Attitude Toward Treatment and Medication Adherence Among Chronic Schizophrenia After Undergoing Confinement

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Abstract. Medication adherence is a crucial aspect in preventing relapse in chronic schizophrenic patients. Positive attitude towards medication adherence is one of the contributing factors in medication adherence. Objective: This study aimed to analyse the relationship between attitude toward treatment and medication adherence among persons with chronic schizophrenia after undergoing confinement. Method: Design of the study was a correlation study then analysed by Pearson Product Moment Correlation. Sixty patients were recruited by consecutive sampling from community health center Sumatera Utara Province. Correlation of attitude toward treatment with medication adherence was examined by Pearson Product Moment Correlation. Results: Current attitudes of people with chronic schizophrenia were 65.0% negative. The percentage of low adherence to treatment was 68.3%. Attitudes was strongly associated with adherence to medication ($r = 0.86$; $p = 0.001$). Conclusions: A reminding and observation family member in taking medication is important to achieve the successful of treatment. Therefore, we suggest that future intervention focused improving adherence to medication.

Keywords: attitude · medication adherence · schizophrenia · confinement

1 Introduction

Schizophrenia is one of the most common diseases of chronic mental disorders that requires ongoing treatment [1]. The prevalence of schizophrenia increases every year in Indonesia, especially in North Sumatra Province. Until now, the treatment of schizophrenia has not been optimal. Most families do not yet understand the disease [2]. They do not know what to do when their loved ones with schizophrenia in the crisis situation [3]. In fact, in Indonesia, there are still many families, especially in rural areas decided to do shackle for patients. Adherence to medication is an essential aspect of the recovery process from psychotic symptoms [4]. However, the prevalence of noncompliance in treatment is very high and a major cause of relapse rate on people with schizophrenia [5]. The Basic Health Research in 2018 [6] estimates that there is an increase in the prevalence of schizophrenia from 1.7 0/00 to 7/00. The percentage of non-compliance taking

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the drug was higher than that of regularly taking the drug (51.1%). Non-compliance with drug taking is a major problem in the treatment of schizophrenia patients. This condition can result in recurrence and re-hospitalization. The length of the illness also kept them from continuing treatment. In addition, financial hardship is also one of the causes of non-continuation of treatment [7]. The economic burden borne by the family resulted in the patient being unable to continue treatment and took the decision to limit patients' interaction with others. The increased frequency of recurrence due to non-compliance with taking the drug is expected to increase every year [8]. This led to an increase in the allocation of funds for the cost of care that the family had to prepare. Effective and ongoing treatment can minimize the incidence of recurrence of psychotic symptoms in schizophrenia. In addition to the factors described earlier, the attitude of schizophrenia sufferers to the drug is related to the adherence of taking the drug [9]. Negative attitudes towards the drug influence patients to decide not to continue treatment [10]. This is reinforced by the results of Feldhaus et al. [11] research. They further raise positive attitudes towards the drug with positive thinking of patients potentially improving their adherence to the drug. In this study it was also explained that drug adherence was found in patients who had a positive attitude towards the drug. The positive effect of the drug on the mental status of the patient keeps the patient regular in treatment. Research conducted by Kondratova et al. [12] shows that the drug causes schizophrenia would be live a normal life. Patients can also concentrate while working. Furthermore, in his research, they explained that the drug helps patients to control psychotic symptoms. Based on the background, research needs to be done to find out the relationship between attitudes and drug to schizophrenic persons who have a history of experiencing development [13].

2 Method

This descriptive correlation study was conducted in several districts/ cities of North Sumatra Province. Participants in the study were people with schizophrenia who had a history of contemplation and had been screened using the Brief Psychiatry Rating Scale. The number of participants in this study was 60 who were selected using consecutive sampling techniques. Instruments used in this study are the Hogan Drug Attitude Inventory and Medication Adherence Rating Scale. The HDMI consists of 30 items. In addition, drug taking compliance is measured using the MARS. This questionnaire consists of 10 statements with the option of yes answer given a score of 1 and not rated 0. The data is analyzed using a computerized system with a $p < 0.05$. Univariate analysis was conducted to determine the distribution of frequency and percentage characteristics of respondents, drug attitude and adherence to medication. The Pearson Product Moment Correlation test was used to analyze the relationship between drug attitude and medication adherence of persons with schizophrenia post confinement. This study has received ethics approval from the Research Ethics Commission of the University of North Sumatra (number 395/KEP/USU/2020).

3 Results

Table 1 shows that the mean age of respondents was 41.23 years (SD = 12.73). The majority of the respondents (56.3%) were female. Most of the respondents were Christian (53.3%). The majority of respondents (41.7%) were single. 51.7% of respondents received BPJS Non PBI from the government. The length of illness of the respondents

Table 1. Distribution Frequency and Percentage of Characteristic Respondents (n = 60)

Characteristic	f	(%)
Age (years)	*M(41.23)*	*SD(12.73)*
Gender		
Male	28	(46.7)
Female	32	(56.3)
Religion		
Islam	27	(45)
Christian	32	(53.3)
Buddhist	1	(1.7)
Marital Status		
Single	25	(41.7)
Married	8	(13.3)
Widowed	17	(28.3)
Separated	10	(16.6)
Occupation		
Government employee	3	(5)
Private employee	8	(13.3)
Small traders	17	(28.3)
Farmer	14	(23.3)
Not working	18	(*30*)
Health insurance		
BPJS Non PBI	31	(*51.7*)
BPJS PBI	*26*	(*43.3*)
Private	*3*	(*5*)
Length of illness (years)	*M(5.5)*	*SD(3.55)*
Number of hospitalizations	*M(2.2)*	(*1.28*)
Type of medication		
Typical Antipsychotics	26	(43.3)
Atypical Antipsychotics	34	(56.7)

was around 5 years. The number of hospitalizations of the respondents was around 2 times. More than half of respondents (56.7%) received atypical antipsychotics. Most of the barriers in taking medication were side effects of the drug. Additionally, the most common side effect of medication were movement problem and headache.

Based on Table 2, most respondents (65.0%) show negative attitude towards the drug.

Table 3 showed that there was a strong relationship between attitude to treatment with medication adherence ($r = 0.86$; $p < 0.01$).

Table 4 using Pearson Product Moment Correlation showing variable attitude associated with medication adherence (r = 0.86; p = 0.001).

Table 2. Distribution and Percentage of barriers and side effect of drug (n = 60)

Variable	F	(%)
Barriers		
None	10	16.7
Side effects of drug	15	25
Have no disease	7	11.7
Budgets	5	8.3
Lack of family support	8	13.3
Bored	6	10
Value	2	3.3
Forgetfulness	7	11.7
Side effects		
None	10	16.7
Movement problem	15	25
Headache	15	25
Drowsiness	20	33.3

Table 3. Distribution and Percentage of attitude and medication adherence (n = 60)

Variable	f	(%)
Attitude		
Positive	21	35
Negative	39	65
Medication adherence		
High	10	16.7
Moderate	9	15
Low	41	68.3

Table 4. The relationship between attitude and medication adherence (n = 60)

Variable 1	Variable 2	*r*	*P*
Attitude	Medication adherence	0.86	0.001

4 Discussion

Pearson Product Moment Correlation statistical tests show that there was a significant relationship between drug attitude and medication adherence ($p = 0.001$; $p < 0.05$; $r = 0.86$). It means that the relationship between attitudes and adherence to drug is directly proportional. Recently study indicates that negative attitudes towards drugs are a major obstacle for patients to adhere to taking medication according to a medical's prescription. The study shows that more than half of respondents had negative attitudes and performed low levels of drug adherence. In this study, the respondents who suffered from side effects of the drugs are more likely to be non-adherence to medication. The side effects of the drug cause the patients to feel drowsiness, headache, and movement problem [14]. The study also reported that participants did not have adequate support from families. In addition, they will stop taking the drug when not feeling psychotic symptoms. The results of this study are relevant to studies conducted by Madeline et al. [13] shows drug attitude is closely related to drug adherence. Non-compliance with the treatment was found in people with schizophrenia who had a negative attitude to the drug [15]. Furthermore, they explained that the side effects of the drug cause discomfort in persons with schizophrenia. The type of medication consumed also affects the adherence of taking the drug [16]. Widschwendter et al. [17] reported that schizophrenic patients who received atypical antipsychotic drugs were more adhere to the drug than those who took typical antipsychotics. The length of time suffering from schizophrenia makes patients' boredom and forgets to take medication as well. Therefore, awareness of the need for medication is essential to ensure medication adherence [18]. The findings of the study emphasize the need for effort to improve patients' commitment to medication [19]. Moreover, Caqueo-Urizar et al. [15] confirmed that adherence to treatment was found in participants who had high DAI scores. The attitude and adhere to the treatment of schizophrenia is also influenced by stigma. Stigma negatively impacts to maintenance medication and recovery process in schizophrenic patients. Drug attitude to drug and success of treatment [21]. In contrast, Lien et al. [22] claimed that stigma had a positive effect on adherence and cognitive as well. It can be concluded that, the concern of adequate antipsychotic medication as a perquisite for proper adherence and the need to integrate adherence-focused psychotherapy and psychoeducation into day-to-day clinical practice are accentuated [16]. Thus, positive attitude and adherence to medication will affect to the risk of relapse and hospitalization prevention [23].

5 Conclusions

Adherence to taking the drug in people with schizophrenia is one of the important aspects in the recovery process. The success of the treatment is influenced by the positive drug

attitude among persons with schizophrenia. Therefore, nurses are expected to develop an effective intervention in helping patients have a positive attitude to the drugs. So, they can adhere to take medication regularly. Active family participation as a supervisor for taking medication can also scale up patient adherence to medication. Thus, persons with schizophrenia can be able to perform daily activities and prevent re-hospitalization and re-confinement as well.

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References

1. Aguglia A, Fusar-Poli L, Amerio A, Placenti V, Concerto C, Martinotti G, Carrà G, Bartoli F, D'Agostino A, Serafini G, Amore M, Aguglia E, Ostuzzi G, Barbui C; STAR Network Investigators. The Role of Attitudes Toward Medication and Treatment Adherence in the Clinical Response to LAIs: Findings from the STAR Network Depot Study. Front Psychiatry, 16(12):784366 (2021).
2. Laila NH, Mahkota R, Shivalli S, et al. Factors associated with pasung (physical restraintand confinement) of schizophrenia patients in Bogor regency, West Java Province, Indonesia BMC Psychiatry, 19,162 (2017).
3. Purba JM, Simamora RH, Karota E, Siregar CT. Family support for persons with schizophrenia after physical restraint and confinement, Enferm Clin, 30 Suppl, .3,53–56 (2020).
4. Kim J, Ozzoude M, Nakajima S, Shah P, Graff-Guerrero … et al. Insight and medicationadherence in schizophrenia: an analysis of the CATIE trial, 168,107634 (2020).
5. Tessier A, Boyer L, Husky M, Bayle F, Llorca PM, Misdrahi D. Medication adherence in schizophrenia: the role of insight, therapeutic alliance and perceived trauma associated with psychiatric care, Psychiatr Res, 257, 315–321 (2017).
6. Kemenkes RI. Basic health research, https://kesmas.kemkes.go.id/assets/up-load/dir_519d41d8cd98f00/files/Hasil-riskesdas-2018_1274.pdf last accessed 2020/8/9.
7. Asher L, Fekadu A, Teferra S, Hanlon C, et al. I cry every day and night; I have my son tied in chains: physical restraints of people with schizophrenia in community settings in Ethiopia. Global Health, 13,47 (2017).
8. Xu L, Xu T, Tan W, Yan B. Household economic burden and outcomes of patients with schizophrenia after being unlocked and treated in rural china. Epidemiol Psychiatr Sci, 29, e81 (2020)
9. Nagai N, Tani H, Yoshida K, et al. Drug aattitude, iinsight, and ppatient's kknowledge about pprescribed aantipsychotics in Schizophrenia: a cross-ssectional ssurvey. *Neuropsychiatr Dis Treat,* 16, 781–787 (2020). Published 2020 Mar 23. https://doi.org/10.2147/NDT.S240377
10. Kikkert MJ, Dekker J. Medication Adherence Decisions in Patients With Schizophrenia. Prim Care Companion CNS Disord, 19(6):17n02182. (2017).
11. Feldhaus T, Falke S, von Gruchalla L, Maisch B, Uhlmann C, … et al. the impact of self-stigmatization on medication attitude in schizophrenia patients. Psychiatr Res, 261, 391–399 (2018).
12. Kondrátová, L., König, D., Mladá, K. *et al.* Correlates of Negative Attitudes towards Medication in People with Schizophrenia. Psychiatr Q, 90, 159–169 (2019).

13. Madeline L, Ziqiang Li, Huiting X, Bhing Leet T, Jimmy L.the effect of therapeutic alliance on attitude toward psychiatric medication in schizophrenia. J. Clin. Psychol, 41(5), 551–560 (2021).
14. Nyanyiwa S, Peters K, Murphy G. a scoping review: treatment attitudes and adherence for adults with schizophrenia, J. Clin. Nurs, 31(21–22), 3060–3075
15. Caqueo-Urízar, Alejandra et al. "Medication nonadherence among South American patients with schizophrenia." Patient Prefer. Adherence, 11, 1737–1744 (2017).
16. Kassew T, Demilew D, Birhanu A, Wonde M, Liyew B, Shumet S. Attitude towards antipsychotic medications in patients diagnosed with schizophrenia: a corss-sectional study at Amanuel mental specialized hospital, Addis Ababa, Ethiopia, 2019, 5094017 (2019).
17. Widschwendter CG, Kemmler G, Rettenbacher MA, *et al.* Subjective well-being, drug attitude, and changes in symptomatology in chronic schizophrenia patients starting treatment with new-generation antipsychotic medication. BMC Psychiatry, 18, 212 (2018).
18. Zhou Y, Rosenheck R, Mohamed S, Ning Y, He H. factors associated with complete discontinuation of medication among patients with schizophrenia in the year after hospital discharge, Psychiatr Res, 250, 129–135
19. Settem VVJ, Karanadi H, Praharaj SK. Cognitive deficits, depressive symptoms, insight, and medication adherence in remitted patients with schizophrenia. Indian J Psychiatry, 61(4), 335–341 (2019).
20. Settem VVJ, Karanadi H, Praharaj SK. Cognitive deficits, depressive symptoms, insight, and medication adherence in remitted patients with schizophrenia. Indian J Psychiatry, 61(4), 335–341.
21. Barlati S, Morena D, Nibbio Cacciani P, … et al. internalized stigma among people with schizophrenia: relationship with socio-demographic, clinical and medication-related features. Schizophr, 243, 364–371.
22. Lien YJ, Chang HA, Kao YC. *et al.* The impact of cognitive insight, self-stigma, and medication compliance on the quality of life in patients with schizophrenia. *Eur Arch Psychiatry Clin Neurosci,* 268**:** 27–38 (2018).
23. Fadipe, B, Olagunju AT, Ogunwale A, Fadipe, YO, Adebowale TO. Self-stigma and decision about medication use among a sample of Nigerian outpatients with schizophrenia. Psychiatr. Rehabil J*., 43*(3), 214–224 (2020)

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