RELATIONSHIP BETWEEN FAMILY SUPPORT AND MEDICATION ADHERENCE AMONG PATIENTS WITH SCHIZOPHRENIA

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ABSTRACT

Background: There are many factors influencing medication adherence among patients with schizophrenia. Medication adherence have an important role in the treatment, especially to preventing relapse patients with schizophrenia. Purpose: The aim of the present study was to examine the relationship between family support and medication adherence among patients with schizophrenia in Bandung, West Java, Indonesia. Method: A cross-sectional study was conducted at the outpatient department of the West Java Province Mental Hospital in Bandung, West Java, Indonesia. Individuals were assessed using the Bahasa versions of Medication Adherence Rating Scale (MARS), and Multidimensional Scale of Perceived Social Support (MSPSS) instruments. Result: A total of 88 patients with schizophrenia were enrolled. The prevalence of medication adherence was 64.8%. By using Chi-square test, the results revealed that family support have no significantly associated with medication adherence Conclusion: This finding could contribute to nursing knowledge to increase the understanding of medication adherence among patients with schizophrenia. The health care providers should promote regarding medication adherence to improve patients’ health status.

Keywords: Medication adherence, family support, schizophrenia

I. Introduction

The Ministry of Health of the Republic of Indonesia (2013) reported that one to two people in a thousand people have suffered from severe mental illness in Indonesia. Schizophrenia has a substantial impact on patients, family, and society. The impact on the individual includes patients social functioning (e.g. occupational performance, functioning in interactions with spouses, parents, children or other relatives), and patients self-care (e.g. personal hygiene, dressing and feeding) (Janca et al., 2013). The burden of care for people with schizophrenia has impact on families, resulting in a significant cost for the caregiver as well as for the person with schizophrenia (Jungbauer, 2004).

Antipsychotic medication is one of the important treatments that are effective in reducing psychotic symptoms, preventing psychotic relapses in maintaining therapy and improving psychosocial functioning among patients with schizophrenia (Dolder, 2002), (Gilbert, 1995). Medication adherence is a key factor related to the effectiveness of all pharmacological therapies (Brown and Bussell, 2011). Patients will be achieve the full benefits of effectiveness of medication if the patients follow prescribed treatment regimens (Osterberg and Blaschke, 2005).
According to the World Health Organization (2003), medication adherence is influenced by a considerable number of factors. The World Health Organization (WHO) has categorized factors related to medication adherence in general population into five factors called the Multidimensional Adherence Model (MAM). The five dimensions of the MAM are; (1) Socioeconomic factors; (2) Therapy related factors; (3) Patient related factors; (4) Condition related factors; (5) Health Care System related factors.

Several studies have been conducted concerning factors related to medication adherence among patients with schizophrenia. Hudson et al. (2004), reported family support was the most common barrier to adherence among patients with schizophrenia. Asian countries in particular reported that family support deficits were significantly associated with non-adherence in persons with schizophrenia (Suttajit and Pilakanta, 2010). Studies conducted in western countries also reported that family support is significantly associated with medication adherence (Gaebel, 1997; Lacro et al., 2002). In a quasi-experimental peer support program for enhancing adherence to oral antipsychotic medication in consumers with schizophrenia the results showed a statistically significant effect on medication adherence (Boardman et al., 2014). Furthermore, a study conducted by Lama et al. (2012), showed that family support was a significant factor in drug compliance in patients with schizophrenia. A study conducted by Tesfay et al. (2013) about medication non-adherence among adult psychiatric outpatients in Jimma University Specialized Hospital, Southwest Ethiopia, reported poor family support was associated with medication non-adherence.

In contrast with all the studies above, Compton et al. (2005) and Sapra et al. (2008), found insignificant associations between family support and non-adherence. It was supported by a study of 239 patients with schizophrenia, the results of which highlight the insignificance of family support on improvement of medication adherence (Rungruangsiripan et al., 2011).

West Java Province Mental Hospital in West Java province is a tertiary referral hospital in Indonesia. The amount of mental illness patients admitted in the hospital in 2013 was 1,672 and among them 1,235 were diagnosed with schizophrenia. In the outpatient department of this hospital, approximately 1732 patients with schizophrenia were registered in 2014, and among them around 775 patients were in relapse and this was mostly caused by non-adherence to medication (Nursing Department of West Java Province Mental Hospital, 2014). Therefore, it is a challenge for health care provider to promote not only medication adherence but also how to prevent non-adherence by concerning to the factors related to medication adherence.
II. Method
A cross-sectional study design was employed and used purposive sampling to recruited 88 participants with schizophrenia. Data collection occurred when patients attended at the outpatient department of West Java Province Mental Hospital, Indonesia for their regular clinic visits. Patients were eligible for participation if they met the following entry criteria:
- Patients with schizophrenia diagnosed by psychiatrists according to ICD-10
- Aged between 18-59 years old at time of study
- Prescribed at least one antipsychotic drug and who have been receiving treatment for more than one month and up to 5 years as confirmed by a physician and medical report
- Able to read, written and spoken Bahasa Indonesia and willingness to participate.

Patients with unstable condition (depression, mania, and cognitive impairment), neurological illness (e.g. epilepsy, Alzheimer’s disease, dementia, stroke, and Parkinson’s disease), and patients with substance abuse confirmed by physician and medical report were not allowed to participate in this study.

A. Instruments
Medication adherence was measured using Medication Adherence Rating Scale (MARS) (Thompson et al., 2000). The reliability analysis of the MARS was tested using compliance in psychiatric patients. The Cronbach’s alpha was 0.75, and the test–retest was assessed after a 2-week interval using parallel-forms Chi-square to test the goodness of fit and was 0.72 for the MARS (Thompson et al., 2000). The reliability of the MARS in this study was tested using 30 schizophrenia patients, and the result of KR-20 was 0.72. The MARS consists of 10 items, which require yes/no responses. The participants were asked to circle the answer which best describes their behavior or attitude towards their medication during the previous week. A MARS score equal to 3 or above indicates adherence, and non-adherence is defined as scores less than or equal to 2. A high score reflected a degree of adherence, and a low score reflected a degree of non-adherence.

Family support was measured using Multidimensional Scale of Perceived Social Support (MSPSS) questionnaire, developed by Zimet et al. (1988), modified by researcher, and consists of 4 items. A 4-item scale, rated with 7-point Likert scale was used, ranging from (1) very strongly disagree to (7) very strongly agree.

B. Data Collection
Approval to conduct this study was achieved from the Ethical Review Board (ERB) committee of Boromarajonani College of Nursing Nopparat Vajira (BCNNV-Bangkok Thailand) with the approval number (ERB) No.18/2558, and obtained a permission letter from the West Java Province Mental Hospital, Indonesia. The eligible participants who willing to participate in this study were signed the informed consent. A number of 91 participants were met the inclusion criteria. Finally, 88 participants were completed self-administered questionnaire, and face-to-face interview. Data was collected from October to November 2015 at the outpatient department of West Java Province Mental Hospital, Indonesia.

C. Data Analysis
SPSS version 22.0 software was used to analyze the data. Approaches to data analysis included descriptive statistics: frequency, percentage, mean and standard deviation. Chi-square test were employed to assess the relationships between
independent variables and medication adherence.

III. Results
A total of 88 self-administered questionnaires were distributed to patients with schizophrenia aged between 18-59 years old at the outpatient department in the West Java Mental Hospital, West Java, Indonesia. In this study, 64.8% of the participants were in adherence to their medication. Three quarters of the participants had a high level of family support (76.1%), 18.2% had moderate level and only 5.7% had a low level of family support. On bivariate analysis, family support did not show a significant association with medication adherence ($\chi^2 = .099, p < .753$).

IV. Discussion
Family support has no significant association with medication adherence. In contrast, a study by Fung et al. (2008) revealed that patients who are living alone were likely to be more non-adherent. Other studies in western countries also indicate that family support has a significant affect on medication adherence (Gaebel, 1997; Lacro et al., 2002; Tesfay et al., 2013). In this study, almost three quarters of the participants had a high level of family support. The possible reasons of this finding were that extended family was an important characteristic of families in Indonesia. Most people live together in one house, sometimes consisting of more than one family. Therefore, after the patients were discharged from the hospital or during rehabilitation, the family members will take care of them and accompany them to see the doctor for follow-up. From the observations of the researcher, all participants went to the hospital accompanied by their family. In addition, related with the family financial burden, the majority of the participant’s treatment costs were covered by health insurance provided by government. This finding is supported by several studies, which stated that there are insignificant associations between family support and medication adherence among patients with schizophrenia (Compton et al., 2005; RungruangSiripan et al., 2011; Sapra et al., 2008).

V. Conclusion
This finding could contribute to nursing knowledge to increase the understanding of medication adherence among patients with schizophrenia. The health care providers should promote regarding medication adherence to improve patients’ health status.

VI. Limitations
The purposive sampling technique was used to select the participants, so the results of this study may not apply to the general population.

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References


