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ORIGINAL RESEARCH

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## THE CORRELATION BETWEEN FAMILY SUPPORT AND RELAPSE IN SCHIZOPHRENIA AT THE PSYCHIATRIC HOSPITAL

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### Abstract

**Background:** Schizophrenia is a severe mental illness with the majority of patients' experiences relapses. Family support is not a new topic, but still considered as an important factor to prevent the relapse. However, little is known about the correlation between family support and relapse in schizophrenia patients in North Sumatra, Indonesia.

**Objective:** This study aims to examine the relationship between family support and relapse in schizophrenia.

**Methods:** This was a correlational cross-sectional study conducted from January to May 2015 at the psychiatric hospital in Medan North Sumatra Indonesia. There were 90 samples selected using purposive sampling. Chi-square test was used to analyze the data.

**Results:** Findings of this study reveals that there was statistically significant relationship between family informational support ( $p=0.00$ ), appraisal support ( $p=0.00$ ), instrumental support ( $p=0.00$ ), and emotional support ( $p=0.00$ ) with relapse in schizophrenia.

**Conclusion:** There is a significant correlation between family support (informational support, appraisal, instrumental and emotional support) and relapse in schizophrenia. Therefore, it is recommended that health care professional should continuously promote the important of family support and increase their knowledge regarding the type of supports needed for patients with schizophrenia.

**Keywords:** schizophrenia; family support; relapse

## INTRODUCTION

Schizophrenia is a severe mental disorder, which has long-term effect on mental health of an individual. People with schizophrenia often difficult in processing information, having interpersonal relationships, and having additional mental health problems such as anxiety disorders, major depressive illness, or substance-use disorders ([Stuart & Sundeen, 2007](#)). The compliance to the schizophrenia medications is poor, as only approximately 50% of the prescribed medication is consumed although a compro-

mised compliance has extensive clinical and economic consequences ([Skarsholm, Stoevring, & Nielsen, 2014](#)). In the past two decades, a growing body of research has called attention to the association between childhood adversity and psychotic disorders, particularly schizophrenia, and patients with psychotic disorders that have high rates of self-reported childhood abuse and neglect, ranging from 30% to over 75% ([Rajkumar, 2015](#)). Mortality in schizophrenia is high, especially due to suicides. Several early predictors of outcomes

have also been found. Individuals with schizophrenia have alterations in brain morphometric and neurocognition, and our late studies have found that the use of high life time doses of anti-psychotics associated with these changes ([Jääskeläinen et al., 2015](#)).

Over the past 50 years, as evidenced by the closure of mental hospitals and advent of community-based care, there has been transition of care for schizophrenia patients from formal hospital-based healthcare systems to outpatient and community services. The financial burden (in terms of direct and indirect costs) of community-dwelling patients with schizophrenia is high with estimated annual costs in the US of \$23 billion ([Gater et al., 2014](#)). If ten percent of the population experiences mental health problems, then we must pay attention. It is estimated that there are about 450 million people worldwide experience mental health disorders. The prevalence of patients with schizophrenia is about 0.2% to 2%, while the incidences or new cases that appear every year are about 0.01%. There are more than 80% of patients with schizophrenia in Indonesia is not handled optimally by either the family or the medical team ([Yosep & Sutini, 2014](#)).

Based on the data in the United States, each year there is about 300,000 schizophrenia experiencing episodes of acute. The prevalence of schizophrenia is higher than Alzheimer's disease, multiple sclerosis, the client with diabetes taking insulin, and muscle disease (*muscular dystrophy*), and 20% - 50% of schizophrenia patients attempted suicide, and 10 % of them death to suicide, and death rate of the schizophrenia is 8 times higher than the death rate of the population in general ([Yosep & Sutini, 2014](#)). According to the results of the household health survey in Indonesia, it is estimated as many as 264 of the 1,000 members of the households suffering from mental health disorders. And the incidence of Schizophrenia in Indonesia reached 0.46%, and those who are experiencing psychotic severe disorders are about 2% in Jakarta, 1.9% in Aceh, and 1.6% in West Sumatra. It is about 50% - 53% of

patients having schizophrenia relapse, which is one of the challenges that has been facing by health care professionals in Indonesia. ([A. I. Setiadi, 2006](#)) such as mental disorder rate occurrence in Central Java in 2008 reached 3768 patients, and increased to 3914 in 2010 ([Setiadi, 2008](#)).

Relapse in schizophrenia is broadly recognized as the reemergence or the worsening of psychotic symptoms. More specifically, certain criteria are used to define relapse; they include aggravation of positive or negative symptoms, hospital admission in the past 6 months, and more intensive case management and/or a change in medication. According to Kazadi study finding that Co-morbid depressed mood, poor adherence owing to lack of insight, medication side-effects and lack of family support were the factors most likely to increase the risk of relapse in patients with schizophrenia. Risk of relapse may be reduced when the treating psychiatrist identifies and addresses these factors ([Kazadi, Moosa, & Jeenah, 2008](#)).

However, as lack of the studies focusing on schizophrenia relapse in North Sumatra Indonesia, therefore this study aims to identify the correlation between family support and schizophrenia relapse. Despite so many factors affect to healing schizophrenia, this study only emphasize on family support as family is the key factor in healing patients with schizophrenia.

## METHODS

### *Study design*

This was a correlational cross-sectional study that was conducted from January to May 2015 at the Psychiatric Hospital of Prof. Dr. Muhammad Ildrem in Medan North Sumatra Indonesia.

### *Sample*

There were 90 samples selected using purposive sampling. The inclusion criteria were all family members who have a family member with schizophrenia in both inpatient

and outpatient, able to communicate well, conscious and willing to be respondents.

#### *Instrument*

The instruments to measure family support and schizophrenia relapse were adopted from the previous research (Nursia, 2011). Schizophrenia relapse was measured by observing how many times of relapse during the last two years. While family support questionnaire consists of twenty statements using Likert scale: always, often, rarely and never, with total scores of 80. The dimension of the instrument includes informational support, appraisal, instrumental and emotional support. The score from respondents is converted into two-interval scale, namely good and less support. Good support if the score is >50 and less support if the score is <50.

#### *Ethical consideration*

Ethical approval of this research was obtained from The Commission of Conduct Health Study, Faculty of Nursing, North Sumatra

University with approval number: 1292/IV/SP/2015. Each participant signed informed consent prior to data collection.

#### *Data analysis*

Chi-square test was used for data analysis.

## RESULTS

Characteristics of respondents in the Table 1 showed that the majority of respondents aged 40-49 years (47.8%), followed by the age group of 30-39 years (37.8%), which was considered as young and productive group. Most of respondents were having senior high school background (46.7%) and bachelor level background (36.7%). And majority of them were self-employed. There was a slightly difference between male (53.3%) and female (46.7%) participants who experienced relapse in schizophrenia in this study.

**Table 1** Characteristic of respondents (N=90)

Characteristic	Frequency	Percentage (%)
<b>Age</b>		
30 – 39	34	37.8
40 – 49	43	47.8
50 – 59	11	12.2
60 – 69	2	2.2
<b>Gender</b>		
Male	48	53.3
Female	42	46.7
<b>Education</b>		
Elementary	1	1.1
Junior high school	14	15.6
Senior high school	42	46.7
Bachelor	33	36.7
<b>Occupation</b>		
Housewife	24	26.7
Self-employee	34	37.8
Private-employee	28	31.1
Civil servant	4	4.4

Table 2 shows that more than 50% of family members have good family support, which consist of informational support (60%), appraisal support (58%), instrumental support (58%), and emotional support (66%). It also shows that the schizophrenia patients who

have less supports from family members tends to have more relapses then those who have good family supports. There were 31% of patients relapse with less informational support, 27% of patients with less appraisal support, 12% of patients with less instrumental

support, and 26% of patients relapse with less emotional support.

**Table 2** Frequency distribution of family support and relapse in schizophrenia (N=90)

Family Support	Category	Relapse					
		Relapse		No Relapse		Total	
		F	%	F	%	F	%
Informational support	Good	8	9	46	51	54	60
	Less	28	31	8	9	36	40
	Total	36	40	54	60	90	100
Appraisal support	Good	12	13	40	44	52	58
	Less	24	27	14	16	38	42
	Total	36	40	54	60	90	100
Instrumental support	Good	43	48	9	10	52	58
	Less	11	12	27	30	38	42
	Total	54	60	36	40	90	100
Emotional support	Good	13	14	46	51	59	66
	Less	23	26	8	9	31	34
	Total	36	40	54	60	90	100

Table 3 shows that there was a statistically significant relationship between informational support ( $p=0.00$ ), appraisal support ( $p=0.00$ ), instrumental support ( $p=0.00$ ), and emotional support ( $p=0.00$ ) with relapse in schizophrenia in the Psychiatric Hospital of Prof. Dr.

Muhammad Ildrem in Medan North Sumatra Indonesia. This result showed the strong evidence that family support is very important for those who are experiencing schizophrenia to prevent relapse.

**Table 3** The correlation between family support and relapse in schizophrenia using Chi-square (N=90)

Family Support	Relapse				P-value
	Relapse		No relapse		
	F	%	F	%	
Informational support					
Good	-	-	54	60	.00
Less	36	40	-	-	
Appraisal support					
Good	-	-	52	58	.00
Less	38	42	-	-	
Instrumental support					
Good	-	-	52	58	.00
Less	38	42	-	-	
Emotional support					
Good	-	-	59	66	.00
Less	31	34	-	-	

## DISCUSSION

Findings of this study revealed that there was a significant correlation between family support

and relapse in schizophrenia patients. In this study, family support is divided into informational support, appraisal, instrumental and emotional support. This finding is in line

with previous studies showing that there were significant correlation between family support (informational, appraisal, instrumental and emotional) and social functions of patients with schizophrenia ([Hartanto, 2014](#); [Sefrina, 2016](#)); but this result is in contrast with ([Nursia, 2011](#)) found that there is no significant relations between family support with repeated treatments of patients with mental disorders ( $p=0.217$ ).

The result of this study is in contrast with previous study ([Nursia, 2011](#)) stated that there is no significant relationship between informational support with repeated treatments of patients with mental disorders. It is probably due to this study is specifically focusing on schizophrenia, instead of measuring the whole patients with repeated treatments in the hospital. However, according to literature ([Friedman, 2008](#)), family should always provide information about the benefit of medicine and give advice to patients to take the medicine regularly. Informational support may include giving advice, instructions, and explanations of how a person behave and act when in the stress situation and solve the problems.

Appraisal support is also correlated with relapse in schizophrenia patients in this study. Appraisal support means that the families involves the patients in day activities and always give positive reward or feedback in every activity to increase a sense of confidence and feel valued by the family. In contrast, no appraisal support will reduce patient's confidence, feel devalued and useless and the risk of relapses increased ([Friedman, 2008](#)).

Family support in relation to instrumental support refers to the real direct support such as providing facilities, money, foods and daily needs, which is not only about physical needs, but also about the time spending with them. Patients will be more motivated because the family always provides assistance both morally and materially. The majority of the families are just paying attention to the time for the next treatment of visit to the hospitals as a routine, with less attention to the real

needs of the patients. As there is a significant correlation between instrumental support and relapse, thus this kind of support should be informed to the family member.

The other important support in this study is emotional support, which has a significant relationship with relapse. Emotional support by family members may include expressions of empathy, such as listening, being open, trust towards what is complained of, understanding, expressing the affection and attention. Emotional support will make the patients feel valuable, comfortable, safe, peaceful, secure and loved ([Friedman, 2008](#)).

This study provides the insight of knowledge that family support is very important in the healing of the patient. Current practice guidelines for the treatment of patients with schizophrenia suggest a combination of antipsychotic medication plus individual and family interventions. Having a family available and supportive (regardless of the interpersonal issues between patient and family) improves outcome mediated by improving long-term adherence ([Glick, Stekoll, & Hays, 2011](#)). Thus, the need for family support and responsiveness in maintaining mental well-being should not be underestimated. There is a constant and deep longing for relatedness throughout life, which involves continuous, mutual balancing between the tension of giving and receiving ([Lyberg, Holm, Lassenius, Berggren, & Severinsson, 2013](#)).

## CONCLUSION

Based on the results of the study, it can be concluded that there is significant correlation between family support (informational support, appraisal, instrumental and emotional support) and relapse in schizophrenia. Therefore, it is recommended that health care professional should continuously promote the important of family support and increase their knowledge regarding the type of supports needed for patients with schizophrenia.

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## Declaration of Conflicting Interest

None declared.

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## Author Contribution

This is the original study of the corresponding author.

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