The Female Indonesian Outpatients with Schizophrenia Adherence to Antipsychotics Medication

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Abstract

Background: Among patients with schizophrenia, medication adherence improves the adverse symptoms and eliminates recurrences. However, many patients still not taking the medication regularly. This study aims to investigate the Indonesia Female outpatient's adherence to antipsychotic medication and their associated factors.

Method: A cross-sectional study was conducted among 70 female patients with schizophrenia living in the community. The data collection was conducted at the outpatient clinic of a psychiatric hospital in Indonesia. The data on demographic characteristics and medication adherence was collected.

Results: the mean age was 36 years old, and more than half (51.4%) had a senior high school level of education. More than half did not have any formal work (63%), had experienced the adverse effects of medication (73%), had a low insight (61%) and had low self-stigma (57%). he adherence to medication was associated with self-stigma ($x^2=11.94$, p= 0.001), insight ($x^2=4.41$, p=0.036), and smoking behavior ($x^2=5.85$, p=0.01).

Conclusion: The association between medication adherence and self-stigma and insight is evident among this population. Poor association between adherence and social support calls for further investigation.

Keywords: adherence, female, Indonesia, schizophrenia

Introduction

Mental disorders are one of the world's most severe public health problems, with an estimated 450 million people. These diseases account for 14% of the global disease burden and 30% of the non-fatal disease burden (WHO, 2017). Psychiatric disorders can also have a direct and indirect impact on economic growth. One of the direct impacts is medical financing which cost around 36 thousand trillion in 2010 and is expected to increase to 86 thousand trillion in 2030. Meanwhile, indirect impacts include lost resources, unemployment, and premature death (Semahegn et al., 2020).

The most common type of psychosis in the world is schizophrenia. Symptoms experienced by people with schizophrenia are thought patterns and perceptual disturbances such as hallucinations and delusions, as well as cognitive impairment, characterized by individuals being unable to remember things and interact with others (Tham et al., 2018). Schizophrenia is a severe mental disorder that affects 20 million people worldwide (World Health Organization, 2019). In addition, although schizophrenia has a high prevalence globally, medication non-adherence among schizophrenic patients remains high, ranging from 20% to 89% (Phan, 2016).

Various studies in Indonesia have been conducted to see the level of medication adherence in patients with

schizophrenia. It is known that the level of non-adherence of patients with mental disorders in taking medication ranges from 30 – 65%. Meanwhile, non-compliance with taking medication in schizophrenic patients reached 50%, which was dominated by outpatients (Isnenia, 2021);(Naafi, Perwitasari, & Darmawan, 2016). Other studies have also examined various factors related to medication adherence in schizophrenic patients, namely self-awareness (Clifford et al., 2020) and self-stigma (Fadipe, Olagunju, Ogunwale, Fadipe Y.O, 2020).

Methods

A cross-sectional study was conducted among female patients with schizophrenia living with their families in the community. Data collection was conducted in the outpatient ambulatory clinics of a psychiatric hospital in Aceh, Indonesia. A systematic random sampling technique was used to select 70 female patients who visited the hospital.

The patient's demographic information includes the age, gender, education, occupation, and history of the number of treatments. The Morisky Medication Adherence Scale (MMAS) was used to access adherence to medication. The level of adherence was obtained from the total score put into the category of adherence if the score ? 6 and non-adherence if the score < 6 (Khayyat et al., 2017). The MMAS instrument reliability test was carried out by (Tan et al., 2014), and it was found that Cronbach Alpha = 0.83, which suggests good reliability.

Results

More than half of the respondents only attended junior high school (51%), did not have any formal work (63%), had experienced the adverse effects of medication (73%), had a low insight (61%), and low self-stigma (57%). More than half did not adhere to the medication (53%). The medication adherence was associated with self-stigma ($x2=11.94$, $x=0.001$), insight ($x2=4.41$, $p=0.036$), and smoking behavior ($x2=5.85$, $p=0.01$). Patients with poor insight are 2.8 times more likely to be non-adherence to medication. In contrast, social support was not associated with medication adherence ($x2=5.38$, $p=0.06$). Detail of demographic information of the study respondents is presented in Table 1.

Discussion

The present study aims to investigate the patient's adherence to antipsychotic medication and its associated factors. It was found that more than half of the female patients in this population did not adhere to the medication. Low adherence to medication has been consistently reported among patients with schizophrenia, and various factors are responsible for the low adherence (Higashi et al., 2013). Our study also found several factors associated with medication adherence, including self-stigma, insight, and smoking behavior. The association between self-stigma and adherence is apparent. Patients with high self-stigma would likely hide their mental problems from others and are not likely to take medication regularly as they feel they are in healthy condition. Previous studies have also consistently reported the role of stigma on adherence to medication among patients with schizophrenia (Abdisa et al., 2020; Kamaradova et al., 2016). Therefore, reducing the stigma in the patient should help the patient's adherence to medication.

Our study also found a significant association between adherence and insight. Patients are with poor insight almost three times more likely to be non-adherence to antipsychotic medication. This finding has been consistent with previous reports (Kim et al., 2020; Novick et al., 2015). Therefore, improving the patients' insight should be one of the priorities while treating patients with schizophrenia. Our study also revealed that social support does not associate with medication adherence. This might be because all patients received similar social support from their families. Thus no difference could be shown between those who

adhered and non-adhere to mediation. Nevertheless, the issue of social support and adherence should be investigated further, considering various issues that might be related to social support and adherence to medication. Furthermore, low adherence found among female patients with schizophrenia requires further investigation.

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Table 1. Socio-demographic information of the respondents

No	Variable		Frequency (f)	Percentage (%)
1	**Level of education**			
		Never attend School	2	3%
		Primary School	11	16%
		Junior High School	36	51%
		Senior High School	19	27%
		College	2	3%
2	**Working status**			
		Working	26	37%
		Does not work	44	63%
3	**Drug Type**			
		Atypical Antipsychotics	29	41%
		Typical Antipsychotics	25	36%
		Mixture	16	23%
4	**Drug Side Effects**			
		Yes	51	73%
		No	19	27%
5	**Insight**			
		High Insight	27	39%
		Low Insight	43	61%
6	**Self-Stigma**			
		High	30	43%
		Low	40	57%
Dependent Variable				
7	**Medication Compliance**			
		Adherence	33	47%
		Non-adherence-Adherence	37	53%