

Research Article

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THE EFFECT OF HEALTH EDUCATION AUDIOVISUAL BASED ON HEALTH BELIEF MODEL TOWARDS COMPLIANCE BEHAVIOR OF TB PATIENTS IN PREVENTION TRANSMISSION AT NAMBO PUBLIC HEALTH CENTER AREA

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ABSTRACT

Background: Health education can improve an adherence and reduce treatment delays in Tuberculosis (TB) patients. Based on results of interviews with TB patients at Nambo Public Health Center in December 2019, the results of interviews that has conducted on 4 patients, it found that the patients was undergoing treatment at the public health center , there were family members who were undergoing same treatment, there had been no routine preventive measures. The 4 patients interviewed said that they did not know clearly to prevention transmission because the health worker only gave a sheet of paper which was recommended to be read at home. The General objective of this study was to determine the effect of health education patients in prevention of transmission at the Nambo Public Health Center Area.

Methods: The type of study was quasyi experimental method with a pre test and post test design. The population of this study was 75 people, by using proportional random sampling technique with 26 respondents. The method of analysis used paired t test of the statistical analysis.

Result: The results of this study, showed that the above table analysis obtained the value of $t=10,111 > 1,706$, where t count was greater than the value of t table. It shows that there was a significant effect of Health Prevention behavior at Nambo Public Health Center.

Conclusion: It is hoped that the Nambo Community Health Center will always education or conseling which will increase community knowledge on TB prevention in the working area.

Key words: *Health Belief Model, TB transmission, Prevention Behavior, Nambo Public Health Center*



INTRODUCTION

Tuberculosis (TB) has existed for thousands of years and remains a major global health problem today and remains one of the top 10 causes of death and the leading cause of single infectious agent in the world (1). In the working area of the Nambo Community Health Centre, Kendari City, in 2017, there were 90 cases of pulmonary TB. In 2018, from January to November there were 93 cases of pulmonary TB. While the number of TB cases in the last three months in the working area of the Nambo health center has tended to increase, in July 2019 the number of TB cases undergoing treatment was 42 people, in August 2019 it was 56 people and in September 2019 it was 75 people. TB cases in Nambo Community Health Centre are in one family suffering from TB. Of the 75 cases there were those who stopped taking their medication (2).

Adherence to TB treatment is a major determinant of treatment success (3). Non-adherence to treatment leads to prolonged infection, recurrence, drug resistance, which can lead to increased morbidity and mortality. This can pose a very serious risk to society and contribute to the failure to eradicate disease globally (4).

Several strategies have been implemented in an effort to support TB treatment adherence, including through counseling, education to TB sufferers and health workers, psychological interventions, reminders, direct assistance in taking medication, support from peers and providing incentives. However, non-compliance problems are still found in patients. TB (5). Compliance with TB patients in TB disease prevention can be improved through health education regarding the disease and its treatment and providing information about the location and cost of care for free (6).

Providing education with audio-visual media can facilitate the delivery of information (7). In addition, it is also effective in increasing adherence to treatment actions or procedures

(8). Education given using audio-visual media is more effective in changing a person's behavior, because the information conveyed through the visual sense can be absorbed by the brain by 75% - 87% and the rest through other senses (9).

Based on the results of interviews with TB patients at the Nambo Health Center in December 2019, information was obtained that the patient underwent treatment at the Nambo Community Health Centre, there were family members who were undergoing the same treatment, there had been no routine preventive measures. The 4 patients interviewed said they did not know how to clearly prevent transmission because the health worker only gave a sheet of paper which was recommended to be read at home. The results of interviews with TB officers stated that several inhibiting factors that affected the recovery of pulmonary TB were some pulmonary TB patients who dropped out of treatment because they felt they had recovered, were bored with taking medication, and still lacked behavior towards preventing transmission. Education has been carried out as an effort to improve adherence, but it is done only once and in one direction, does not dig much about patient beliefs, and the media used have not provided a clear picture of TB disease.

METHOD

This study uses a quasi-experimental type with a pre-test-post-test design method (10). This research was conducted from March to April 2020. The sample in this study were 36 patients with TB in the working area of the Nambo public Health Center in September 2019, spread across 5 urban villages.

RESULT

Table-1 shows that at the time of the pre-test of 26 respondents, there were 6 respondents (23.1%) who had well TB Transmission Prevention Behavior and 20 respondents (76.9%) who had less TB Transmission Prevention Behavior, while at



the post test there were 26 respondents, 24 respondents (92.3%) had well TB transmission prevention behavior and 2 respondents (7.7%) who lacked TB transmission prevention behavior.

Table-2 shows that the statistical test results obtained a significant value of $0.000 < \alpha 0.05$. The results of table analysis also obtained the value of $t = 10,111 > 1,706$, where t count is greater than the value of t table. This shows that there is an effect of Health Education Audiovisual Based on the Health Belief Model (HBM) on TB

Transmission Prevention Behavior at Nambo Public Health Center

Table 1
Descriptive Transmission Prevention of TB Behavior at Nambo Public Health Center

Transmission Prevention Behavior	Pre test		Post test	
	n	%	n	%
Well	6	23,1	24	92,3
Less	20	76,9	2	7,7
Total	26	100	26	100

Table 2
Audiovisual Health Education Based on t Health Belief Model (HBM) Against TB Transmission Prevention Behavior at Nambo Public Health Center

Transmission Prevention Behavior	Mean	SD	t count	P value
Pre test	45,38	15,807	10,111	0.000
Post test	69,23	13,542		

DISCUSSION

The results of this study shows that the means of behavior of the respondents before the intervention was 45.38 and after the intervention (post test) increased to 69.23. It shows that basically the respondent's behavior is quite well, however health education still needs to be done considering that there is some information that is not yet known by the respondent. If seen the characteristics of the respondents, there are still 7,7% junior high school students and junior high school students, 8%. From the results of the study, it was found that there were still those who lacked preventive behavior, as many as 2 respondents (7.7%) this was because there were some who did not pay attention to the intervention and some did not understand the interventions given.

Education will affect a person's learning process, the higher the education, the easier it is for that person to receive information that can and is absorbed clearly (9).The level of education usually affects a

person's level of knowledge (11), where according to Notoatmodjo (2014) the higher the level of education, the better the knowledge, in this case, of course, knowledge about TB transmission prevention behavior (12).

Simonds(1976) in (13) aims to bring about behavioral changes in individuals, groups and populations that are larger than TB prevention behavior, towards behaviors that are conducive to current health and behavior. future.The results of this study are in line with the research of Moonaghi, Hasanzadeh, Shamsoddini, Emamimoghadam, & Ebrahimzadeh (2012), showing that health education using video or audiovisual can be as effective as using face-to-face methods (8).

The provision of health education is not easy to see or measure the benefits for the community. Health education is a long term education. where in the short term health education will affect changes / increase in public knowledge. Meanwhile, in the medium term health education will affect



behavior, then this behavior will affect the increase in public health indicators as an outcome of health education.

This research was conducted 13 times with interventions for 1 month, where the intervention was given, respondents were shown videos of TB transmission prevention behaviors, the advantage of this video is that this video is very interesting because the video is combined with illustrations and animation about TB transmission, in the video there is the origin of the video. TB, how TB is transmitted, how to prevent TB, and TB treatment, so that respondents are enthusiastic to ask questions.

The results of (14) showed an increase in attitude and behavior scores in the intervention group supported by the presence of video media where the duration of the video in this study was 10 minutes, the duration of the video would influence someone's interest and absorption of information. Research by (15), Shows that health education using audiovisual media can improve knowledge and attitudes of sufferers in preventing tuberculosis transmission.

CONCLUSION

Based on the research results, it can be concluded that there are: There is an effect of Health Education Audiovisual Based on the Health Belief Model (HBM) on TB Transmission Prevention Behavior at Nambo Community Health Centre.

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