HEALTH PROMOTION AND LITERACY MODELS TO INCREASE THE AUTONOMY OF PATIENTS WITH TUBERCULOSIS

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ABSTRAK
Autonomy was the main element in improving the ability of Tuberculosis patients to care and improve healing. The success rate of the Tuberculosis program in Tanjungpinang City was less than 90% so there was a risk of an increase in Tuberculosis drug resistance. The purpose of this research was to prove the effectiveness of health promotion and literacy models in increasing the autonomy of Tuberculosis patients. This research used a quasi-experimental approach, carried out for 2 (two) months in the intensive phase of the Tuberculosis treatment program. The research sample was 60 people with simple random sampling. The research variables consisted of nursing actions based on health promotion, health literacy, and autonomy of Tuberculosis patients. Analysis study used an independent t-test to determine the effectiveness of the health promotion and literacy models for the autonomy of Tuberculosis patients. The results showed that the health promotion and literacy models were effective in increasing the autonomy of Tuberculosis patients undergoing treatment and care with p <0.05. The autonomy of Tuberculosis patients on treatment and care to have an impact on the improvement of cure rates for Tuberculosis patients, reduce drug resistance, prevent transmission to family members and improve healthy behavior in Tuberculosis patients.

Keywords : Autonomy; Health Promotion; Literacy; Tuberculosis.

INTRODUCTION

There were an estimated 10 (9.0—11.1) million new (incident) TB cases worldwide in 2018, of which 5.7 million were men, 3.2 million were women and 1.1 million were children. People living with HIV accounted for 9% of the total. Eight countries accounted for 66% of the new cases: India, China, Indonesia, the Philippines, Pakistan, Nigeria, Bangladesh, and South Africa (World Health Organization, 2015).

New Tuberculosis cases globally are 9.6 million people, 58% are in Southeast Asia and the Western Pacific. India, Indonesia, and China have the largest number of Tuberculosis cases with 23%, 10%, and 10% of the total new Tuberculosis

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cases globally. Currently, Indonesia ranked 3 (three) among the 22 countries in the world that have the highest burden of Tuberculosis disease. Globally occur MDR-TB (Multi Drug Resistance Tuberculosis) is 3.3% from new Tuberculosis cases and 20% of Tuberculosis cases that have been re-treated, an estimated 190,000 people died due to MDR-TB in 2014 (World Health Organization, 2015).

Nurses as providers of health and nursing services have not been optimal in increasing the autonomy of Tuberculosis patients, performing care during the treatment program. A Preliminary study of interviews with 9 (nine) nurses in charge of the Tuberculosis program found that every patient who tested positive for Tuberculosis received health education about the program's treatment and prevention of transmission. Care is an effort to increase knowledge, skills, and attitudes in carrying out treatment and maintenance that is carried out gradually and continues to enhance the independence of Tuberculosis patients.

One strategy to improve the autonomy of Tuberculosis patients is by taking a nursing action the approach based on health promotion and literacy models. The increased autonomy of Tuberculosis patients expected to have an impact on the success of the Tuberculosis eradication program in Tanjungpinang City.

Health promotion (Parish et al., 1991) and health literacy (Sørensen et al., 2012) are models that are used to improve the autonomy of pulmonary TB patients undergoing treatment and care. The autonomy of Tuberculosis patients is a form of the individual need to independently carry out treatment and care while undergoing a Tuberculosis treatment program, competent in establishing cooperation with nurses and families during the treatment program.

RESEARCH METHOD

The study was conducted with a quasi-experimental approach, a sample of 60 Tuberculosis patients (30 treatments and 30 controls) with criteria for new cases of positive BTA Tuberculosis patients who were undergoing a Tuberculosis treatment program at the Tanjungpinang City Health Center.

This study was conducted for two months by providing medical treatment and education (4 times/2 months) and home visits (2 times/2 months) to TB patients.

Health education materials about understanding TB disease, prevention, and treatment programs for pulmonary TB. the evaluation of the independence of TB patients with home visits. The research instrument on the independence of pulmonary TB patients is 17 statements with a Linkert scale, validity, and reliability tests on pulmonary TB respondents totaling 30 TB patients.

The analysis used an independent t-test to determine the effectiveness of the health promotion and literacy model in increasing the independence of tuberculosis patients. This research is a trial phase of the health promotion and literacy model in TB patients. Health promotion and literacy models were the results of model development by researchers in the early stages of research.

This research has passed the ethical test by the ethics committee at STIKES Hang Tuah Tanjungpinang (No.06/KEPK/IX/Stikes/2021). Before conducting the research, respondents were explained the actions to be taken and

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voluntarily gave up their consent to the researcher.

RESULTS AND DISCUSSIONS
Characteristics of Tuberculosis Patients

The characteristics of Tuberculosis patients consist of age, sex, level of education, and income as the table below.

Tabel 1. Characteristics of Tuberculosis Patients in the Treatment and Control Groups

No	Characteristics of Tuberculosis Patients	Category	Treatment		Control	
			(f)	(%)	(f)	(%)
1.	Age	20 - 30 years	4	13	4	13
		31 - 40 years	8	27	8	27
		41 – 50 years	10	33	9	30
		51 – 60 years	5	17	5	17
		> 60 years	3	10	4	13
2.	Gender	Male	14	47	15	50
		Female	16	53	15	50
3.	Education	Primary	4	13	5	17
		Junior	7	24	8	27
		High School	15	50	12	40
		Bachelor	4	13	5	17
4.	Income	< 1 million	2	7	3	10
		1 – 2 million	15	50	13	43
		> 2 – 3 million	10	33	9	30
		> 3 million	3	10	5	17
		Total	30	100	30	100

Based on table 1, most of the respondents are 41-50 years old, female gender, with high school education and income of 1-2 million

Description of Autonomy of Tuberculosis patients

The autonomy of Tuberculosis patients measured before and after given treatment programs and treatment measures in the treatment and control groups, the level of autonomy of Tuberculosis patients is shown in the table below.

Table 2 showed that there was an increase in autonomy in the treatment and control groups after nursing actions were given.

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Table 2 Autonomy of TB Patients in the treatment and Control Group

Autonomy Variable	Category	Treatment				Control			
		Pre-tes		Post-tes		Pre-tes		Post-tes	
		f	%	F	%	f	%	f	%
Treatment	Good	0	0%	18	60%	0	0%	4	14%
	Enough	5	17%	10	33%	3	10%	25	83%
	Less	25	83%	2	7%	27	90%	1	3%
Caring	Good	0	0%	14	70%	0	0%	12	40%
	Enough	3	10%	16	30%	0	0%	16	53%
	Less	27	90%	0	0%	30	100%	2	10%
Cooperation	Good	0	0%	20	50%	0	0%	10	34%
	Enough	2	7%	10	50%	1	3%	19	63%
	Less	28	93%	0	0%	29	97%	1	3%
Total		30	100%	30	100%	30	100%	30	100%

The treatment group experienced an increase in autonomy in treatment of more than 50%, while the control group was less than 50% in the good category. Increased autonomy of Tuberculosis patients establishes cooperation in the treatment group with a good category of 50% and 30% control.

T-Test Results (Independent)

A T-test (Independent) was conducted to determine the effectiveness of the Health Promotion and Literacy models to increase the autonomy of Tuberculosis patients undergoing treatment and care, the results of the t-test as shown in the table below.

Table 3 T-Test Results Independent Results Autonomy of Tuberculosis patients

Variabel	N	Mean	SD	SE	pValue
Treatment	60				
Pre		15.93	1.552	0.283	0,000
Post		18.83	2.842	0.519	
Caring					
Pre		16.40	1.380	0.252	0,000
Post		18.23	2.285	0.417	
Cooperation					
Pre		14.70	1.489	0.272	0,379
Post		15.10	1.971	0.360	

Table 3 shows that the health promotion and literacy models effectively increased the independence of patients with tuberculosis, with a p-value of <0.05 on autonomy in treatment and care, while autonomy in cooperation with a p-value of > 0.05.

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Once given Health education had given to patients by nurses and researchers. TB patients in carrying out treatment and care are increasing. The collaboration between patients and nurses remains the same because, since the initial TB treatment, patients and families have collaborated in the TB program, so there are no significant changes.

The application of health promotion and literacy models with the nursing process approach emphasizes educational activities (counseling and health education) to improve health promotion behavior by increasing self-efficacy and health literacy of Tuberculosis patients (Khariroh S, et al, 2016). Performing Stages of nursing actions (education) as below,

1) Creating a comfortable environment
2) Improving the self-efficacy of Tuberculosis patients (Taymoori et al., 2010).

The approach used to improve the self-efficacy of Tuberculosis patients through counseling by 1) identifying and clarifying problems that must be resolved, 2) involving Tuberculosis patients and families in identifying alternative solutions to problems, 3) involving Tuberculosis patients and families to choosing alternative solutions to problems, 4) facillitating Tuberculosis patients evaluating the decisions taken to increase awareness of themselves in overcoming the problem (Friedman, 2010).

Counseling nurses help Tuberculosis patients to make the process of problem-solving and take the right decision to act. Counseling can be done on Tuberculosis patients and families who experience psychosocial problems related to the roles and responsibilities as Tuberculosis patients,

conflicts in the family due to Tuberculosis, social isolation due to suffering from Tuberculosis, patients who experience side effects of tuberculosis medication (Friedman, 2010).

Autonomy as a basic human need is done if it gets support, facilitates more autonomy in the form of behavior regulation (Deci, E. L., & Ryan, 2000). The autonomy of Tuberculosis patients will occur if the support provided by nurses in the form of nursing actions (education and supervision) can change the cognitive-behavioral abilities of Tuberculosis patients (self-efficacy).

Increased health literacy capabilities will improve effective communication between Tuberculosis patients and nurses which will result in increased ability to conduct treatment and care, use health services effectively and improve the ability to make decisions about health problems in Tuberculosis patients and family member (Logan, et al., 2015).

CONCLUSION

Health promotion and literacy models effectively improve the autonomy of Tuberculosis patients undergoing treatment and care. It is expected to have an impact on the success of Tuberculosis treatment programs. Indicators of cure rates for Tuberculosis patients, increasing (> 90%). Preventing transmission to family members and improving health status Tuberculosis patients.

Improve health education and counseling activities by the Tuberculosis treatment program schedule (6-8 months) to increase knowledge and change healthy behavior for Tuberculosis patients and families by applying for health promotion and literacy models.

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