



Original Research

Effectiveness Of Psychoeducation And Assertive Training (PEAT) Combined For Improving Medication Adherence In Patients With Schizophrenia

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ABSTRACT

Background: Non-adherence behaviors have a variety of causes, from suffering negative drug side effects to having scepticism regarding the effectiveness of recommended treatments. Recognising these complex relationships is essential to creating strategies that effectively manage the psychosocial as well as medical components of schizophrenia. The purpose of this study is to investigate how a combination of psychoeducation and assertive training can improve medication adherence in people with schizophrenia.

Methods: A pretest-posttest quasi-experiment design was employed in this study as part of a quantitative research technique. Demographics and the Morisky Medication Adherence Questionnaire were used in conjunction with observation to collect data. Based on room-based simple random sampling, 80 patients with schizophrenia who met the inclusion criteria were split into two groups. Of these, 38 patients in the intervention group and 36 responders in the control group finished the study. This study made use of the five-stage Psychoeducation and Assertive Training (PEAT) module.

Results: A combination of psychoeducation and assertiveness training (PEAT) was found to have an effect on medication adherence in this study. Following PEAT, patients with schizophrenia had a mean medication adherence of 5.92 ± 1.29 . The statistical test findings showed that the mean medication adherence of schizophrenic patients receiving PEAT differed significantly (p value < 0.001) from those who did not.

Conclusion: Studies show that putting more of an emphasis on PEAT can help hospitals treat patients with schizophrenia more consistently by helping them take their medications as prescribed. Additionally, patients with schizophrenia should have a treatment plan that includes PEAT.

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INTRODUCTION

According to He et al., (2020), the burden of schizophrenia on the world's healthcare systems is still high and is still rising. Patients with schizophrenia faced social and public stigma, which had a number of detrimental effects such as drug stoppage, unjust termination, loneliness, and more. A legal framework is required to end prejudice by society against mentally ill people who are receiving deliberate, properly handled medical care and medications (Ko & Park, 2021).

Inadequate medication Education about psychotropic medications is provided to clients with mental illness, which is exacerbated by difficulties in establishing and sustaining a stable therapeutic alliance with their healthcare providers. It has been demonstrated that monitoring side effects is the most difficult part of pharmacotherapy for people with mental diseases who are allowed to live in the community (Bui et al., 2022). Improving medication adherence starts with a collaboration between the patient and his therapist that allows them to accomplish goals through assigned tasks. According to this partnership, modifying perspectives of patients' care could have a greater impact on enhancing medication compliance (Hsieh et al., 2022).

Health professionals can assist patients in complying with therapy and continuing to take their medicine, as nonadherence to treatment is a significant issue for patients. The main causes of patients' non-adherence behaviour include medication side effects, a lack of patient trust in the necessity of treatment, and patient ambiguity regarding the efficacy of drugs (Mehralian et al., 2019). A comprehensive approach to treatment can help individuals with schizophrenia stick to their drug regimen, according to a review of the literature. In order to attain compliance outcomes, health personnel assume the role of advocates by facilitating and upgrading involvement in treatment decisions (Nyanyiwa et al., 2022).

According to Şahin Altun et al., (2021), the majority of schizophrenia patients' non-compliance with medication compliance can be influenced by their lack of social support. According to Mehralian et al., (2019), the primary reasons behind patients' non-adherence behaviour include adverse effects from medications, a lack of patient trust in the value of therapy, and patient uncertainty about the effectiveness of medications. Healthcare facilities have provided treatment for schizophrenia to patients from a variety of community backgrounds, families, and health services. Such treatments include psychoeducation, health education, and assertiveness training. Despite the benefits of each intervention, stigma around the illness of schizophrenia patients persists (Yildirim & Kavak Budak, 2020).

There has been little research on the combination of psychoeducation and assertive training with a focus on families, and even less on the individual components of psychoeducation and assertive training combined with a focus on schizophrenia patients in order to promote compliance with medication in these patients. Assertive training is essential since it helps patients achieve better levels of assertiveness, medication adherence, and functional remission. Psychoeducation is one type of intervention that addresses issues in severe mental disorders like schizophrenia. Its use is still restricted, nevertheless, particularly in Surakarta, Central Java, Indonesia.

Numerous non-pharmacological and pharmacological interventions have been tried, but they haven't completely resolved the problems associated with schizophrenia, such as patients' diligent backsliding and non-adherence to medication. The aim of this research is to gain an insight into how assertive training and psychoeducation work together to increase medication adherence for people with schizophrenia.

MATERIALS AND METHOD

Research design

Quantitative research methodology was used in this study using pretest-posttest quasi-experiment with control group design. In order to provide insight into the process of treating patients with schizophrenia who were receiving a combination of psychoeducation and assertive training (PEAT), data was gathered through observation and questionnaires. Then, information was gathered in a pretest-posttest study including two groups to evaluate how psychoeducational and assertive training combined affected medication adherence.

To achieve the same distribution of a single categorical variable in this design, the intervention group and control group, which are chosen before the intervention, must be homogeneous. While the control group merely received standard nursing care, the intervention group received normal nursing care along with a combination of psychoeducation and assertive training.

Population and sample research

Individuals with schizophrenia who satisfied the eligibility requirements were divided into groups based on room-based random selection. To facilitate the provision of interventions, the room was randomly selected and placed in a sealed envelope that was closed. There were 272 patients with schizophrenia, and 80 of them satisfied the entrance requirements. The study's inclusion criteria included having schizophrenia between the ages of 18 and 50 years old, receiving standard medical care, being able to converse verbally, experiencing at least two hospitalisations due to relapse, and being willing to adhere to the intervention. The elderly, mentally handicapped, and those with acute schizophrenia were the exclusion criteria.

Materials and research tools

The five-stage Psychoeducation and Assertive Training (PEAT) module was used in the intervention group. The researchers created this module by fusing two mutually beneficial exercises in which participants exercised behaviour and emotional expression while also learning about the symptoms of schizophrenia. The module developed by Aho-mustonen et al., (2011), Choe et al., (2016), Mueser & Gingerich (2013), and Speed et al., (2018) has been modified to create this module while a control group received routine nursing care as usual. It is anticipated that as a result of this merging, the respondents will be better able to communicate their needs and feelings and act on their own will.

Session 1 covers the definition and causes of schizophrenia, while Session 2 focuses on the signs and symptoms of schizophrenia and how to articulate thoughts and feelings. Session 3 treatment and care for schizophrenia followed by ability to express wants, needs, and anger, session 4 self-care for schizophrenia followed by ability to say "no" for irrational requests and conveying reasons, and session 5 ability to maintain assertive change with 50 to 60 minutes allocated to each session. Each group of respondents in the intervention group completed a complete session between 14-21 days.

There are two sections to the study instruments. The first section discusses demographics, including gender, age, level of education, employment status, marital status, frequency of treatment, length of time with schizophrenia, insight, and physical health issues. The following section used Morisky et al., (2008) to measure medication

adherence, for pre-intervention, the initial condition was recorded before given intervention. A day after the respondent completed all stages of the intervention, a posttest was carried out.

Collection or research stages

The State Psychiatric Hospital Surakarta served as the research site for seven months, then, in accordance with the inclusion criteria, male and female schizophrenic patients with varying job and marital statuses who had been moved from the emergency department to the acute care unit were selected. There were 40 patients in the psychoeducational and assertive training combined group. Of these, two patients did not follow the intervention to the letter because the family moved to a different hospital after the patients were admitted, leaving 38 patients in the intervention group. Because the family chose to discontinue participation before the intervention was finished, 4 of the 40 respondents in the control group were not assessed for their medication adherence following the intervention, leaving 36 respondents in the control group.

Data analysis

The SPSS version 23 was utilised for generating different trend analyses and descriptive statistics. The variables in this study were described using the frequency table, relative frequency (percent), mean, median, deviation standard, minimum, and maximum values. An examination of the respondents' attributes was done using univariate analysis. Prior to examining the impact of psychoeducational and assertive training combined (PEAT) on medication adherence, normality tests were conducted.

The data was normally distributed, as indicated by the significance result of the medication adherence score data in the intervention group and control group before and after the intervention, which showed p value > 0.05 . The mean adherence compliance of each group before and after the intervention, as well as the difference between the intervention group and control group, were compared using a t-test dependent (paired t-test) and an independent t-test.

RESULTS

According to Table 4.1, the average age of the participants in the PEAT group is 32.00 ± 8.41 , while that of the control group is 36.67 ± 6.50 . In the PEAT group, the age of onset is 24.89 ± 8.05 , whereas it is 27.33 ± 7.56 in the control group. The PEAT group and control group experienced 7.61 ± 3.12 and 9.47 ± 4.41 days of suffering, respectively. Male respondents made up the majority in both groups, which included 29 (76.3%) and 25 (69.4%).

In both age groups, the largest percentage is senior high school and above, with 20 (52.6%) and 16 (44.4%). Twenty (55.6%) of the respondents in the control group work full-time, whereas 17 (44.7%) of the respondents in the PEAT group are employed full-time. The majority of respondents—17 (44.7%) in the PEAT group and 21 (58.3%) in the control group—are married. Regarding history of physical problems, respondents in both groups—more than 50%—have never had a medical issue.

Table 1. Sociodemographic data of schizophrenia patients

Characteristics	PEAT group (n=38)	Control group (n=36)
Age	32.00±8.41	36.67±6.50
Age of onset	24.89±8.05	27.33±7.56
Number of previous hospitalization	3.34±2.47	3.67±3.36
Duration of suffering	7.61±3.12	9.47±4.41

Table 2. Sociodemographic categories of schizophrenia patients

Variable	PEAT Group (n=38)		Control Group (n=36)	
	n	%	n	%
Gender, n (%)				
Male	29	76.3%	25	69.4%
Female	9	23.7%	11	30.6%
Education level, n (%)				
Primary school and below	11	29.0%	5	13.9%
Junior High School	7	18.4%	15	41.7%
Senior High School and above	20	52.6%	16	44.4%
Work Status, n (%)				
Unemployed	8	21.1%	6	16.6%
Part time employed	13	34.2%	10	27.8%
Full time employed	17	44.7%	20	55.6%
Marital Status, n (%)				
Single	9	23.7%	7	19.4%
Divorce/Separated/Widow	12	31.6%	8	22.2%
Married	17	44.7%	21	58.3%
History of physical problem, n (%)				
Non infectious disease	18	47.4%	12	33.3%
Infectious disease	1	2.6%	5	13.9%
No history	19	50.0%	19	52.8%

According to the results of statistical tests. The combination of psychoeducation and assertive training (PEAT) showed a mean difference of 1.26 between pre- and post-intervention values. The combined psychoeducation and assertive training (PEAT) group's medication adherence differed significantly ($p < 0.001$) between the first and second assessments. This study discovered that PEAT had an impact on medication adherence.

Table 3. Combination of psychoeducation and assertive training (PEAT)(n=38)

Variable	Mean	SD	SE	P value
Medication adherence				
Pre test	4.66	1.760	0.285	P<0.001
Post test	5.92	1.459	0.237	

Table 4. Distribution of mean differences in medication adherence between the control group and psychoeducation

Group	N	Mean	SD	SE	P value
Control	36	4.94	1.655	0.276	P<0.001
Combination of psychoeducation and assertive training	38	5.92	1.29	0.237	

Table 4 shows that after a combination of psychoeducation and assertiveness training, the mean medication adherence of patients with schizophrenia was 5.92 ± 1.29 . According to the statistical test results, there was a significant difference ($P < 0.001$) in the mean medication adherence of schizophrenic patients who received combination psychoeducation and assertive training interventions compared to those who did not receive this combination.

DISCUSSION

This study discovered that a combination of psychoeducation and assertive training (PEAT) had an impact on medication adherence. This is consistent with earlier studies. Compared to the group of patients who are fearful or do not pay attention to medication, those who are aware of the need for taking medication have higher adherence to medication and a good quality of life index.

Patients in the pharmacophobia group may not be adhering to their treatment plans because they feel well enough to stop on their own. Low adherence was also linked to fear of medication adverse effects in the pharmacophobic group. In addition to helping patients with psychiatric illnesses live better lives, appropriate health education for pharmacophobia patients can increase medication adherence (Ganesan et al., 2018).

Factors were identified as independent predictors of reduction at release: the length of untreated psychosis, a good early reaction, and more positive symptoms at baseline. Yoshimura et al., (2019) emphasise the importance of early intervention and the use of particular and adequate medications for negative symptoms. Furthermore, an earlier study suggested a research strategy that would allow patients to speak about their experiences and genius while dealing with schizophrenia (Yu et al., 2019).

According to the data gathered, previous research using the motivational interviewing approach has shown its effectiveness, which is consistent with the current study. Psychiatric nurses must learn the intervention and interview strategies and feel comfortable utilising them in order to ensure treatment adherence. This study adds significance to the body of literature since it shows that the motivational strategy improves treatment adherence and insight levels in schizophrenia patients. Additionally, the patients were able to discriminate between the drug's adverse effects and symptoms. He or she learned about the benefits of using medication to treat ailments (Ertem & Duman, 2019).

A prior study discovered that adherence is influenced by a number of factors, including motivation, treatment outcomes, energy and willingness, fear of complications and new illnesses, support from friends and family, and support from medical professionals. On the other hand, self-management is influenced by a number of other factors (Paukkonen et al., 2021). Moreover, emotion regulation can be employed as a nursing intervention to raise awareness and reduce the number of antipsychotic medications taken (Kirchner et al., 2022).

Prescription adherence behaviour and beliefs about the attribution of mental and biological illnesses are related. In order to improve medication adherence, psychoeducation should focus on modifying the patient's beliefs about his illness by increasing his awareness and fostering positive attitudes about the use of antipsychotics and medical professionals (Suen et al., 2021). According to Cho & Jang (2019), schizophrenia patients can enhance their emotional expression and recognition with the aid of an emotion management program.

There is still a lack of research on how well assertiveness training combined with psychoeducation might increase medication adherence in people with schizophrenia. While there is evidence that assertiveness training can help patients learn how to express their needs and deal with social stress, and psychoeducation can help patients learn more about their illness and the value of treatment, the combination of these two approaches in a comprehensive intervention has not received much attention. To assess how well these two approaches work together and what effect they have on drug adherence, more research is required.

CONCLUSION

This study demonstrated the impact of a combination of psychoeducation and assertive training (PEAT) on medication adherence of schizophrenia patients. The significance of prompt intervention and appropriate medication with unfavourable side effects is discussed. Furthermore, a research design could allow patients to express their experiences and virtuosity while battling schizophrenia. Research indicates that healthcare facilities can benefit from a greater emphasis on the combination of psychoeducation and assertive training, as it can enhance the adherence of schizophrenia patients to their medications.

Moreover, a combination of psychoeducation and assertiveness training should be part of the treatment plan for all newly diagnosed patients with schizophrenia and for at least one caregiver. Although there is proof that psychoeducation can teach patients more about their illness and the importance of treatment, and assertiveness training can teach patients how to communicate their needs and handle social stress, the combination of these two strategies in a comprehensive intervention has not gotten much attention. Further research is needed to determine how effectively these two strategies complement one another and what impact they have on medication adherence.

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