

Analysis of Stress and Family Characteristics in Relation to Schizophrenia Relapse at Poliklinik RSJ Grhasia Yogyakarta

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Abstract

One of the factors causing schizophrenia relapse is a lack of family support and not taking medication. So the role and support of the family are really needed in the healing process for schizophrenia sufferers. Families who help care for schizophrenic patients can create a burden of care for caregivers, which can trigger stress. This research contributed to assessing the relationship between stress levels and family support with relapse in schizophrenia patients at the RSJ Grhasia Yogyakarta polyclinic. This type of research is quantitative research. The sample in this study was 94 respondents using the accidental sampling technique. Data collection was carried out by distributing questionnaires. Data analysis in this study used the gamma correlation test. Characteristics of the respondents in this study were male (57.4%), the majority were early elderly (30.9%), the majority's stress level was a normal stress level (93.6%), and the majority had family support. good family (86.2%), the majority had no recurrence in the last 1 year (56.4%). The relationship between stress levels and recurrence is p-value ($p=0.430$), the relationship between family support and recurrence ($p=0.909$), and the relationship between gender characteristics and recurrence ($p=0.893$). There is no relationship between characteristics, stress levels, and family support with relapse in schizophrenia patients at the RSJ Grhasia polyclinic.

Keywords: Stress; Characteristics; Family; Relapse; Schizophrenia.

Article info: Article info: Sending on January 7, 2025; Revision on December 30, 2025; Accepted on January 31, 2026

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1. Introduction

Schizophrenia is a disease characterized by a split between behavior, thoughts, and feelings in a person. Family can be a major factor causing relapse in schizophrenia sufferers after irregular medication intake. Family support, especially from caregivers, greatly influences the recovery process, but can create a burden of care for caregivers that can trigger stress, mood swings, and even excessive worry. Data from the World Health Organization (WHO) in 2019 showed that around 264 million people experience depression, 45 million people experience bipolar disorder, 50 million people experience dementia, and 20 million people experience schizophrenia. The highest prevalence is in Bali, and Yogyakarta, Central Java, is ranked seventh. People with mental disorders are still a major health problem in the world, so the role and support of the family are needed in the healing process of schizophrenia sufferers.

Family support includes a positive attitude and acceptance of family members, and includes support in the form of information, evaluation, practical assistance, and emotional support. However, there are still many patients with schizophrenia who feel that they are not supported by their families or even their surroundings. In addition to non-compliance in taking medication, the role of the family can also be a significant factor in causing relapse in individuals with schizophrenia. Support from the family, especially for caregivers, has a significant impact on the patient's future recovery process, but can also cause a burden of care that can trigger stress, mood swings, and excessive worry. Caregivers of people with schizophrenia feel a high burden, while family burden is the level of distress experienced by the family due to the condition of their members. This condition can cause increased stress (Kulhara et al, 2014).

Despite these findings, research exploring the interaction between family stress, demographic characteristics, and schizophrenia relapse remains limited in Indonesia, particularly in Yogyakarta. Most previous research has focused on either family stress or relapse independently, rather than examining their relationship within a single framework. This study seeks to fill that gap by analyzing the relationship between stress levels and family characteristics with relapse among schizophrenia patients.

The results of a preliminary study at the Grhasia Mental Hospital in Yogyakarta on September 12, 2023, interviews were conducted with 10 families. It was found that 6 family members said that the patient forgot to take the medicine and did not take the medicine regularly because they were not reminded or even the family was usually busy. Hence, they forgot to remind them to take the medicine, and 4 family members said that one of them had stopped the medicine because it was indeed stopped by their parents. There were also those who did not want to take their medicine again because they felt that they were healthy or had improved, resulting in the patient suffering from schizophrenia relapsing. The relapse itself, the family said occurs once a year, once every 2 years, and even 2-3 times a year. Researchers also distributed stress questionnaires to see family stress, it was found that families said they had difficulty resting, felt easily anxious, were impatient when delayed, and sometimes felt easily angry.

2. Method

The type and design of this research is quantitative research with an analytical survey design with a cross-sectional approach. Samples were collected using probability sampling techniques using the Accidental sampling technique. The research was conducted at the Mental Health Polyclinic, Grhasia Mental Hospital, Yogyakarta, with a research period of July 2024.

The population of this study was families who had family members with schizophrenia who were undergoing treatment in the past month. The research sample was families who had family members with schizophrenia who were undergoing treatment at the Grhasia Mental Hospital in Yogyakarta, totaling 94 respondents.

The research variables include the Independent Variable, namely stress, and characteristics of the families of schizophrenia patients. The Dependent Variable in this study is relapse in schizophrenia patients. The instrument used was a questionnaire consisting of objective questions regarding family stress, family

characteristics (including gender and age), and a relapse questionnaire for schizophrenia patients. The validity and reliability of the instrument for the relapse instrument obtained an r value of 0.9 with 4 questions, where the first question was for relapse symptoms. Meanwhile, the stress level instrument uses the standard DASS 42, so there is no need to conduct validity and reliability tests because it has a validity and reliability value of 0.91, which is processed based on Cronbach's Alpha assessment.

3. Results and Discussion

Based on Table 1, the majority of the stress levels of families of schizophrenia patients out of 94 respondents have a "Normal" stress level, 88 people with a percentage of (93.6%).

Table 1. Frequency Distribution of Respondents Based on Family Stress Levels in Patients at the Grhasia Mental Hospital Polyclinic, Yogyakarta

Stress Level	Frequency (f)	Percentage (%)
Normal	88	93.6
Mild	2	2.1
Moderate	3	3.2
Severe	1	1.1
Total	94	100%

Table 2 shows that the highest number of respondents is male, namely 54 people, with a percentage of (57.4%). And for the age of the respondents, most of them are early elderly, as many as 29 people, with a percentage of (30.9%).

Table 2. Frequency of Patient Family Characteristics Based on Gender and Age at the Grhasia Mental Hospital Polyclinic, Yogyakarta

Gender	N	%
Male	54	57.4%
Female	40	42.6%
Total	94	100%
Age	N	%
Late Adolescent	3	3.2%
Early Adult	18	19.1%
Late Adult	22	23.4%
Early Elderly	29	30.9%
Late Elderly	22	23.4%
Total	94	100%

Based on Table 3, it shows that most of the relapses in schizophrenia patients from 94 respondents were 53 people with a percentage of (56.4%) who did not experience a relapse in the last year.

Table 3. Frequency Distribution of Respondents Based on Relapse (in the last year) in Patients at the Grhasia Mental Hospital Polyclinic, Yogyakarta

Relapse in Schizophrenia Patients: Frequency	Frequency (f)	Percentage (%)
Never	53	56.4
Rarely	32	34.0
Often	9	9.6
Total	94	100%

Based on Table 4, it was found that for the symptoms of patients after being treated in a mental hospital, some did not want to take medication 30.8%, those who experienced a relapse after being hospitalized were 43.6%, and those who were re-admitted with the same diagnosis (schizophrenia) were 43.6%.

Relationship between Stress Level and Relapse in Schizophrenia Patients

Based on Table 5, it shows that out of 94 respondents, 49 respondents with a percentage (55.7%) experiencing normal stress levels and no relapse in schizophrenia patients. From the results of the gamma test in this study obtained a p value = 0.430 (> 0.05) this indicates that Ho is accepted and Ha is rejected. So it can be concluded that there is no relationship between stress levels and relapse in schizophrenia patients at the Grhasia Mental

Hospital polyclinic in Yogyakarta, in this study, relapses that occurred in schizophrenia patients were because patients did not want to take medication

Table 4. Frequency Distribution of Respondents Based on Relapse Symptoms (in the last year) in Patients at the Grhasia Mental Hospital Polyclinic, Yogyakarta

Relapse Symptoms in Schizophrenia Patients: Frequency	Frequency (f)	Percentage (%)
Not wanting to take care of themselves	11	11.7
Getting angry for no reason	7	7.4
Not wanting to interact	21	22.3
Not wanting to take medication	22	30.8
Not wanting to do usual activities yang biasa dilakukan	13	13.8
Talking or laughing alone	11	11.7
Going berserk	4	4.2
Being alone	21	22.3
Rehospitalized for the same diagnosis	41	43.6
Those who experienced a relapse after being hospitalized	41	43.6

Table 5. Relationship between Stress Level and Relapse in Schizophrenia Patients at the Grhasia Mental Hospital Polyclinic, Yogyakarta

Stress Level	Relapses								P.Value
	Never		Rarel		Often		Total		
	(f)	%	(f)	%	(f)	%	(f)	%	
Normal	49	55.7	30	34.1	9	10.2	88	100	0.430
Mild	1	50.0	1	50.0	0	0.0	2	100	
Moderete	2	66.7	1	33.3	0	0.0	3	100	
Severe	1	100	0	0.0	0	0.0	1	100	

Relationship between Family Characteristics and Relapse in Schizophrenia

Based on Table 6, it shows that out of 94 respondents, 30 respondents (55.5%) are male and schizophrenia patients have never experienced relapse. The results of the Kendall tau test in this study obtained a p value = 0.893 (<0.05). This shows that Ho is accepted and Ha is rejected so that it can be concluded that there is no relationship between the gender of the family who cares for and relapse in schizophrenia patients at the Grhasia Mental Hospital Polyclinic, Yogyakarta

Family Stress Level of Schizophrenia Patients at the Grhasia Mental Hospital Polyclinic, Yogyakarta

The results of the study showed that the majority of respondents experienced normal stress levels, as many as 88 respondents (93.6%). According to Hawari (2016), stress is a burden that arises from demands from the surrounding environment, which can be specific or non-specific. This burden reflects a negative impact on people who care for patients, especially family members who suffer from schizophrenia. According to Rafiyah (2011), several factors that influence the

burden of caring for schizophrenia patients include gender, age, income, education level, health status, and knowledge.

Normal stress among respondents shows that they are able to cope with the burden of caring for schizophrenia patients without making it a significant stress for their families. However, the

results of this study also found 1 respondent who experienced severe stress, the researcher assumed that the severe stress experienced by this 1 respondent was because the respondent was not yet able to cope with the burden of being a caregiver or someone who helps patients during the care or treatment process for schizophrenia patients.

Table 6. Relationship between Family Characteristics and Relapse in Schizophrenia Patients at the Grhasia Mental Hospital Polyclinic, Yogyakarta

Gender	Relapse						<i>P.Value</i>	
	Never		Rarely		Often		Total	
	(f)	%	(f)	%	(f)	%	(f)	%
Male	30	55.5	19	35.2	5	9.3	54	100
Female	23	57.5	13	32.5	4	10	40	100
Total	53	56.4	32	34.0	9	9.6	94	100

The duration of patient care also affects the level of family stress. The longer the treatment period, the more the family generally gains knowledge and experience. With this experience, they tend to be less affected by stressors or problems and try to forget or reduce the impact of the stressors they feel, especially compared to when they first found out that their family member had schizophrenia. In addition, over time, families tend to develop a more positive perception of family members with schizophrenia and try to seek support to ease their burden. The family's ability to assess and cope with stressors associated with caring for schizophrenia patients is also related to the learning process they go through in dealing with the situation. The longer someone cares for a family member with schizophrenia, the higher the family's confidence in the treatment process. This is due to the extensive experience during treatment.

Frequency of Patient Family Characteristics Based on Gender and Age at the Grhasia Mental Hospital Polyclinic, Yogyakarta

In this study, the most common gender found was male. Previous studies have stated that women tend to have a higher level of vulnerability to stress compared to men, as stated by. They mentioned hormonal factors as one of the causes, as well as the fact that women are more often involved in care, which can cause more difficulties and burdens. However, this theory is in contrast to the findings of this study, where the majority of respondents were men who showed normal levels of stress. Normal stress among respondents indicates that they are able to cope with the burden of caring for schizophrenia patients without making it a significant stress for their families.

Based on the age characteristics of the respondents, most were in the age range of 46-55 years, which is included in the middle adult

category, where a person's maturity has been achieved. This maturity affects an individual's ability to manage stress, so they tend to experience stress less often than younger individuals. In general, older people tend to experience lower levels of stress because they have more life experience in facing various challenges, as conveyed by Cabral et al (2014). Age reflects the period of time since the individual's birth until now, and as one gets older, it is expected that a person will also gain maturity and better abilities in living life.

Relapse of Schizophrenia Patients at the Grhasia Mental Hospital Polyclinic, Yogyakarta

The results showed that at the Grhasia Mental Hospital Polyclinic, Yogyakarta, 56.4% of schizophrenia patients did not experience relapse, while 34.0% experienced rare relapses, and 9.6% experienced frequent relapses. Relapse in schizophrenia patients is often caused by patient non-compliance in taking medication, which leads to relapse. Schizophrenia is a chronic disease that requires long-term care and treatment. The family plays a role as the main source of support that is essential for patients in the daily healing process of schizophrenia. The role of the family includes monitoring drug use, providing consistent and comprehensive care, and providing reinforcement to schizophrenia patients (Purba et al., 2020).

The results of this study were obtained based on Table 4 for the symptoms of patients after being treated in a mental hospital; most of them did not want to take medication 30.8%, those who experienced a relapse after being hospitalized were 43.6%, and those who were re-admitted with the same diagnosis (schizophrenia) were 43.6%. From the percentage above, it was found that most patients who were re-admitted with the same diagnosis, with a percentage of 43.6%, were

because patients did not want to take their medication. This is evidenced by the results of the percentage of patient symptoms above; most patients did not want to take medication as much as 30.8%, which is one of the factors that causes relapse, namely non-compliance with taking medication.

Relapse in schizophrenia patients can be triggered by several factors, such as non-compliance in taking medication regularly, failure to make routine visits to the doctor, stopping treatment without the doctor's approval, lack of support from family and society, and life problems that cause emotional stress. If schizophrenia patients stop taking their medication, positive and negative symptoms of schizophrenia, such as hallucinations, autonomous behavior, delusions, and social isolation, can reappear due to increased levels of the neurotransmitter dopamine in the brain. Based on the results of the study, researchers assume that patients who rarely or irregularly take medication are more likely to relapse. On the other hand, if patients adhere to the medication schedule prescribed by the doctor routinely and regularly, the relapse rate in schizophrenia patients can be suppressed.

Relationship between Stress Level and Relapse in Schizophrenia Patients at the Grhasia Mental Hospital Polyclinic, Yogyakarta

The results of the bivariate test using the gamma correlation test showed that most of the family respondents who experienced normal stress levels did not experience relapse in schizophrenia patients, with a total of 49 respondents. Respondents who rarely experienced relapse numbered 30 people, while those who often experienced relapse numbered 9 people, as recorded in Table 5, Cross Tabulation of the Relationship between Stress Level and Relapse in Schizophrenia Patients at the Grhasia Mental Hospital Polyclinic, Yogyakarta. The results of the gamma test in this study obtained a value of $p = 0.430 (> 0.05)$. In this study, relapses that occurred in schizophrenia patients were due to the patients not wanting to take medication.

Relapse in schizophrenia patients can be caused by several factors, including non-compliance in taking medication, not having routine check-ups with a doctor, stopping medication without a doctor's approval, lack of support from family and society, and life problems that cause stress. When schizophrenia patients stop taking medication, positive and negative symptoms such as hallucinations, autism, delusions, and social isolation can reappear due to increased levels of the neurotransmitter dopamine. The study showed that compliance in taking medication affects the relapse

rate in schizophrenia patients at the Special Hospital for South Sulawesi Province. Another study also found that the relapse rate at Surakarta Mental Hospital was influenced by compliance in taking medication and support from family and the surrounding environment. Schizophrenia is a psychotic mental disorder that is often characterized by experiences such as hallucinations, delusions, perceptual disorders, distorted thought patterns, and abnormal changes in affect (Stępnicki et al., 2018).

The results of this study, the researchers assumed that because the patient's family had accepted the patient's condition and had experience in caring for patients, the family was more accepting of their family member's condition with schizophrenia. Schizophrenia patients in this study also had an average of schizophrenia and treatment for more than 1 year. This is proven by the theory of (Kulhara et al., 2012). The longer someone cares for a family member with schizophrenia, the higher the family's confidence in the care process, because they have gained a lot of experience during this time.

Relationship of Family Characteristics with Relapse in Schizophrenia Patients at the Grhasia Mental Hospital Polyclinic, Yogyakarta

Statistical testing using the Kendall Tau test gave a p -value = 0.893. This value is greater than the significance level of 0.05, so H_0 is accepted, and H_a is rejected. Thus, it can be concluded that there is no significant relationship between the gender of the family member who cares for the patient and the relapse rate in schizophrenia patients. The results of this study indicate that the gender of the family member who cares for the patient does not affect the relapse rate in schizophrenia patients. This may be due to other, more dominant factors, such as the intensity of emotional support and the family's understanding of the condition of schizophrenia. This study highlights the importance of paying attention to factors other than demographic characteristics, such as care skills, emotional support, and active involvement in treatment.

Demographic characteristics such as gender, treatment programs should emphasize family education and skill development in providing effective emotional and psychosocial support. Health services also need to provide family counseling programs that focus on how to deal with stress, build good communication, and increase involvement in patient treatment.

In the research results, there is data that out of 54 schizophrenia patients who were cared for by male family members, 5 patients (9.3%) experienced relapses that were classified as "often."

Although the majority of patients who were cared for by male family members did not experience relapses or only rarely experienced relapses, this data shows that there is a small number of patients who still experience relapses even though they have received care from male family members. The emotional support provided by male family members may differ in quality or intensity compared to support from female family members. Although men can provide practical support, they may lack in the aspect of emotional or affectionate support, which is often important for the mental stability of patients. This does not mean that men are less capable, but there are differences in style in providing support that may affect patient relapse.

Based on the data and analysis conducted, it can be concluded that there is no relationship between the gender of the family caregiver and the relapse of schizophrenia patients at the Grhasia Mental Hospital Polyclinic, Yogyakarta. This suggests that factors other than demographic characteristics, such as gender, may play a greater role in the management of schizophrenia relapse. This study contributes to the understanding that the care of schizophrenia patients requires a holistic approach that considers various aspects of family support, not just demographic characteristics. Several studies, such as those conducted by Purba et al. (2020), have shown that family demographic characteristics such as age or gender are not always directly related to relapse. They suggest that holistic support involving education, emotional stability, and psychosocial support has a more significant impact.

4. Conclusions and Suggestions

This study concluded that the stress levels in families of schizophrenia patients at the Grhasia Mental Hospital Polyclinic in Yogyakarta were mostly in the normal category, indicating that most families can manage the emotional stress associated with caring for family members with schizophrenia. In addition, the characteristics of family members who care for patients at this polyclinic were mostly male, indicating that the caregiving role is often taken by male family members.

Furthermore, based on relapse data, it was found that most patients never experienced a relapse, which may indicate the stability of the patient's condition and may indicate adequate family support and compliance with treatment. The results of the statistical analysis showed that there was no significant relationship between family stress levels and relapse in schizophrenia patients. This indicates that although families may experience a certain level of stress, it does not directly affect the risk of relapse in patients.

In addition, this study also found that there was no relationship between the gender of family members who care for and the relapse of schizophrenia patients. This indicates that gender differences in care roles do not have a direct impact on the relapse rate of schizophrenia patients in this polyclinic. This finding suggests that other factors, such as the quality of support and management of care, may play a greater role in influencing relapse than demographic factors such as gender or stress levels.

5. Acknowledgments

We would like to express our deepest gratitude to Universitas Respati Yogyakarta for providing financial support for this research. The assistance provided is very valuable in supporting the implementation of our research until the final stage. We also express our deep appreciation to the management and all staff of the Grhasia Mental Hospital for the permission and support provided during the research. Facilities, cooperation, and assistance from the hospital have been important factors in the smooth running and success of this research. Hopefully the contribution provided can provide broad benefits for the development of science and the improvement of health services in the future.

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