Category: G - Nursing

Section: Nursing in Internal Medicine





# Relationship of Family Resilience with Relapse in People with Schizophrenia

Dewi Eka Putri<sup>1</sup>\*, Afrizal Afrizal<sup>2</sup>, Dachriyanus Hamidi<sup>3</sup>, Elmaida Effendy<sup>4</sup>, Febri Yeni Susilawati<sup>1</sup>, Bunga Permata Wenny<sup>1</sup>

<sup>1</sup>Department of Mental and Community Health, Faculty of Nursing, Universitas Andalas, Padang, West Sumatera, Indonesia; <sup>2</sup>Department of Sociology, Faculty of Social and Political Science, Universitas Andalas, Padang, West Sumatera, Indonesia; ³Department of Pharmacy, Faculty of Pharmacy, Universitas Andalas, Padang, West Sumatera, Indonesia: ⁴Department of Psychiatry, Faculty of Medicine, Universitas Sumatera Utara, North Sumatera, Indonesia

#### Abstract

Edited by: Sasho Stoleski Edited by: Sasho Stoleski
Citation: Putri DE, Afrizal A, Hamidi D, Effendy E,
Susilawati FY, Wenny BP. Relationship of Family
Resilience with Relapse in People with Schizophrenia.
Open-Access Maced J Med Sci. 2022Apr 14; 10(G):335-340.
https://doi.org/10.3889/oamjms.2022.7651
Keywords: Family; Resilience; Relapse; Schizophrenia
"Correspondence: Dewi Eka Putri, Faculty of Nursing,
Linivarciise Andalas Padany Wast Sumatera Indonesia. Universitas Andalas, Padang, West Sumatera, Indonesia

E-mail: dewiekaputri@nrs.unand.ac.id Received: 20-Oct-2021 Revised: 11-Dec-2021 Copyright: © 2022 Dewi Eka Putri, Afrizal Afrizal, Dachriyanus Hamidi, Elmaida Effendy, Febri Yeni Susilawati, Bunga Permata Wenny Funding: This research did not receive any financia

Competing Interest: The authors have declared that no

Open Access: This is an open-access article distribution.

Omed the terms of the Creative Common Attribution.

NonCommercial 4.0 International License (CC BY-NC 4.0)

BACKGROUND: The relapse of people with schizophrenia is a global problem. One of the problems of treating schizophrenia is relapse. It becomes heavy due to the problem of family resilience in caring for people with schizophrenia.

AIM: This study aimed to determine the correlation between family resilience and relapse in people with schizophrenia in the Public Health Center Padang or Puskesmas Padang working area.

METHODS: The research population was families who cared for people with Schizophrenia in the working area of Puskesmas Padang. It was determined with the purposive sampling method and based on that, 139 families were determined as respondents. The data were collected using the instruments to measure family resilience that was the family resilience assessment scale (FRAS) questionnaire. For relapse, the researchers asked the frequency of people with schizophrenia treatment for 1 year in demographic characteristics.

RESULTS: The results of this study indicate that more than half of the respondents (60.4%) have moderate family resilience and more than half (71.2%) have low relapse rates. Hence, it can be concluded that there is a significant relationship between family resilience and people with schizophrenia relapse with Chi-square test (p = 0.000).

CONCLUSION: Family resilience can reduce relapse in people with schizophrenia. Family efforts in increasing family resilience include a positive outlook, having social and economic resources, and expressing stable emotions in solving a problem. It is hoped that health workers in providing care for schizophrenic patients will not only focus on the patient but also on the families who care for them.

## Introduction

The prevalence of schizophrenia in Indonesia every year always increases. According to the WHO (2018) [1], there are 23 million who have schizophrenia. This number increased from 21 million in 2017. The results of the 2013 Basic Health Research (RISKESDAS) prevalence of people living with Schizophrenia of 1.7 per 1,000 population increased to 6.7 per 1,000 households in 2018 (Kemenkes, 2013; 2018) [2]. According to Riskesdas (2018) [3] in Indonesia, the prevalence of schizophrenia in West Sumatra is in the fourth rank with a prevalence of 9.1 per mile.

Efforts to treat people with schizophrenia have not been successful in Indonesia, characterized by a high enough relapse (Olivares et al., 2013a) [4]. The frequency of relapse and the increasing proportion of relapses add to the problems in handling people with Schizophrenia. Relapse in patients with Schizophrenia is relatively high, with approximately one-third of schizophrenic patients relapsing within 1 year of discharge and 18.8 being readmitted (Xiao et al., 2015) [5]. The research found the potential for relapse is 21% in the 1<sup>st</sup> year, 33% in the 2<sup>nd</sup> year, and 40% in the 3<sup>rd</sup> year (Amelia and Anwar, 2013) [6]. People with schizophrenia relapse 1-2 times in 1 year (Patonah, 2012) [7].

Factors that trigger the relapse of schizophrenia include the client, the person in charge, the doctor, and the family (Sulinger in Fitra et al., 2013) [8]. However, the most factor influencing the relapse rate is non-adherence in treatment associated with a lack of family members support for people with schizophrenia (Emsley et al., 2013; Sariah et al., 2014; and Blakemore et al., 2016) [9], [10], [11]. Lack of family support influenced by family resilience. The research found that family resilience is low in families with schizophrenia (Chen et al., 2016) [12].

Family resilience refers to the coping and adaptation processes within the family as a functional unit, specifically defining it as the capacity to recover from the adversity that is reinforced and more active processes of resilience, self-justification, and growth

G - Nursing Nursing in Internal Medicine

response to crisis and challenges (Becvar and Becvar, 2013) [13]. Low family resilience is a burden and stress in caring for people with schizophrenia (Fitryasari et al., 2018) [14]. Several studies found that 60.6% of families caring for people with schizophrenia at home use excessive emotional expressions (angry), poor relationship patterns such as quarrels with siblings and husband/wife (Amelia and Anwar, 2013; Zahnia and Sumekar, 2016; Zanetti et al., 2017; and Adebiyi et al., 2018) [6], [15], [16], [17]. People with schizophrenia who lived in a family environment with high emotional expression (negative affective style) and are restrained with excessive rules so that the frequency of relapse increases (Kaplan and Shaddock, 2010; Fadli et al., 2013; Zahnia and Sumekar, 2016; and Adebiyi et al., 2018) [7], [15], [18], [19].

Researchers wanted to study family factors associated with relapse in schizophrenic, this is because other factors have been widely studied, while family factors, especially from resilience, have not been widely conducted in Indonesia. Based on the phenomenon, researchers are interested in knowing the relationship between family resilience and the relapse of people with schizophrenia.

#### Methods

This study aimed to determine the correlation between family resilience and relapse in people with schizophrenia in the Public Health Center Padang or Puskesmas Padang working area. The research population was families who cared for people with schizophrenia in the working area of Puskesmas Padang. It was determined with the purposive sampling method, and based on that, 139 families were determined as respondents. The inclusion criteria in this study were families of people with schizophrenia who had been in control of the Andalas Public Health Center, families of people with schizophrenia who had been hospitalized at least 1 time, families who directly cared for people with schizophrenia, families who live at home with people with schizophrenia, cooperative families, families can read and write, and families are willing to be respondents.

The data collected using the instruments to measure family resilience was the family resilience assessment scale (FRAS) questionnaire with a Likert scale. The FRAS questionnaire scores are categorized into low resilience: Score 4–62, medium resilience: Score 63–84, and high resilience: Score 85–112. For relapse, the researchers asked the frequency of people with schizophrenia treatment for 1 year. The relapse stated to be low when it has been treated previously at least 1 time in 1 year and higher when the same or more than 2 times in 1 year.

### **Results and Discussion**

General description of respondent characteristics will be described based on age, gender, education, occupation, relationship with clients, and the length of time a family member suffers from schizophrenia. The characteristics of the respondents are shown in Table 1:

Table 1: Frequency distribution of respondents' characteristics at Andalas Public Health Center, Padang City in 2021 (n = 139)

Characteristics	f	%
Age		
Adolescence	4	3
Adult	94	68
Elderly	41	29
Jenis Kelamin		
Male	36	26
Female	103	74
Education		
Low	67	48
High	72	52
Profession		
Working	58	42
Not working	81	58
Relationship with patient		
Husband	11	8
Wife	19	14
Parent	25	18
Child	45	32
Cousin	39	28
Relationship with patient (years)		
< 5	20	14
6–10	43	31
> 10	76	55
Long family care (year)		
< 5	41	30
6–10	64	46
> 10	34	24
Total	139	100

Based on Table 1, it can be seen that of the 139 respondents, most (68%) of the respondents are adults. Most (74%) of the respondents are female. Most (52%) of respondents are highly educated. Most (58%) of the respondents do not work. Almost half (32%) of the respondents had a relationship as a child of someone with schizophrenia. Most (55%) people with schizophrenia suffer from schizophrenia for > 10 years. Almost half (46%) of the respondents treated people with schizophrenia for 6–10 years.

The distribution of family resilience indicators and relapse in people with schizophrenia is showed in Table 2.

Table 2: Frequency distribution of family resilience and relapse in people with schizophrenia at Andalas Health Center, Padang in 2021 (n = 139)

Variable	F	%
Family resilience		
Low	8	5.8
Moderate	84	60.4
High	47	33.8
Relapse		
High	40	28.8
Low	99	71.2
Total	139	100

The results showed that more than half (60.4%) of the respondents had moderate family resilience, and more than half (71.2%) people with schizophrenia had a low relapse (Table 2). The results of this study are in line with research conducted by Mastiyas (2017) [20],

Table 3: Frequency distribution of family resilience components at Andalas Health Center, Padang City in 2021 (n = 139)

Resilience component	Indicator	Category	f	%
Belief system	Gives Meaning to Difficulty	Low	52	37
		High	87	63
	Positive Outlook	Low	11	8
		High	128	92
	Transcendent and Spirituality	Low	31	22
		High	108	78
Organizational pattern	Flexibility	Low	60	43
		High	79	57
	Connectedness	Low	65	47
		High	74	53
	Social and Economic Resources	Low	56	40
		High	83	60
Communication/Problem solving	Clarity	Low	55	40
		High	84	60
	Expression of Emotion	Low	8	6
		High	131	94
	Collaborative	Low	58	42
	Problem solving	High	81	58

which found that more than half of families (65.9%) have sufficient resilience. The same study was also conducted by Maulidia *et al.* (2017) [21] that stated 75% of families have a moderate level of resilience.

In this study, families who have moderate resilience have a fairly good ability to deal with difficult situations and are capable enough to bounce back from the crisis they face. Moderate family resilience showed from the belief system that the family has when facing difficult situations. As much 54.6% of families if there is a problem then the problem can be overcome, 60.1% of families understand well the painful or sad feelings in the family, and 53.2% the family participates in religious activities such as "taklim" assemblies.

Parameters of family resilience are part of three basic components, namely, family belief systems, family organizational processes, and family communication processes. Each component has a specific indicator that can describe the magnitude of the component's influence on the resilience of the family. Based on the description above, families with moderate resilience have a belief system when facing difficult situations that will help families orient themselves to understand each other and the conditions they face (Table 3). With a good belief system, the family will interpret an event as positive, have faith in God's intervention, be always full of hope, and be optimistic in living life (Suryadi et al., 2013) [22]. These results follow Walsh (2012) [23] that the family belief system is the core of family functioning that helps build resilience.

In addition to having a belief system, families with moderate resilience also formed through organizational patterns. In this case, the family said that more than half (63.1%) families had their respective roles. More than half (61.8%) of families can learn from mistakes in the family, and 54.6% of families ask for help from neighbors and extended family when facing difficult situations.

Organizational patterns can provide a way for families to organize themselves in carrying out daily tasks. Through a good family organizational pattern, the family will be open to economic resources and provide optimal social support when facing a crisis.

Family resilience is formed through belief systems and organizational patterns and formed through communication or problem-solving in the family. This result showed that most (69.3%) families take care of each other's feelings when talking so that no one is hurt. Most (65.3%) families are careful about what they will do so that no one is offended in the family, and most families (64.7%) make compromises in dealing with a problem.

Communication or problem solving within the family to form resilience involves exchanging information to obtain factual information, opinions, or feelings. Listening empathetically and carefully while talking about oneself and relationships with other family members is the key to effective family communication. A moderately resilient family means mutual empathy and tolerance for individual differences in the family, managing problems well, and listening to all opinions and ideas of other family members. Families also make decisions together with respect for differences.

As an additional analysis, the researchers also linked the demographic characteristics of respondents with family resilience, namely, age, gender, employment status, and length of care for people with Schizophrenia. In this study, most (68%) of the families were adults. An adult will be more task-oriented than ego, have clear goals and work efficiently, have an objective attitude, and accept criticism and suggestions, be responsible. The increasing age of a person will have a good resilience where someone older has better emotion regulation and good problem solving and has a positive quality of life despite the stressful situation (Gooding et al., 2012) [24].

The characteristics of other respondents associated with the researcher are gender. Most (74%) of the family are female. Sun and Stewart (2007) [25] stated differences in resilience between women and men. Women have more favorable levels of social-emotional development such as communication experiences, empathy, seeking help, autonomy, and levels of concern for relationships with adults and peers. Higher than men, women also have a loving, patient, and caring nature and are more sensitive to the feelings of others (Rahmawati *et al.*, 2018) [26].

Family work factors can also determine resilience; from this study, 58% of families do not work. According to Pesik *et al.* (2020) [27], family resilience is influenced by work factors. Families who do not work will provide support in the form of sufficient free time to take care of family members who have schizophrenia compared to working families which have a short time to care for people with schizophrenia.

The length of the family caring for people with schizophrenia can also affect the family's resilience, where almost half (46%) of families take care of people with schizophrenia for 6–10 years. It means that the family already has much experience in caring for people with schizophrenia. The longer the family

G - Nursing Nursing in Internal Medicine

takes care of people with schizophrenia, the family will have more mature resilience in dealing with difficult situations. Families who have been caring for people with schizophrenia for a long time can decide to use mental health services. Families also know the causes of relapse, family care at home for people with schizophrenia, personal hygiene for people with schizophrenia, how to deal with aggressive people with schizophrenia, and whom to contact the family to refer if it occurs. Relapse in people with schizophrenia could be mitigated.

The characteristics of communal culture allow resources that support the formation of family resilience to be easily accessed by individuals and a supportive surrounding environment, such as social support, which also be in the form of financial support to help families access health facilities. In addition, spirituality and belief in God's destiny can also help the family accept and remain optimistic about the situation to make the family resilient. According to Bishop and Greeff (2015) [28], the quality of resilience that families have in caring for people with schizophrenia includes family togetherness, seeking community support, and communication models that exist in the family during a crisis, affirming and supporting communication patterns, family fatigue, commitment to the family, and reframe the crisis as a future challenge.

Based on Table 4, 60.4% of respondents with moderate family resilience (56.0%) people with schizophrenia have a low relapse. Statistically using the Chi-square test, it can show that p < 0.005 (0.000)indicates a relationship between family resilience and relapse in people with schizophrenia. It is in line with the research of Nurmaela et al. (2018) [29] of the 88 samples that experienced rare relapses, the majority of families had resilience, while families without resilience experienced frequent relapses with a significance value (p) = 0.000 (< 0.05), which indicates that there is a significant relationship between family resilience and relapse in schizophrenic patients. Family resilience can prevent the relapse of schizophrenic patients and help schizophrenic sufferers toward a better healing and adaptation process (Amagai et al., 2016) [30]. According to Achmad (2020) [31], family resilience is social support that aims to increase resilience in him when social actors around him have support for problem-solving or the process of getting back up.

Table 4: Relationship of family resilience with relapse in people with schizophrenia at Andalas Health Center, Padang in 2021 (n = 139)

Family resilience	Relap	ose			Total		p-value
	High	High		Low			
	f	%	F	%	f	%	
Low	3	37.5	5	62.5	8	5.8	0.000
Middle	37	44.9	47	56.0	84	60.4	
High	0	0	47	100	47	33.8	
Total	40	28.8	99	71.2	139	100.0	

According to Tlhowe and Koen (2016) [32], family resilience can overcome the relapse of

family members who experience schizophrenia. It is demonstrated by accepting the condition of the family experiencing schizophrenia, having trust, involving mentally ill family members in daily activities, and realizing what makes the mentally ill family members worse. Bishop and Greeff (2015) [28] said that the quality of family resilience in caring for people with schizophrenia includes being together in the family, seeking support in the community, communication models that exist in the family during a crisis, affirming and supporting communication patterns, family fatigue, commitment to family, and reframe the crisis as a future challenge. The interesting thing about family resilience is how family members support each other when problems occur.

The family is the most crucial person in preventing relapse in people with schizophrenia, because the family is the smallest and closest unit to people with schizophrenia. The family will be the caregiver and have significant responsibilities in the home care process (Dian et al., 2019) [33]. Fikreyesus et al. (2016) [34] state that people with mental disorders who do not live with their families have a 72% risk of experiencing a relapse. Research conducted by Farkhah and Hernawati (2017) [35] factors that cause relapse in schizophrenia includes family knowledge, quality of life as a caregiver, and stressful family life events.

Family resilience can prevent the relapse of schizophrenic patients and help schizophrenic sufferers toward a better healing and adaptation process (Takashi and Amagai, 2016) [30]. The importance of family resilience for people with schizophrenia, such as health workers, especially Puskesmas officers responsible for mental health, is expected to provide education to families regarding how families manage stress.

## Conclusion

There is a significant relationship between family resilience and relapse in people with Schizophrenia at the Andalas Health Center, Padang City, in 2021. More than half of families who raise a person living with schizophrenia have moderate resilience and low relapse.

#### Recommendation

It is hoped that health workers in providing care for schizophrenic patients will not only focus on the patient but also on the families who care for them. Family resilience education with topics on how to

improve family stress management such as having a belief system in dealing with difficult situations, forming organizational patterns in the family, and effective communication or problem-solving in the family when families face difficult situations so that recurrence of people with schizophrenia can be prevented.

#### References

- World Health Organization. Mental Disorders; 2018. Available from: https://www.who.int/en/news-room/fact-sheets/detail/ mental-disorders [Last accessed on 2021 Feb 10].
- Damayantie N, Heryani E, Muazir M. Faktor-faktor yang mempengaruhi perilaku penatalaksanaan hipertensi oleh penderita di wilayah kerja pskesmas sekernan ilir kabupaten muaro jambi tahun 2018. J Ners Midwifery. 2018;5(3):224-32.
- Laporan Hasil Riset Kesehatan Dasar Riskesdas. Laporan Hasil Riset Kesehatan dasar tahun 2018. Badan Penelitian dan Pengembangan Kementerian Kesehatan RI Tahun 2018. Indonesia: Laporan Hasil Riset Kesehatan Dasar Riskesdas; 2018
- Olivares JM, Sermon J, Hemels M, Schreiner A. Definitions and drivers of relapse in patients with schizophrenia: A systematic literature review. Ann Gen Psychiatry. 2013a;12(1):32. https:// doi.org/10.1186/1744-859X-12-32 PMid:24148707
- Xiao J, Mi W, Li I, Shi Y, Zhang O. High relapse rate and poor medication adherence in the Chinese population with Schizophrenia: Results from an observational survey in the People's Republic of China. Neuropsychiatr Dis Treat. 2015;11:1161-7. https://doi.org/10.2147/NDT.S72367
   PMid:26056450
- Amelia DR, Anwar Z. Relaps pada pasien skizofrenia. Jurnal Ilmiah Psikologi Terapan 2013;1:53-65.
- Patonah SP. Analisis social capital dalam capaian program perencanaan persalinan dan pencegahan komplikasi (P4k). Asuhan Kesehatan. 2012;3(2):37958.
- 8. Fitra MS, Widodo A, Kep A, Zulaicha E, Kp S. Hubungan Antara Faktor Kepatuhan Mengkonsumsi Obat, Dukungan Keluarga Dan Lingkungan Masyarakat Dengan Tingkat Kekambuhan Pasien Skizofrenia Di RSJD Surakarta, Doctoral Dissertation. Indonesia: Universitas Muhammadiyah Surakarta; 2013.
- Emsley R, Chiliza B, Asmal L, Harvey BH. The nature of relapse in schizophrenia. BMC Psychiatry. 2013;13:50. https://doi. org/10.1186/1471-244X-13-50
   PMid:23394123
- Sariah AE, Outwater AH, Malima KI. Risk and protective factors for relapse among individuals with schizophrenia: A qualitative study in dar es Salaam, Tanzania. BMC Psychiatry. 2014;14:240. https://doi.org/10.1186/s12888-014-0240-9 PMid:25168715
- Blakemore PR, Sephton SM, Ciganek E. The Julia-K ocienski Olefination. Organ React. 2004;49:1-261.
- Chen X, Mao Y, Kong L, Li G, Xin M, Lou F, et al. Resilience moderates the association between stigma and psychological distress among family caregivers of patients with Schizophrenia. Personal Individ Diff. 2016;96:78-82. https://doi.org/10.1016/j. paid.2016.02.062
- 13. Becvar DS, Becvar RJ. Family Therapy: A Systemic Integration. Boston, MA: Pearson Education; 2013.
- 14. Fitryasari R, Yusuf A, Tristiana RD, Nihayati HE. Family

- members' perspective of family Resilience's risk factors in taking care of schizophrenia patients. Int J Nurs Sci. 2018;5(3):255-61. https://doi.org/10.1016/j.ijnss.2018.06.002
- Zahnia S, Sumekar DW. Epidemiological study of schizophrenia. Majority. 2016;5(4):160-6.
- Zanetti AC, Ciol MA, Wiedemann G, de Azevedo-Marques JM, Dantas RA, da Silva Gherardi-Donato EC, et al. Predictive validity of the Brazilian Portuguese version of the family questionnaire for relapse in patients with schizophrenia. J Nurs Measure. 2017;25(3):559-72. https://doi.org/10.1891/1061-3749.25.3.559 PMid:29268835
- Adebiyi MO, Mosaku SK, Irinoye OO, Oyelade OO. Sociodemographic and clinical factors associated with relapse in mental illness. Int J Afr Nurs Sci. 2018;8:149-53.
- Guo X, Zhai J, Liu Z, Fang M, Wang B, Wang C, et al. Effect of antipsychotic medication alone vs combined with psychosocial intervention on outcomes of early-stage schizophrenia: A randomized, 1-year study. Arch Gen Psychiatry. 2010;67(9):895-904. https://doi.org/10.1001/ archgenpsychiatry.2010.105
   PMid:20819983
- Fadli SM, Mitra M. Pengetahuan dan ekspresi emosi keluarga serta frekuensi kekambuhan penderita skizofrenia. Kesmas J Kesehatan Masyarakat Nasl. 2013;7(10):466-70.
- Mastiyas YN. Hubungan Resiliensi Keluarga Dengan Kekambuhan Pada Orang Dengan Gangguan Jiwa (Odgj), Doctoral Dissertation. Indonesia: Universitas Airlanga; 2018.
- Maulida TR, Karimah A, Lestari P, Rochmanti M. Depression, anxiety, and stress among medical students in the faculty of medicine Universitas Airlangga year batch 2016, 2017, and 2018. Indian J Public Health Res Dev. 2020;11(12):223-30.
- Suryadi T, Rizia F, Kulsum K. Ethical and medicolegal consideration in case of pregnancy due to sexual abuse in the schizophrenic patient. Open Access Peer Rev Multidiscip J Biol Med Biochem 2020;2020:234.
- Walsh F. Facilitating Family Resilience: Of Adversity.
   Washington, DC: American Psychological Association; 2012.
   p. 173-85. https://doi.org/10.1007/978-1-4614-0586-3
- Gooding DC, Coleman MJ, Roberts SA, Shenton ME, Levy DL, Erlenmeyer-Kimling L. Thought disorder in offspring of schizophrenic parents: Findings from the New York highrisk project. Schizop Bull. 2012;38(2):263-71. https://doi. org/10.1093/schbul/sbq061
   PMid:20554785
- 25. Sun J, Stewart D. Age and gender effects on resilience in children and adolescents. Int J Ment Health Prom. 2007;9(4):16-25.
- Rahmawati AI, Ariffudin I, Mulawarman M. Psychological experience dynamics of students with glossophobia through narrative counseling as seen from gender: A qualitative study. In: 3rd ASEAN Conference on Psychology, Counselling, and Humanities (ACPCH 2017) 2018 Feb. Netherlands: Atlantis Press; 2017. p. 5-9.
- Pesik YC, Kairupan RB, Buanasari A. Hubungan dukungan keluarga dengan resiliensi caregiver skizofrenia di wilayah kerja puskesmas poigar dan puskesmas Ongkaw. J Keperawatan. 2021;8(2):11-7.
- Bishop M, Greeff AP. Resilience in families in which a member has been diagnosed with schizophrenia. J Psychiatric Ment Health Nurs. 2015;22(7):463-71. https://doi.org/10.1111/jpm.12230
   PMid:26112032
- Nurmaela, Suryani, Rafiyah, I. The relationship of family resilience with relapse in the schizophrenia patients at psychiatric unit. J Keperawatan Padjadjaran 2018;6(1):340. https://doi.org/10.24198/jkp

G - Nursing Nursing in Internal Medicine

 Achmad RW, Nurwati N, Mulyana N. Resiliensi Keluarga Single Parent dengan Anak Skizofrenia. Indonesia: Tesis Ilmu Kesejahteraan Sosial Universitas Padjajaran; 2020.

- 32. Tlhowe TT, Koen MP. Science direct strengths of families to limit relapse in mentally ill family members. Health SA Gesondheid. 2016;22:28-35. https://doi.org/10.1016/j.hsag.2016.09.003
- Dian T, Wungouw HP, Legoh D. Hubungan dukungan keluarga dengan tingkat di rsj naimata Kupang. Cen Med J. 2019;16(2):30-34.
- Fikreyesus M, Soboka M, Feyissa GT. Psychotic relapse and associated factors among patients attending health services in Southwest Ethiopia: A cross-sectional study. BMC Psychiatry. 2016;16(1):354. https://doi.org/10.1186/s12888-016-1076-2 PMid:27765033
- 35. Farkhah L, Suryani S, Hernawaty T. Faktor caregiver dan kekambuhan klien skizofrenia. Jurnal Keperawatan Padjadjaran 2017;5:37-46.