

Supportive psychotherapeutic intervention and video directing observed therapy to increase family adherence

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ABSTRACT

To determine the effect of supportive psychotherapy and video-directing observed therapy interventions on family compliance in assisting patients with mental disorders in the working area of the Kabila Health Center, Bone Bolango District, Gorontalo City. Research design quasi-experimental design with a one group pre- and post-test design, where the variables to be measured are family adherence in providing treatment assistance, which are included in the dependent variable. The independent variables in this study were supportive psychotherapy and video-directed observation therapy. The sampling technique used was a total sampling technique with a sample size of 39 respondents. Data analysis was performed using univariate analysis, namely descriptive analysis (frequency, percentage, median, minimum value, and maximum value) and bivariate analysis (Wilcoxon test), with a significance level of <0.05 , which was performed using SPSS version 25 software. Supportive psychotherapy and video-directing observed therapy increased family compliance accompanying the treatment of patients with mental disorders (p -value of $x_1=0.020$, $x_2=0.000$, $p<0.05$). Supportive psychotherapy interventions and video-directed observed therapy have been proven to increase family compliance in treatment assistance, which can improve the quality of life of patients with mental disorders.

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1. INTRODUCTION

According to the American Psychiatric Association (APA) guidelines [1] and the German Society for Psychiatry, Psychotherapy, and Neurology [2], psychotherapeutic interventions are included in standard treatment programs in the acute and post-acute phases of schizophrenia patients [3]. In the context of the currently internationally recognized model of stress-vulnerability coping, assuming a cluster of biopsychosocial causes [4]–[7]. Psychotherapeutic interventions such as “compulsory training” programs provide a basis for further treatment measures [8]. The ultimate goal of all therapeutic interventions is to empower the patients and their families. Non-adherence to treatment is one of the most significant barriers to global control and has become a major factor leading to treatment failure [9]. This condition is detrimental to sufferers because drug discontinuation, which is not according to the doctor's recommendations and is done suddenly, can cause side effects [10]. In the Anglo-American area, psychotherapy is seen as a combination of several therapeutic elements contained in a complex psychosocial intervention [11]–[16].

Strategies for overcoming non-compliance are with the help of reminders of short message service (SMS) messages which assist patients in building patient commitment and adherence in improving recovery

[17]–[19], Use of monitoring via video [20], [21]. Hypnosis therapy, educational interventions, counseling methods, educational and psychological interventions, motivational interviews and psychotherapy as strategies to increase adherence [22]–[24]. One way to improve adherence is through directly observed video therapy, which involves the use of a videophone or other video/computer equipment to remotely observe patients taking medication. This method is promising as a flexible and less invasive option to ensure that patients successfully complete their treatment [25]. Patients are very happy to use video applications to upload while taking medication [20], [21].

Kabila District, Bone Bolango Regency, is one of the areas that continues to experience an increase in the number of patients with mental disorders in Gorontalo. The number of patients with mental health problems in the Kabila Health Center area in December 2019 was 58. In December 2020, there were 63 people with a description of 2 deaths and 2 new patients. There was an increase of 7.9% per year in the working area of the Kabila Health Center (Health Profile of the Kabila Health Center, 2020). The results of an initial review in the form of an interview with the head of the Kabila health center on November 3, 2020 reported that the increase in the number of mental patients was due to a lack of compliance from families and patients, besides that the condition of the COVID-19 pandemic in 2020 complicated the patient's treatment process. Large-scale social restrictions make the treatment process suboptimal for patients with mental disorders. This is because within a certain period, gathering activities such as mental health posts cannot be carried out to minimize the occurrence of transmission in crowds.

This study aimed to determine the effectiveness of supportive psychotherapy and video-directed observed therapy in increasing family compliance in assisting the treatment of patients with mental illness in the working area of the Kabila Health Center, Bone Bolango District, Gorontalo. Novelty in this study lies in the use of video-directed observed therapy, which has not been widely explored in previous research on family compliance. By comparing the effectiveness of supportive psychotherapy and video-directed observed therapy, this study contributes to the existing literature on mental health interventions and provides valuable insights for healthcare professionals in improving patient outcomes.

2. METHOD

This study used a quasi-experimental research design with a one-group pre- and post-test design, where the variables to be measured were family adherence in providing treatment assistance, which was included in the dependent variable. The independent variables in this study were supportive psychotherapy and video-directed observation therapy. The sampling technique used was a total sampling technique with a sample size of 39 respondents. A sample size of 30 is the minimum number of samples to produce a sampling distribution that is close to normal. So, the sample size of 39 is very sufficient to be used as a sample for this research. The instrument used had a validity value of r results (corrected item-total correlation) that was above the value of the r table ($r=0.514$), indicating that it is reliable. based on a significant test of 0.05, meaning that the items above are valid.

The inclusion criteria in this study were families of patients in whom one family member had a mental disorder, families who had Android phones/gadgets with video conferencing features, who were able to communicate well, and families who were willing to be respondents. Supportive psychotherapy was administered in the control group. The intervention group received supportive psychotherapy and video-directing observed therapy (VDOT). The research instrument was developed based on previous research and adapted to respondents and research problems. The validity of the instrument was tested on respondents with the same characteristics, namely, the patient's family at the Tapa Health Center in Bone Bolango District. Data analysis was performed using univariate analysis, namely descriptive analysis (frequency, percentage, median, minimum value, and maximum value) and bivariate analysis (Wilcoxon test), with a significance level of <0.05 , which was performed using SPSS version 25 software. The Wilcoxon test was used because when the data normality test was performed, not all data were normally distributed ($p<0.05$). This research received approval from the Gorontalo Ministry of Health Polytechnic Ethics Committee with number LB.01.01/KEPK/50/2021.

3. RESULTS AND DISCUSSION

Table 1 shows that the level of adherence before the counseling intervention and SMS reminder pre-test was carried out by accompanying families taking medication for people with mental disorders (people with mental disorders in the Kabila Health Center area, namely the compliant category of 19 families (48.7%) and 20 families (51) less compliant. ,3%). After receiving the Post-test 1 counseling intervention, the value changed: 26 families (66.7%) obeyed and 13 families (33.3%) were less obedient. Then, SMS Reminder was given, and the second post-test was carried out with the results of 36 families (92.3%) being obedient and three families (7.7%) not being obedient.

Table 1. Family compliance frequency distribution

Variable (n=39)	Results	
	f	%
Pre-test compliance level		
Obey	19	48.7
Not obey	20	51.3
Compliance level of post-test I		
Obey	26	66.7
Not obey	13	33.3
Compliance level of post-test II		
Obey	36	92.3
Not obey	3	7.7
Total	39	100.0

Table 2 shows the significance of the two-way test on the value of the post-test I–pre-test ($p=0.020<0.05$). It can be concluded that H_0 is rejected and H_a is accepted, proving that supportive psychotherapy intervention affects the level of adherence. While the significance value of the two-way test on the value of the post-test II–pre-test is ($p=0.000<0.05$), it can be concluded that H_0 is rejected and H_a is accepted, which proves that supportive psychotherapy and VDOT interventions influence family compliance.

Table 2. Statistic test (Wilcoxon test)

Variable	Mean rank	Z table	P-value	N
Adherence (supportive psychotherapy)				
Pre-test measurements	5.00	-2.333 ^a	.020	39
Post-test measurement I				
Adherence (supportive psychotherapy and VDOT)				
Measurement post-test II	10.00	-3.900 ^a	.000	39
Pre-test measurements				

Based on the results of the analysis, the average age of the family members who accompanied people with mental disorders was 20-60 years (80%). These results illustrate that most family members who have the ability to care for health are in the early adult to middle adult age range. The results of this study are in line with research conducted by [26], which states that family members who provide care are those who are in early adulthood and middle adulthood, namely, those older than 18 years and younger than 40 years. Based on the results of the analysis obtained from this study, it was found that the closest family members who provided assistance to people with mental disorders were females. Researchers assume that the female sex becomes dominant because of her ability to manage medication well so that patient compliance during the treatment period can be fulfilled. The researchers' assumptions are supported by research conducted by [27], [28], which states that female family members tend to experience positive experiences in caring for, caring for, and looking after family members who are in care.

Based on the results of this analysis, it was found that the level of education possessed by family members who are the closest companions to people with mental disorders is basic education, consisting of elementary school education. A low level of education results in the ability to understand the importance of regular medication and has an impact on the risk of dropping out [29], [30]. This is unlike the case with a high level of education. A study showed that the higher the level of family education, the higher the healthy behavior created by the family, such as support, encouragement, and effective monitoring, which tends to be involved in decision-making and actively participates in matters related to immediate family members [31], [32].

Based on the results of the study, the type of family that accompanied people with mental disorders had an equivalent value between nuclear and extended families (50%). These results are in line with the research conducted by [33], who also reported that the nuclear family type (44.1%) had a high number of visits to health facilities in the context of disease treatment. In this family, support from a partner can help achieve a healthy family. Compliance with the treatment of people with mental disorders is strongly influenced by their family, which is a source of social support. Psychotherapy is another type of supportive therapy used for adherence. Ivey and Simek-Downing (1980) argued that psychotherapy is a long-term therapeutic process associated with efforts to reconstruct a person and larger changes in personality structure. A number of studies have demonstrated the clear superiority of family psychoeducational interventions over standard treatment [34]–[37].

Families play an important role in the recovery of patients with mental disorders [38]. This is because people with mental disorders are in a state of an unstable mindset and emotions. The patient's mindset has changed from before suffering from mental disorders, so that they are less able to make decisions in their lives, and sometimes even to carry out self-care activities also need help. This was because of the patient's failure to function as a complete individual. Patients need help in carrying out daily activities until their mental and emotional conditions begin to stabilize. To restore this, treatment is needed for patients undergoing therapy, including the administration of medicines that the patient must consume. At this point, a role is required. Family support affects patient adherence to medication.

The results showed that the significance value of the two-way test on the value of the post-test I–pre-test was ($p=0.020<0.05$) which means that supportive psychotherapy intervention has an effect on the level of adherence. While the significance value of the two-way test on the value of post-test II–pre-test was ($p=0.00<0.05$), from these results, it was also concluded that supportive psychotherapy and VDOT interventions influenced family compliance in accompaniment. The family can play a significant role in terms of support during the recovery process for sick family members to achieve optimal health status [39].

The maximum health obtained by people with mental disorders is achieved through adherence to medication. Treatment adherence was significantly correlated with the recurrence rate in people with mental disorders and those with mental disorders. The forms of compliance included complying with agreements, complying with and completing treatment programs, using medications appropriately, and following recommendations. Adherent behavior depends on the specific clinical situation, nature of the disease, and course of treatment [40].

This study found that supportive psychotherapy interventions provided to families increased their adherence to drug consumption. This study is supported by research that states that minimal supportive psychotherapy has a low impact on adherence and treatment strategies [41]. This is also in line with research stating that supportive psychotherapy not only has an impact on obedient attitudes but also on healthy attitudes [42]. Supportive psychotherapy to support medication adherence is provided on an ongoing basis, using a structured procedure. This procedure can be accompanied by the provision of a guidebook, which provides a source of learning for the family to increase knowledge regarding the disease suffered by the patient. This information is urgently needed not only to strengthen medication adherence, but also to increase awareness of risk factors and improve preventive capabilities so that relapse does not occur [43].

The results of this study also showed that the adherence level improved after Supportive Psychotherapy and VDOT interventions. The VDOT can provide service information to help patients make better decisions, follow doctors' advice, receive better health services as reminders, and monitor patient treatment [44]. VDOT interventions are a viable solution to support programs by adapting new technologies available through technological growth during the pandemic era [45]. The benefits of this intervention are as a reminder to take medication, a reminder for the next scheduled visit, as education about pulmonary TB, families, and patients can also report directly about the situation the patient is experiencing during treatment [46].

Researchers recommend that the intervention can be developed with several other integrated interventions in order to be able to measure the success of treatment not only focusing on consumption adherence but being able to measure the ability of families to maintain habits. The limitation for researchers is the small number of samples; therefore, the variation in the data we expect cannot be explored in this study. The absence of a family living at home with a sufferer was also an obstacle in this study.

4. CONCLUSION

Significant differences were found in medication adherence before and after the supportive psychotherapy and VDOT interventions. In addition, differences in the distribution of family adherence were observed. Researchers recommend that, after significant adherence is found, this intervention can be modified again following the needs of health service providers to provide a better increase in adherence to people with mental disorders. In addition, researchers recommend that the intervention be developed with several other integrated interventions so that it can measure the success of treatment by not only focusing on consumption adherence, but also measuring the ability of families to maintain habits through the implementation of family tasks.

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