



THE RELATIONSHIP OF FAMILY ROLES TO MEDICATION ADHERENCE IN SCHIZOPHRENIA PATIENTS

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Research Report

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ABSTRACT

Introduction: Schizophrenia is a chronic mental illness with symptoms of hallucinations, delusions and inappropriate behavior. Patients require long-term treatment, but many do not adhere to treatment. The purpose of the study was to determine whether there was a relationship between family roles and adherence to medication for schizophrenic patients. **Methods:** The research design used correlation with a cross-sectional approach. The population of this study was 60 families with schizophrenia who visited the mental polyclinic of Ibnu Sina Hospital on 7-13 July 2019. The sampling technique used accidental sampling with a total sample of 52 respondents. Collecting data on family roles based on Friedman's theory and medication adherence using the Morisky Medication Adherence Scale. The research test used the Spearman rank test SPSS. Ethical Approval by Faculty of Nursing Universitas Airlangga number 1601-KEPK, July 17, 2019. **Results:** The results of this study showed that the role of the good family was 53.8% and the role of the less family was 46.2%. The medium level of adherence to taking medication was 42.3% and less level of adherence to taking medication was 32.7%. The results of the Spearman test are rho count 0.403 > rho table 0.271, which means that there is a significant relationship. **Conclusion:** The role of the family is related to medication adherence for schizophrenic patients.

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INTRODUCTION

Schizophrenia is a chronic mental disorder characterized by distorted thoughts, perceptions, emotions and behaviors that are not natural (WHO, 2019). Suffering requires long-term treatment, but many sufferers do not adhere to treatment (Pratiwi, et al., 2017). The results of the study reported that there were many non-adherence to taking medication in schizophrenic patients around 55.3% (Irman, Patricia & Srimayenti, 2018). Adherence to taking medication has been proven to control symptoms of the disease and prevent a recurrence (Higashi et al., 2013). Families have an important role in medication adherence for schizophrenic patients. Optimal family roles in helping medication adherence according to the rules can prevent a recurrence (Caqueo-Urizar, et al., 2015).

World Health Organization (2021) WHO data informs that 20 million people in the world suffer from schizophrenia. The results of the 2018 Riskesdas survey reported that the prevalence of schizophrenia in Indonesia reached 6.7 per mil

population, while in East Java it was approximately 155,000 people. (Kementerian Kesehatan RI, 2018). Schizophrenia is a type of chronic disease that often relapses due to non-adherence to treatment (Olivares et al., 2013). Fitryasari's (2018) study found that 46% of patients relapse 1-3 times a year and a small proportion relapse more than three times a year. The number of schizophrenia in Gresik every year has increased. Data at the Gresik district health office showed that the number of schizophrenia in 2017 is 1,003 people, and in 2018 it increased to 1,102 people, and the following year it increased to 1,342 people (Dinkes, Gresik, 2020).

Various factors cause medication non-adherence for people with schizophrenia, including worrying about dependence, fear of side effects and economic incapacity (Higashi et al., 2013). The role of the family is a significant factor in adherence to taking medication according to the advice of health workers (Subedi, Paudel, & Thapa, 2020). Rokayah's (2017) study informing that lacking the family role in controlling drug

administration, makes 61.4% of patients not obedient to taking medication. The results of another study reported that non-adherence to taking anti-psychotic drugs in schizophrenic patients was 71%, with the specification that women and people with less education tended to be more disobedient (Desai & Nayak, 2019). People with schizophrenia must take medication regularly, but research shows that medication non-adherence in people with schizophrenia is still 49% (Semahegn et al., 2020). The less of the family role is resulting in medication non-adherence and non-compliance medication has an impact on the occurrence of relapse, re-hospitalization and suicide (Acosta, *et al.*, 2012).

Efforts have been made to improve adherence to medication for schizophrenic patients. Law number 18 of 2014 concerning mental health as an effort to reduce the prevalence of schizophrenia, including the prevention of relapse. The family role in the form of a good attitude to the patient is meaningful as a form of family support that has an effect on medication adherence (Nurjamil & Rokayah, 2017). The family role is very important in medication adherence, the greater role of the family given, the greater the compliance, and getting smaller of family roles, has implications for the low level of medication adherence (Pealeu & Wowiling, 2018).

From the explanation above, the research problem is formulated "How is the relationship between the role of the family and the level of adherence to taking medication in people with schizophrenia".

This study aims to investigate the relationship between family roles with the level of medication adherence for schizophrenia patients at Ibnu Sina Hospital, Gresik. The benefit of the research is to improve the quality of providing mental nursing care, especially schizophrenia care in the community.

MATERIALS AND METHODS

This research is a correlation study with a cross-sectional approach, namely research that emphasizes the measurement time of independent data and the dependent variable is measured at the same time (Nursalam, 2020). This study describes the relationship between the family roles with the level of medication adherence for schizophrenia sufferers. The research was conducted in June 2019 at Ibnu Sina Hospital, Gresik.

The population is a research subject with predetermined criteria (Polit dan Hungler, 1999). The population of this study was families of people with schizophrenia who visited the mental polyclinic of Ibnu Sina Hospital, Gresik from July 7 to 13, 2019 with a total of 60 families. The sample was part of the population that was considered representative of the entire object studied (Setiadi,

2013). The sample of this study was several families of schizophrenic patients who had control at the mental polyclinic of Ibnu Sina Hospital, Gresik Regency with 52 respondents.

Sampling is the process of selecting a portion of the population to be able to represent the population (Nursalam, 2020). The sampling technique used in this research is accidental sampling. Accidental sampling is a sampling that is done by chance, that is, anyone who coincidentally meets a researcher can be used as a sample (Sugiyono, 2015).

Sample criteria are determined based on, 1) Inclusion criteria are general characteristics of research subjects from a target population that is affordable and will be studied (Nursalam, 2020). The inclusion criteria in this study were: a) Families of schizophrenic patients who visit mental polyclinic, b) Cooperative Schizophrenic Family, c) Patient's families who want to interact. Exclusion criteria are to eliminate or exclude subjects who meet the inclusion criteria from the study to be studied, namely other than families of people with schizophrenia. The sampling formula is as follows:

Variables are observed characteristics that have variations in value and are the operationalization of a concept so that it can be investigated empirically or its level is determined (Setiadi, 2013). The variable in this study is the role of the family in adherence to medication for schizophrenic patients.

Data collection is the process of collecting and measuring information that is carried out systematically, used to answer research questions. Data collection is carried out by steps according to the research design and the technique of the instrument used (Burns dan Grove, 2016). This research data collection begins with taking care of a permit to conduct research, proceeding to take care of a research ethics letter, and a data collection permit. After obtaining approval from each research party, the research was carried out in stages, namely the approach to obtaining consent to become a respondent, signing the informed consent, distributing questionnaires, and collecting the questionnaires on the same day. Researchers checked and assessed the answers to the questionnaires that had been filled out by the respondents. A research instrument is a tool in research that is used to collect valid, reliable, and actual data (Nursalam, 2016). The research instrument is a questionnaire, for the family roles based on Friedman's theory (2010) and medication adherence questionnaire using the Morisky Drug Adherence Scale, and closed.

The stages of data processing in this study were as follows, namely: 1) Editing is an effort to re-check the correctness of the data obtained or collected so that it is ensured that the respondent has filled out all the questionnaires. 2)

Coding is an activity of giving numerical codes (numbers) to data consisting of several categories so that it is easier for researchers to tabulate and analyze data. In general data male gender= 1, female= 2, enterpriser= 1, employee= 2, housewife= 3, civil servant= 4, ages 20-45= 1, ages 46-65= 2, ages 65-85= 3. On specific data family roles, less= 1, good= 2. Special data on medication adherence, low= 1, medium= 2, high= 3. 3) Scoring provides scoring for each question, then summed and assessed, the score from the results of data collection from the family roles questionnaire sheet is never 1 = 0-25%, sometimes 2 =26-50%, frequently 3 =51-75%, constantly 4 =76-100%, and medication adherence sheets for schizophrenic patients are: a score of 0 for the answer "yes" and a score of 1 for the answer "no". 4) Tabulating is an activity to enter data into a table, then calculate the number of frequencies for each data collected, both general data and special data. 5) Prosentase.

After the data is grouped in the frequency distribution table, then the calculation is carried out using the formula to obtain the percentage.

Analysis of research data is divided into general data and specific data, namely the family roles on medication adherence by using descriptive analysis. This descriptive analysis was carried out with the intention of obtaining a relationship between family roles and adherence to medication for patients with schizophrenia. Research ethics was carried out by filling out a form by the respondent consisting of an informed consent form, maintaining confidentiality, and anonymity.

RESULT

The general characteristics of the respondents are the characteristics inherent in the respondents. Characteristics of respondents in this study consisted of gender, age, profession.

Table 1. Characteristics of respondents based on age, gender, profession

Description	Respondent	
	Total	Percentage
Age		
20-45 years	33	63,5
46-65 years	18	34,6
66-85 years	1	1,9
Gender		
Male	28	53,8
Female	24	46,2
Profession		
Enterpraiser	32	61,5
Employee	8	15,4
Housewife	11	21,1
Civil servant	1	1,9

Based on table 1, the age group showed that the majority of respondents aged 20-45 years were 33 respondents (63.5%), and a small proportion aged 66-85 years were 1 respondent (1.9%). Based on the gender in the table, it shows that most of the respondents were male by 28 respondents (53.8%) and almost half of the respondents were female by 24 respondents (46.2%). The table shows that most of the respondent's profession were enterpraiser as many as 32 respondents (61.5%) and a small proportion of civil servants were 1 respondent (1.9%). The special characteristics of the respondents in this study consisted of the family roles and medication adherence for schizophrenic patients

Table 2. Distribution of respondents based on family roles and medication adherence.

Description	Respondent	
	Total	Percentage
Family role		
Less	25	48,1
Good	27	51,9
Medication adherence		
Low	17	32,7
Medium	22	42,3
High	13	25,0

Based on table 2, the special data on the family roles were mostly good, as many as 27 respondents (51.9%), and almost half of them were, as many as 25 respondents (48.1%). Based

on a special data table on medication adherence, almost half of respondents were moderate 22 respondents (42.3%), followed by low 17 respondents (32.7%) and a small proportion of

high medication adherence are 13 respondents (25.0%).

Table 3. Correlation of family roles on medication adherence in schizophrenic patients.

Family role	Medication adherence						Total	
	Low		Medium		High		F	%
	F	%	F	%	F	%		
Less	10	19,2	11	21,2	3	5,8	24	46,2
Good	7	13,5	12	23,1	9	17,3	28	53,8
Total	17	32,7	23	44,2	12	23,1	52	100

Spearman Correlation Test: rho count > rho table = 0,403 > 0,271

Based on table 3, shows that the relationship between good family roles has moderate medication adherence with 23.1%.

The results of data analysis with the SPSS 16.0 application using the Spearman correlation test obtained rho count > rho table = 0.403 > 0.271. These results indicate that there is a significant relationship between the role of the family on medication adherence in patients with schizophrenia.

DISCUSSION

The characteristic of respondent based on age accordance with Mirza's study, (2015) who reported that almost half of families with schizophrenia were aged 18-40 years (38.2%). Individuals of this age are expected to be able to carry out their roles and functions optimally and well with sick family members (Ashidiqie, 2020). A good family roles will increase medication adherence for people with schizophrenia (Febriana & Setiawati, 2020). Age affects the family roles in caring for people with schizophrenia, the older a person is, the more mature they think and act.

Research results from Sharma et al., (2016) informing that there are gender differences in providing care carried out by families for people with mental disorders. Treatment of schizophrenia at home requires the role of men to make decisions related to delivering control when drugs run out, and women to provide daily needs (Putri & Lestari, 2015). Gender is related to the family roles in adherence to medication for schizophrenic patients.

According to the Direktorat Pendidikan Menengah Umum in 1982, self-employed means people who carry out economic or business activities privately or independently without relying on other people. Work has an important role in determining human quality, work limits the gap between health information and practices that motivate a person to obtain information and take action to avoid health problems (Notoatmojo, 2007).

Work is a family role that must be carried out to support in providing care for schizophrenic patients, especially medication

adherence (Jones, et al., 2011). Family work supports the role to help medication adherence for schizophrenic patients. The more established an individual's job is, the better the role performs, and conversely the less established job the given role adjusts.

The role of the family is very much needed by people with schizophrenia in the recovery period, especially to support medication adherence to prevent relapse (Subandi & Marchira, 2010). Nurjamil's study (2018) informing the family role is urgently needed by people with schizophrenia after returning from the hospital, and undergoing treatment at home mainly in medication adherence. The family role is in accordance with the Program Pendekatan Keluarga Indonesia Sehat (PIS-PK) which states that the family is the focus of the implementation approach with functions including caring for each other, respecting each other, and supporting the continuity and development of family life. (Kemenkes RI, 2017). The role of the family that is supported by the adult stage of age, men who are responsible for the care of sick family members, as well as the function of a caring family, mutual respect will lead to good medication adherence, and have an effect on preventing recurrence.

The results of this study indicate that adherence to medication for schizophrenic patients is mostly moderate, then low, and finally high. This result was in accordance with previous studies related to medication non-adherence, namely the non-adherence rate of 40-50%, and this figure is the same for schizophrenia. In addition, it is estimated that only a third of people with schizophrenia are compliant. Research report Pelealu, et al., (2018) showed almost half of medication adherence 45.9% low. Irman, Patricia & Srimayenti, (2018) reported a lot of medication non-adherence in people with schizophrenia around 55.3%. Non-adherence to medication in schizophrenic patients is still common, so it is important to get attention. Increasing the family role is important for better medication adherence.

There is a significant relationship between the role of the family on medication adherence in patients with schizophrenia. Increasing the role of the family is important. Family empowerment in order to increase the role of the family through education and training on how to take medicine correctly is expected to increase this role.

CONCLUSIONS

There is a significant relationship between the role of the family with medication adherence in patients with schizophrenia. Education about the role of the family on how to take medication correctly needs to be done. Good knowledge about taking medication in the family will improve its role in treating people with schizophrenia, especially adherence to drinking.

REFERENCES

- Acosta, *et al.*, (2012). Medication adherence in schizophrenia. *World Journal of W J P Psychiatry*. 2012 October 22; 2(5): 74-82. doi:10.5498/wjp.v2.i5.74
- Ashidiqie (2020). Peran Keluarga Dalam Mencegah Corona Virus Disease. *Jurnal Sosial & Budaya Syar-i*. Vol. 7 No. 10 (2020), pp. 911-922, DOI: 10.15408/sjsbs.v7i8.15411.
- Caqueo-Urizar, *et al.*, (2015). The role of family therapy in the management of schizophrenia: Challenges and solutions. *Neuropsychiatric Disease and Treatment*. 2015 volume 11 page 145-461. DOI: 10.2147/NDT.S51331.
- Febriana & Setiawati, (2020). Family Support is the Key to Compliance with the Treatment of Relapsing Schizophrenia Patients. *Jurnal Ners* Vol. 15, No. 2, page 457-Special Issue 2020. <http://dx.doi.org/10.20473/jn.v15i2.20361>.
- Fitryasari R., Nursalam, Yusuf Ah., Hargono R., & Chan C.M. (2018). Predictors of Family Stress in Taking Care of Patients with Schizophrenia. *Jurnal Ners*. Vol. 13, No. 1, April 2018. DOI: 10.22216/jen.v3i1.2852.
- Friedman, Marilyn M., Bowden VR & Jonen, Elaine G., (2010). *Buku Ajar Keperawatan Keluarga: Riset, Teori dan Praktek*. Jakarta: EGC. ISBN 978-979-448-997-2.
- Higashi *et al.*, (2013). Medication adherence in schizophrenia: factors influencing adherence and consequences of nonadherence, a systematic literature review. *Therapeutic Advances in Psychopharmacology Original Research*. (2013) 3(4) 200–218. DOI: 10.1177/2045125312474019.
- Hurlock, E.B. 1999. *Psikologi Perkembangan: Suatu Pendekatan Sepanjang Rentang Kehidupan*. Alih bahasa: Istiwidayati & Soedjarwo. Edisi Kelima. Jakarta: Erlangga.
- Irman, V., Patricia, H., & Srimayenti, (2018). Faktor-Faktor yang berhubungan dengan Kepatuhan Keluarga dalam Mengontrol Minum Obat Pasien Skizofrenia. June 2018. *JIK Jurnal Ilmu Kesehatan* volume 2 nomor 1 halaman 130-135, DOI: [10.33757/jik.v2i1.54](https://doi.org/10.33757/jik.v2i1.54).
- Jones *et al.*, (2011). Development of a caregiver empowerment model to promote positive outcomes. *Journal of Family Nursing* 2011 vol 17 issue 1 page 11–28. DOI: 10.1177/1074840710394854.
- Jose, O. Sermon J. Michiel H. & Andreas S. (2013). Definitions and drivers of relapse in patients with schizophrenia: a systematic literature review. *Annals of General Psychiatry* 2013, 12:32 Page 2 of 11 DOI: 10.1186/1744-859X-12-32.
- Kementerian Kesehatan RI, (2018). Laporan Nasional Rischesdas 2018 volume 53 issue 9 page 181-222 Kementerian Kesehatan RI 2018 PMID: 25246403 <http://www.yankes.kemkes.go.id/assets/downloads/PM>.
- Kemenkes RI (2017) Program Indonesia Sehat dengan Pendekatan Keluarga (PIS-PK). Kementerian Kesehatan RI. <http://pispk.kemkes.go.id/id/>.
- Nurjamil (2018) Hubungan antara peran keluarga dengan kepatuhan minum obat pasien skizofrenia, Bandung. *Jurnal Keperawatan* volume 5 no.1, hal 53-59. <https://jurnal.unimus.ac.id/index.php/JKJ/article/view/4468>.
- Nursalam. 2020. *Metodologi Penelitian Ilmu Keperawatan*. Jakarta: Salemba Medika
- Pelealu & Wowiling, (2018). Hubungan Dukungan Keluarga Dengan Kepatuhan Minum Obat Pasien Skizofrenia Di Rumah Sakit Jiwa Prof. Dr. V. L. Ratumbuang Provinsi Sulawesi Utara. *e-journal Keperawatan (e-Kp)* Volume 6 Nomor 1, Mei 2018. <https://ejournal.unsrat.ac.id/index.php/jkp/article/view/19473/19024>.
- Polit, D.F., & Hungler, B.P (1999), *Nursing Research: Principles and Methods* (6th ed), J,B Lippincot Co.
- Putri & Lestari, (2015). Pembagian Peran Dalam Rumah Tangga Pada Pasangan Suami Istri Jawa. *Jurnal Penelitian Humaniora*, Vol. 16, No. 1, Februari 2015: 72-85. ISSN: 1411-5190.

- Semahegn et al., (2020). Psychotropic medication non-adherence and its associated factors among patients with major psychiatric disorders: a systematic review and meta-analysis. *Systematic Reviews Journal* (2020) 9:17 page 2018. DOI: 10.1186/s13643-020-1274-3.
- Subandi M.A (2011). The Role of Family Empowerment and Family Resilience on Recovery from Psychosis. Halaman 1-10. <https://www.semanticscholar.org/paper/>.
- Subedi, Paudel, & Thapa, (2020). Treatment Non-Compliance In Patients With Schizophrenia. *Journal of Universal College of Medical Sciences* Vol 8 no 1 hal 3-8 2020 <https://doi.org/10.3126/jucms.v8i1.29773>.
- Sugiyono, (2006), *Statistika untuk Penelitian*, CV Alfabeta, Bandung.
- WHO, (2021). Schizophrenia 4. World Health Organization 4 October 2019 <https://www.who.int/news-room/fact-sheets/detail/schizophrenia>.