.98 ± 11.35
Low	32	15.76	
Moderate	128	63.05	
High	43	21.18	

Source: Primary Data, 2025

Table 2. Bivariate Test Results between Duration of Care, Family Closeness, and Caregiving Burden in Families Caring for Schizophrenia Patients

Variable	τ	p-value	Description
Duration of Care	-0.144	0.003	Negative correlation, significant
Family Closeness	-0.133	0.014	Negative correlation, significant

Source: Primary Data (2025)

4 Discussion

The majority of family caregivers were female (59.6%). This finding is consistent with previous research showing that caregiving roles at home are predominantly undertaken by women (67.2%) (14). Compared with men, women tend to be more involved and spend more time providing patient care (15,16). Prevailing social, cultural, and psychological factors shape the caregiving role women perform. Women are frequently seen as having greater empathy, responsibility, and patience than men. Within the existing social structure, caregiving for ill family members is generally considered a woman's responsibility, whereas men are expected to serve as the primary breadwinners. This phenomenon reflects the strong influence of male-dominated traditions in Indonesia, where women are more likely to remain in the domestic sphere, including caring for sick family members. At the same time, men play a central role in meeting the family's economic needs.

The results showed that most caregivers of patients with schizophrenia were aged 30–59 (68.5%), consistent with previous studies reporting that most caregivers for mental disorders are adults, consistent with previous studies reporting that most caregivers for mental disorders are adults (14). While experience helps adults be more rational and flexible in decision-making (17), inadequate support can lead to fatigue or exhaustion with age. These findings underscore the need for targeted support for adult caregivers, who often juggle caregiving with professional and family duties.

The majority of respondents had a senior high school education (56.2%), in contrast to previous studies where most caregivers had only a primary school education (45%) (14,18). This shift may reflect improvements in socioeconomic status, increased access to education, and successful government programs. As a result, higher education among caregivers enhances health literacy, enabling a better understanding of illness, treatment, and caregiving strategies, consequently boosting their effectiveness in this role. Together, these demographic factors help explain caregivers' preparedness and challenges. These results suggest that bolstering educational advancement can further empower caregivers, improving outcomes for both caregivers and patients.

The results of the study showed that the majority of patients with schizophrenia were cared for by married family members (89.2%). This finding is consistent with previous studies, which reported that patients receiving home care were predominantly cared for by married family members (14,19). Married families tend to have greater emotional stability because they possess broader social support resources within the household. These additional support resources can help distribute caregiving responsibilities

among more family members, potentially reducing caregiver fatigue compared to situations in which a single individual provides care alone.

The study found that most families caring for patients with schizophrenia worked as laborers (37.9%) or farmers (28.1%). This condition illustrates that the majority of patients with schizophrenia were cared for by families from lower–middle socioeconomic backgrounds. These findings are consistent with previous research indicating that most patients with schizophrenia (80.7%) come from impoverished groups (20). In this study, patients with schizophrenia were predominantly cared for by siblings (37.4%). These findings indicate that the caregiving role is not limited to parents or spouses, but is also assumed by other family members with close emotional ties to the patient. This result contrasts with previous studies reporting that patients with schizophrenia are more commonly cared for by parents (21). This discrepancy may be influenced by several factors, such as the absence of parents or their advanced age, which necessitates that siblings assume the caregiving role. The involvement of siblings in caregiving in low-income families may represent a family strategy to share economic and caregiving burdens, particularly when external resources, such as professional healthcare services, are not readily accessible.

Based on the study results, the duration of care for patients with schizophrenia was more than 10 years (46.8%). This condition illustrates that schizophrenia is a chronic mental disorder associated with a high level of dependency, thereby requiring long-term and continuous care by the family. These findings are consistent with previous research indicating that the duration of caregiving for patients with schizophrenia ranges from 6 to 10 years (21). A prolonged caregiving duration reflects the family's commitment to caring for the patient; however, it can also lead to significant emotional, physical, and financial strain on family caregivers, increasing the overall burden of care.

Based on the study results, most families caring for patients with schizophrenia experienced a moderate level of caregiving (63.05%). This indicates that families can still adapt and perform their caregiving roles effectively despite substantial pressure while caring for the patient. However, previous studies have shown variations in the level of burden experienced by caregivers of patients with schizophrenia, ranging from moderate to severe (11,22) suggesting that some caregivers experience higher emotional and physical strain in fulfilling their caregiving roles. The differences in perceived caregiving burden between this study and previous research may be influenced by several factors, such as respondent characteristics, the severity of the patient's condition, and differences in cultural and social environments. In addition, other factors that may influence caregiving burden should be considered, such as the severity of the patient's condition and social support, which were not measured in this study but may significantly affect the burden families perceive while caring for patients with schizophrenia.

Based on Table 2, the results indicate a significant negative relationship between caregiving duration and family closeness with caregiving burden. These findings suggest that the longer families care for patients and the closer the family relationships are, the lower the burden perceived by families caring for patients with schizophrenia. This result can be explained by the fact that, as the duration of caregiving increases, families gain more experience in managing the patient's condition and behaviors.

The experience families gain during the caregiving process helps them develop effective coping strategies, enabling them to better manage emerging stress. Families who have provided care for a longer period can establish structured routines and organize role distribution, thereby improving patient care and reducing perceived burden. These findings are consistent with previous studies indicating that caregiving duration is associated with the burden perceived by caregivers of patients with mental disorders (23). The duration of family caregiving corresponds to the duration of the patient's illness. The longer the patient is ill, the longer the family must provide care, and this condition is associated with perceived burde (6).

The study results also show that caregiving burden is negatively associated with family closeness and the quality of the family–patient relationship, indicating that higher family closeness is associated with lower perceived burden. This condition may occur because emotional closeness enables caregivers to better accept the patient's condition, leading them to perceive caregiving as an expression of affection and responsibility rather than a burden. Families with strong emotional closeness are more able to recognize changes in the patient's behavior, respond appropriately, and understand the patient's needs. This situation creates a calm, supportive environment, thereby reducing the risk of patient relapse and the stress or burden on the family. These factors contribute to family satisfaction in providing care. This finding is consistent with previous research showing that the majority of families (64.4%) reported satisfaction in caring for family members with schizophrenia. Family satisfaction is reflected in the family's ability to adapt to the patient's condition, resolve problems through discussion, express affection, and allocate time to interact with the patient (24).

Although the findings of this study provide important information for family-based care of patients with schizophrenia, several limitations remain. The cross-sectional design, which provides only a snapshot at a single point in time, is a limitation because it cannot explain causal relationships among the variables of family closeness, caregiving duration, and caregiving burden. This study cannot determine whether family closeness reduces caregiving burden or whether a lower caregiving burden facilitates the development of emotional support between the family and the patient. In addition, other potential confounding factors that may influence caregiving burden, such as the severity of the patient's condition and the level of social support received by the family, were not examined or controlled for in this study.

5 Conclusion and Suggestions

The findings of this study show a significant negative relationship between caregiving duration, family closeness, and caregiving burden in families of patients with schizophrenia. Longer caregiving and closer family ties are associated with a lower perceived burden. This suggests that families gain adaptive coping strategies with time. Family closeness also fosters empathy, patience, and acceptance of the patient's condition.

This study has limitations due to its cross-sectional design, which precludes causal inference among the examined variables. In addition, other factors that have not yet

been explored or controlled for—such as the severity of the patient's condition, economic status, and external support received—may also influence the perceived caregiving burden. Future studies should consider using a longitudinal design to better track changes in caregiving burden over time and should aim to account for additional influencing factors such as patient condition severity, family economic status, and external support. Despite these limitations, the findings may serve as a foundation for developing psychoeducational interventions for families caring for patients with schizophrenia, particularly those from lower–middle socioeconomic backgrounds.

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