

Original Research

Improvement of Psychological Health Aspect of Tuberculosis Client Through Psychoeducation



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Article Info	Abstract
Article history: Received: 10 May 2020 Accepted: 28 July 2020	<i>Introduction:</i> Tuberculosis is well known as an infectious disease on lungs system caused by Mycobacterium tuberculosis in physical, social and mental health conditions. <i>Methods:</i> This research applied quasi-experiment and consisted of pre and post-test on non-equivalent control group. The subjects were divided into two groups, control group (35) and treatment group (35) by using simple random sampling technique based on inclusion criteria. The research was conducted at Health Center, Jombang. The variables involved in this research were psycho-education psychological aspects. <i>Results:</i> The results of the research showed that physical and psychological aspects on both treatment and control groups is with $p = 0.000 (<0.05)$ which means that there is significant difference on psychological aspect between treatment and control groups. Psycho-education significantly influenced psychological among the patients with tuberculosis. <i>Conclusion:</i> This change occurred due to the increase of health on the patient with tuberculosis in psychological aspects and also it followed by the decrease of symptoms on the patient.
Keywords: Tuberculosis, psychoeducation, psychological	

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INTRODUCTION

Tuberculosis (TB) has become a health problem in the world, including Indonesia, the third cause of death and ranks first for infectious diseases class. Tuberculosis therapy has a positive effect on the physical condition, but there are other effects obtained after tuberculosis patients completed treatment and microbiologically declared cured, the quality of life of tuberculosis patients is significantly worse than the healthy population, seen from his mental health (vitality of life, health effects on living activity, restrictions by mental health status, mental health in general) [1].

WHO Global Tuberculosis Report report (2017) states that in 2016, Indonesia ranks second with the highest incidence of TB cases with an estimated 1,000,000 cases [2]. Ministry of Health (2017) described in Indonesia in 2016 found the number of TB cases as many as 351,893 cases, increased when compared to all cases of TB found in 2015 which amounted to 330,729 cases [3].

The recent implemented DOTS (Directly Observed Treatment Short Course) strategy that has been implemented in various countries as an effort to improve the success of TB treatment, but there are still related problems have not been resolved since the existing intervention methods are considered less effective [4]. Because of the length of the treatment program requires patience, tenacity, willingness. The phenomenon that occurred in Indonesian society is the number of pulmonary TB patients with prolonged treatment program despite a program DOTS method was also found pulmonary TB

patients who failed treatment as well as changes in quality of life.

As an effort to improve psychological aspects of health, it is necessary to have an intervention method about aspects of psychological health of TB clients better through psychoeducation program. Psychoeducation is a therapy given to individuals, families or groups to strengthen coping strategies or a special way of dealing with the difficulties of change, which includes an act of modality delivered by professionals who are integrated and synergize with psychotherapy and mental education interventions [5].

Referring to the data and research above, the authors are interested in conducting research that aims to determine the effect of the application of psychoeducation to an increase in the psychological aspects of Tuberculosis clients.

METHODS

This research applied quasi-experimental type of research conducted to reveal the causal relationship by involving the control group in addition to the experimental group [6]. The design used is a pre-test and post-test non-equivalent control, which is to form 2 groups, each group carried out an initial measurement (pre-test) to determine the initial score before the intervention. The treatment group was given an intervention (psychoeducation) while the control group was given an intervention in accordance with the Health Center program. The final measurement (post-test) was carried out in both groups after the intervention in the treatment group was declared complete.

Meanwhile, dependent variable was psychological aspects.

The sample of this study is the existing TB Clients who meet the research criteria in the work area of the Jombang health service, using simple random sampling techniques, which is divided into 2 groups namely treatment and control. The subjects were divided into two groups, control group (35) and treatment group (35) which conducted at Health Center, Jombang after fulfilling inclusion and exclusion criteria. The control group was pre-tested and then given treatment according to the Health Center program, whereas for the treatment group psychoeducation was carried out for 2 weeks, then 2 groups were carried out post-test. The data were collected by using WHOQOL questionnaire and analyzed by using paired t test, and Mann Whitney. The research was approved by ethical clearance No. 632-KEPK Airlangga University.

RESULTS

Table 1 shows that the percentage of age of the respondents who experienced the most TB was age 17-34 years and 35-51 years each amounting to 13 respondents (37.1%) in the treatment group, while for the control group the percentage of respondents who experienced TB the most was at the age 17-34 years (48.6%). Based on gender, the majority of respondents were female in the control

group, namely 19 respondents (54.3%), while the treatment group was mostly male, with 25 respondents (71.4%). Based on education, the majority of respondent education in the treatment and control group was junior high school, in the control group there were 15 respondents (42.9%), while in the treatment group there were 14 respondents (40.0%). Based on the homogeneity test, it was found that the characteristics of age, sex and education showed homogeneity ($p > 0.05$).

The results showed that there was an influence of psychoeducation on the quality of life on the psychological health aspects of tuberculosis clients. the results of psychological health aspects in the control group at the time of the pre-test average was 14.20 and at the post-test 15.26, whereas in the treatment group it was obtained at the pre-test mean of 14.63 and at the post-test 19.94. The increase in the average in the group showed an increase in aspects of psychological health after treatment. Paired t test and Wilcoxon test showed significant values ($p < 0.05$) which means that there were differences in values in the groups before and after treatment.

The results of Mann Whitney test on psychological health aspect variable in treatment and control group that is $p < 0.000$ (< 0.05) meaning there are difference of psychological health aspect which significant between treatment group and control group.

Table 1
The Distribution of the study participant

No	Charakteristics	Treatment Group (n=35)		Control Group (n=35)		<i>p value</i>
		F	%	F	%	
1	Age (Years)					0.175
	17 – 34	13	37.1	17	48.6	
	35 - 51	13	37.1	14	40.0	
	52 – 67	9	25.7	4	11.4	
2	Gender					0.668
	Male	25	71.4	16	45.7	
	Female	10	28.6	19	54.3	
3	Educational Background					1.000
	No School	0	0.0	1	2.9	
	Elementary school	7	20.0	5	14.3	
	Junior High school	14	40.0	15	42.9	
	Senior High school	11	31.4	12	34.3	
	Bachelor	3	8.6	2	5.7	

DISCUSSION

Chan's (2006) study describes Psychoeducation interventions that contain education, relaxation and effective group support in improving outcomes of care provided, as well as positive effects and good emotional support for individuals [7]. Another study that also supports this research was conducted by Fini et al (2011) explaining that health education can increase the level of individual confidence in carrying out the process of self care and improve the quality of life of the individual [8]. This is in line with Al-rishawi's (2015) Psycho-educational program is suggested to improve the client's psychological and emotional status [9].

Psychoeducation significantly affects stress levels, anxiety and depression is demonstrated through research conducted by Rahimipour et al (2015) through educational therapy hope to reduce depression, anxiety, and stress levels in patients undergoing

hemodialysis. There were significant results on the average score of depression, stress, and anxiety in the treatment group. Through the education of hope therapy, individuals will have more realistic goals and get rid of despair that can undermine confidence. So it is possible that the individual is more resistant to negative events. In addition, hope is a kind of feeling that increases the likelihood of future behavior or fun events [10].

Research conducted by Khanal (2017) also shows that with behavioral changes proven helpful in identifying appropriate changes in attitude and decision making. The findings of this study emphasize the need for tailored psycho-social support. Working with simple psychological support for the general population can be used easily for people with MDR-TB. Good psychological support is expected to improve attitudes and ways of making decisions in determining therapy so

that the success of therapy will be more optimal [11].

Notoatmodjo (2003) also argues that the age of the individual can affect his psychic health, the more mature the individual's age, the more likely he will become aware of and know about the problems, the more experience gained so as to increase the mental and intellectual maturity of the individual [12].

Research conducted by Berry et al (1999) states that the sex of an individual affects his emotional state, men have a strong mentality when there is a stimulus that threatens him and has an adventurous character when compared to women who tend to have high emotional levels [13].

Martin (2017) also revealed that individuals in psychoeducation interventions proved a significantly greater improvement in the outcome of the medical treatment and treatment strategy subscale compared to those who participated in the control condition [14].

Factors that can support psychoeducation in aspects of psychological health are the level of education, age and sex of the individual. In line with Notoatmodjo (2010), states that the level of education increases along with one's acceptance of accepting new and easy things in terms of self-adjustment [15]. These statements are in line with the opinion of Simanungkalit (2011) in Mandias (2012), the easier it is for individuals to receive information along with the higher education, so the more knowledge. This has an impact, where if a low education will hinder the development of behavior towards

the reception of new information and knowledge [16].

Improving the quality of life in the psychological health aspects in this case researchers assume that the optimal education in the form of psychoeducation can be a driving factor, support and predisposition and controller therapy so that individual behavior is improved which the end result of individual psychological health as well more increased.

CONCLUSION

Psychoeducation significantly influenced psychological among the patients with tuberculosis. This change occurred due to the increase of health on the patient with tuberculosis in psychological aspects and also it followed by the decrease of symptoms on the patient based on this study the authors hope that the nurse / TB program holder can utilize existing TB patient contacts by applying psychoeducation in conducting health education for TB clients so that they will further improve TB management independently by clients and families.

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