



THE RELATIONSHIP BETWEEN FAMILY SUPPORT AND SCHIZOPHRENIA PATIENT RELAPSE IN INDONESIA: A SYSTEMATIC REVIEW

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Abstract

Schizophrenia is a chronic mental disorder characterized by disturbances in perception, emotion, and thought processes, affecting approximately 24 million people worldwide. In Indonesia, more than 400,000 individuals are estimated to live with schizophrenia. Relapse remains a major challenge in disease management and is influenced by various psychosocial factors, including family support. A systematic review was conducted in December 2025 using PubMed, ScienceDirect, and Google Scholar to identify relevant studies published between 2021 and 2025. Study selection followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The risk of bias was assessed using the Joanna Briggs Institute (JBI) Critical Appraisal Tools. Sixteen cross-sectional studies involving a total of 1,093 participants met the inclusion criteria. The included studies demonstrated low to high risk of bias. Most studies reported a statistically significant association between family support and relapse prevention or medication adherence among patients with schizophrenia ($p < 0.05$). Family support plays a crucial role in reducing relapse among patients with schizophrenia in Indonesia. Family-based interventions should be strengthened as part of long-term treatment strategies to improve clinical outcomes.

Keywords: Family Support ; Schizophrenia ; Relapse

1. Introduction

Schizophrenia is a mental disorder characterized by disturbances in thought, perception, emotion, movement, and behavior, manifested through positive and negative symptoms (Lawrence & Bernstein, 2024; Ningsih et al., 2023; Putri et al., 2025; Takeda et al., 2024). Positive symptoms include hallucinations and delusions, whereas negative symptoms are commonly characterized by social withdrawal and emotional flattening. The etiology of schizophrenia is multifactorial, involving neurobiological abnormalities, environmental factors, and genetic predisposition (Muthmainnah & Amris, 2024).

According to the World Health Organization, approximately 24 million people worldwide suffer from schizophrenia (Marbun et al., 2024). In Indonesia, national health survey data indicate that at least 7 out of every 1,000 residents are affected by schizophrenia (Rohmayanti et al., 2023). One of the reasons for this high prevalence is that patients do not recover or experience relapses.

Approximately 50% of schizophrenia patients experience relapse within the first year, increasing to 70% in the second year (Ain & Yunita, 2024; Yeni et al., 2023). Relapse contributes substantially to the burden of care, healthcare costs, and deterioration of patients' quality of life. Several factors influence relapse, including poor medication adherence and inadequate family support (Ain & Yunita, 2024).

Family support plays an essential role in relapse management. Strong family support enhances patients' motivation and confidence in recovery. Previous studies have demonstrated a close relationship between family support and medication adherence (Habibah et al., 2025). Furthermore, studies by Pahlawan and Az Zahra, Abdullah, and Nobrihas et al reported a significant association between family support and relapse among patients with schizophrenia. These findings highlight the importance of family involvement in schizophrenia care.

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However, despite the abundance of localized studies across various regions in Indonesia, the empirical data remain highly fragmented and exhibit critical inconsistencies. For instance, while the majority of domestic studies report a significant positive correlation between family support and relapse prevention, certain regional studies such as those by Ramadhani et al. contradictorily present non-significant findings. Furthermore, individual studies in Indonesia are predominantly constrained by small sample sizes and localized cross-sectional designs, which limits the generalizability of their findings. There is also a notable methodological variation, where some researchers evaluate family support as a homogenous entity, whereas others differentiate it into specific functional dimensions (emotional, informational, and instrumental). Therefore, a systematic review is urgently required to critically appraise, synthesize, and reconcile these fragmented and conflicting data. By consolidating evidence from geographically diverse settings across Indonesia, a systematic review can provide a higher level of statistical weight and clinical validity that individual studies cannot achieve alone. Centered on this necessity, this systematic review aims to comprehensively synthesize recent empirical evidence regarding the relationship between family support and relapse reduction among schizophrenia patients in Indonesia, thereby providing a definitive framework for future family-centered psychiatric care policies.

2. Method

This study employed a systematic literature review design and was conducted in December 2025. Article identification was guided by the Population, Intervention, Control, and Outcome (PICO) framework. The population was patients with schizophrenia, the intervention was family support, the control was not specified, and the outcome was relapse.

Relevant articles published between January 2021 and November 2025 were retrieved from Google Scholar, PubMed, and ScienceDirect using predefined keywords (Table 1).

Table 1. Databases and Search Keyword

Database	Keyword
Google Scholar	“Dukungan keluarga” AND “Kekambuhan” AND “Skizofrenia”
Science direct	("Family Role" OR "Family Support" OR "Family Involvement") AND ("Relapse") AND (Schizophrenia) AND (Indonesia)
Pubmed	

Inclusion criteria consisted of full-text original quantitative studies (including cross-sectional and cohort designs) published between 2021 and 2025, written in English or Indonesian, and examining family support in relation to relapse among schizophrenia patients. Exclusion criteria included grey literature, conference abstracts, letters to the editor, review articles, and studies with inaccessible full texts.

Study selection followed the PRISMA guidelines (Figure 1). During the screening phase, 2,377 records were excluded based on title and abstract screening. The primary reasons for exclusion were: 1) studies not focusing on schizophrenia relapse or family support; 2) non-original research types such as literature reviews or meta-analyses; and 3) studies published outside the designated 2021–2025 timeframe. Data extraction included author names, publication year, study location, study design, analytical methods, and main findings. Risk of bias was assessed using the JBI Critical Appraisal Tools for cross-sectional and cohort studies.

Data extraction was performed to systematically organize and synthesize essential information from the included studies. This process ensures a transparent comparison of study characteristics, such as the geographic distribution of research, sample sizes, and specific analytical methods used to determine the relationship between family support and schizophrenia relapse. By consolidating these variables, the review can effectively identify patterns and inconsistencies across the current literature in Indonesia.

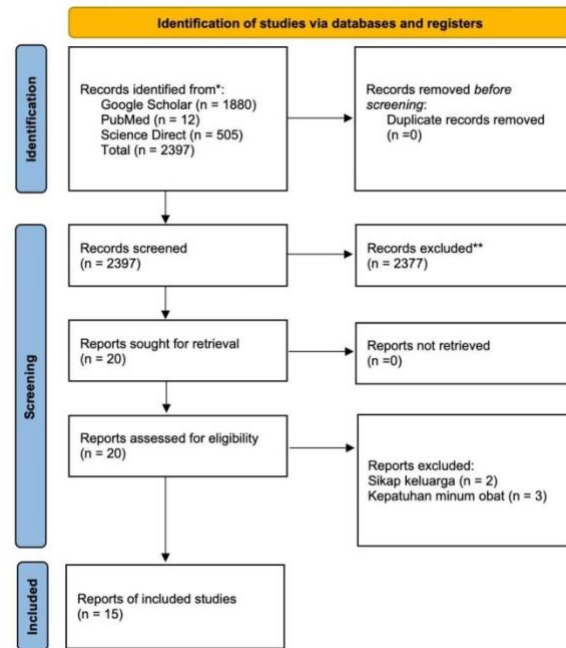


Figure 1. PRISMA Flowchart

Table 2. Risk of Bias

Researcher	Method	1	2	3	4	5	6	7	8	Total Score	Description
Abdullah	CS	-	?	?	?	?	?	?	+	4.0	Moderate
Nobrihas et al.	CS	?	+	?	?	?	?	?	+	5.0	Moderate
Ramadhani et al.	CS	?	?	?	?	?	?	?	+	5.0	Moderate
Agustin et al.	CS	-	?	?	?	?	?	?	+	4.0	Moderate
Rohmayanti et al.	CS	+	+	?	?	+	-	?	+	5.5	Moderate
Parmin et al.	CS	?	?	?	?	?	?	?	+	4.5	Moderate
Yeni et al.	CS	-	?	?	?	?	?	?	+	4.5	Moderate
Ain and Yunita	CS	+	?	?	?	-	-	?	+	4.0	Moderate
Marbun et al.	CS	+	+	+	?	-	-	?	+	5.0	Moderate
Emirald a and Martafar i	CS	-	+	?	?	-	-	?	+	3.5	Height
Gowi	CS	-	+	?	?	+	?	?	+	5.0	Moderate
Safitri et al.	CS	+	+	?	?	?	?	+	+	6.0	Low
Suryani et al.	CS	?	?	?	?	?	?	?	+	5.0	Moderate
Putri et al.	CS	?	+	?	?	?	?	?	+	5.0	Moderate
Rohayati	CS	?	+	?	?	+	?	?	+	5.5	Moderate
Pahlawan et al.	CS	+	+	+	?	?	?	+	+	6.5	Low

Note: The checklist is based on the JBI Critical Appraisal Tool for Analytical Cross-Sectional Studies, consisting of 8 questions: (+): Criteria met; (-): Criteria not met; (?): Unclear or not explicitly stated in the study's report. **JB** **I Questions:** (1) Inclusion criteria defined; (2) Subjects/setting described; (3) Exposure measured validly; (4) Objective criteria used; (5) Confounding factors identified; (6) Strategies for confounding; (7) Outcomes measured validly; (8) Appropriate statistical analysis.

Tabel 3. Data Extraction

Researcher	Year	Location	Number of Samples	Method	Analysis	Results
Abdullah	2021	Avicenna Mental Health Clinic Makassar	54	Cross-sectional	Chi-squared	Results show p-value = 0.007 (p<0.05)
Nobrihas et al.	2022	Naimata Kupang Mental Hospital	60	Cross-sectional	Test logistic regression	The results show a p-value = 0.001 (p<0.05)
Ramadhani et al.	2022	Sungai Penuh Community Health Center	75	Cross-sectional	Chi-squared	Results show p-value = 0.963 (p>0.05)
Agustin et al.	2022	Kumun Community Health Center	50	Cross-sectional	Rank Spearman	Results show p-value = 0.005 (p<0.05)
Rohmayanti et al.	2022	Carita Community Health Center	113	Cross-sectional	Chi-squared	Results show p-value = 0.016 (p<0.05)
Parmin et al.	2023	Madani Regional General Hospital	44	Cross-sectional	Chi-squared	Results show p-value = 0.006 (p<0.05)
Yeni et al.	2023	Padang Pariaman Regional General Hospital	43	Cross-sectional	Chi-squared	Results show p-value = 0.011 (p<0.05)
Ain and Yunita	2024	Urban Health Center	50	Cross-sectional	Chi-squared	Results show p-value = 0.011 (p<0.05)
Marbun et al.	2024	Prof. Dr. Muhammad Ildrem Psychiatric Hospital	68	Cross-sectional	Chi-squared	Results show p-value = 0.007 (p<0.05)
Emiralda and Martafari	2024	Aceh Mental Hospital	181	Cross-sectional	Chi-squared	Results show p-value = 0.000 (p<0.05)
Gowi	2024	Karawang District Health Center	35	Cross-sectional	Pearson	Results show p-value = 0.022 (p<0.05)
Safitri et al.	2025	Mutiara Sukma NTB Mental Hospital Health Center	80	Cross-sectional	Chi-squared	Results show p-value = 0.000 (p<0.05)
Suryani et al.	2024	Dr. Amino Gondohutomo	36	Cross-sectional	Chi-squared	The results show a p-value = 0.007 (p<0.05)

Researcher	Year	Location	Number of Samples	Method	Analysis	Results
Putri et al.	2025	Sungai Rangit Kotawaringin Community Health Center	21	Cross-sectional	Rank Spearman	Results show p-value = 0.000 (p<0.05)
Rohayati	2025	Cideres Regional General Hospital	97	Cross-sectional	Chi-squared	Results show p-value = 0.006 (p<0.05)
Pahlawan et al.	2025	Batujajar Community Health Center	86	Cross-sectional	Chi-squared	Results show p-value = 0.001 (p<0.05)

3. Result and Discussion

A total of 16 cross-sectional studies involving 1,093 participants were included. Fourteen studies reported a statistically significant association between family support and relapse prevention among patients with schizophrenia ($p < 0.05$). Two studies reported non-significant findings. (Abdullah, 2021; Agustin et al., n.d.; Ain & Yunita, 2024; Emiralda & Martafari, 2024; Gowi, 2024; Marbun et al., 2024; Nobrihas et al., 2024; Pahlawan & Az-Zahra, 2025; Parmin et al., 2023; Putri et al., 2025; Rohayati, 2025; Rohmayanti et al., 2023; Safitri et al., 2025; Suryani et al., 2024; Yeni et al., 2023). Family support—encompassing emotional, informational, and instrumental dimensions—plays a crucial role in relapse among patients with schizophrenia. Five of the included studies explicitly examined all three dimensions of family support (Marbun et al., 2024; Nobrihas et al., 2024; Pahlawan & Az-Zahra, 2025; Rohmayanti et al., 2023; Safitri et al., 2025). In contrast, the remaining studies addressed family support in a more general context without differentiating its specific (Abdullah, 2021; Agustin et al., n.d.; Ain & Yunita, 2024; Emiralda & Martafari, 2024; Gowi, 2024; Parmin et al., 2023; Putri et al., 2025; Rohayati, 2025; Suryani et al., 2024; Yeni et al., 2023).

Emotional Support

Emotional support manifested through affection, appreciation, empathy, and acceptance has been consistently shown to play a central role in reducing stigma-related psychological stress and enhancing patients' self-efficacy in managing their illness. Adequate emotional support fosters a sense of security and belonging, which enables patients to cope more effectively with stressors and adhere to long-term treatment plans. Several studies have demonstrated that supportive emotional interactions within the family significantly reduce relapse risk among patients with schizophrenia (Marbun et al., 2024; Nobrihas et al., 2024; Pahlawan & Az-Zahra, 2025; Rohmayanti et al., 2023; Safitri et al., 2025).

In contrast, dysfunctional emotional environments characterized by excessive emotional expression, criticism, hostility, or inadequate emotional regulation have been associated with increased relapse frequency. Such environments may exacerbate psychological distress, trigger maladaptive coping mechanisms, and precipitate symptom exacerbation (Abdullah, 2021; Ain & Yunita, 2024; Putri et al., 2025). High levels of negative emotional expression within families may also undermine patients' confidence and willingness to engage in treatment, thereby increasing vulnerability to relapse.

These findings are consistent with previous studies emphasizing that emotional support from family members, peers, and the broader social environment is a critical determinant of quality of life, medication adherence, and overall clinical stability among patients with schizophrenia (Jiang et al., 2024; Patmisari et al., 2025; Wakim et al., 2025). Therefore, fostering emotionally supportive family environments is essential for relapse prevention and long-term recovery.

Informative Support

Informational support provided by families, particularly when aligned with professional guidance plays a vital role in facilitating effective symptom monitoring, early relapse detection, and sustained medication adherence. Families who possess adequate knowledge about schizophrenia, its symptoms, and

treatment regimens are better equipped to recognize early warning signs and respond appropriately, thereby preventing symptom deterioration (Nobrihas et al., 2024; Putri et al., 2025; Rohmayanti et al., 2023).

Furthermore, structured health education enhances caregivers' capacity to support patients' functional independence and decision-making abilities. Adequate informational support has been shown to reduce rehospitalization rates and improve continuity of care by promoting consistent treatment engagement. The effectiveness of long-term schizophrenia management is therefore strongly influenced by the level of family health literacy and access to accurate, evidence-based information (Mamang et al., 2024, 2025; Swai et al., 2024). Consequently, family-centered psychoeducation programs are a key component of comprehensive relapse prevention strategies.

Instrumental Support

Instrumental support encompasses tangible assistance such as financial support, daily care, transportation, supervision of medication intake, and accompaniment to medical appointments. This form of support plays a crucial role in maintaining treatment continuity and reducing stressors that may precipitate relapse, particularly among patients with limited functional independence (Rohmayanti et al., 2023; Setiawati et al., 2021).

Conversely, insufficient practical assistance, internal family conflicts, cultural barriers, and economic constraints have been consistently associated with increased relapse risk. Financial instability and lack of access to healthcare resources may disrupt treatment adherence and delay necessary medical interventions, thereby exacerbating clinical outcomes (Ain & Yunita, 2024; Gowi, 2024). Adequate instrumental support, integrated with active family involvement in treatment planning and monitoring, is therefore a key determinant of sustained clinical stability and relapse prevention (Akgenç, 2025; Fitria & Nurdina, 2024; Nobrihas et al., 2024; Putri et al., 2025).

4. Conclusion and Suggestion

This study is limited by the exclusive inclusion of cross-sectional designs and the use of only three databases, which may have resulted in the omission of relevant studies. Future research should employ longitudinal designs, such as cohort studies and randomized controlled trials, to better establish causal relationships. This systematic review demonstrates a significant relationship between family support and relapse reduction among schizophrenia patients in Indonesia. Emotional, informational, and instrumental support collectively contribute to improved treatment adherence and clinical stability. However, this study is limited by the exclusive inclusion of cross-sectional designs and the use of only three databases, which may have resulted in the omission of relevant studies. Future research should employ longitudinal designs, such as cohort studies and randomized controlled trials, to better establish causal relationships and identify potential confounding factors influencing relapse among patients with schizophrenia.

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