

Research Article

Relationship of The Family Health Task Implementation with Motivation and Adherence of Tuberculosis Treatment among Tuberculosis Patients

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ABSTRACT

Cases of pulmonary Tuberculosis (TB) increase every year. The strategy to control pulmonary TB cases is to improve motivation and adherence for the treatment of pulmonary TB patients. The family has a role in caring for family members affected by pulmonary TB. This study aims to analyze the relationship between the implementation of family health tasks with motivation and treatment adherence of pulmonary TB patients at the community health center. This study used a cross-sectional design. The independent variable was a family duty in care. The dependent variable was motivation and adherence to the treatment of pulmonary TB patients. The study samples were 50 pulmonary TB patients at the community health center. The data was collected by distributing questionnaires. The statistical test used a chi-squared test with a significant degree of $p < 0.05$. The statistical result shows that the implementation of family duty in care has a relationship with motivation for treatment ($p = 0.001$) and treatment adherence ($p = 0.01$) of pulmonary TB patients.

Keywords: adherence, family health task, motivation, pulmonary TB, treatment

INTRODUCTION

Cases of pulmonary TB are increasing every year. To reduce this case, it requires the treatment of pulmonary TB patients (Abdul et al., 2019; Kurniawati et al., 2016). The patient's adherence factors determine the success of the treatment by taking medication and the role of the family (Pandia, Syafiuddin, Bachtiar, & Rochadi, 2019). Patient adherence in taking medicine arises because there is motivation from the patient to recover (Madjid et al., 2019; Sukartini, Sitorus, Waluyo, & Darmawan, 2015). Motivation comes from an individual. Besides, the motivation comes from outside the individual or environment. In other words, the motivation can be obtained from the influence of the family (Sardiman, 2014; Syarifah, Mutiara, & Novita, 2019; Wahyuni, Soeroso, Wahyuni, Amelia, & Alona, 2018). A family has a role in maintaining health by carrying out care duties for family members (Supinganto, Metri, & Supriyanto, 2014).

World Health Organization states that Indonesia ranks second-highest among countries affected by pulmonary TB in the world (World Health Organization, 2015). In 2014, East Java was ranked the second-highest of pulmonary TB cases in Indonesia (Kemenkes RI, 2015). The number of pulmonary TB cases registered for treatment in 1,045 patients, the default cases are 31 patients,

and 26 people died. In 2015, the number of pulmonary TB patients was 1,152 people. Adhering to the treatment regimen is an uphill battle for pulmonary TB patients. Feeling of boredom and healed frequently arise, which makes patients tend to stop treatment unilaterally before the treatment period ends. These problems are further aggravated by the lack of motivation and the low role of the family in providing medical support completely, and it affects patient adherence to treatment (Kemenkes RI, 2011). Therefore, support from the family is required because it can provide high motivation for patients to achieve healing (Sudarma, 2008). Based on the theory of Ajzen in 2005, a family is one of the factors that make a patient believes that he or she must recover to achieve family expectations (Ajzen, 2005). Therefore, it arises the motivation for treatment that ultimately affects how strong the patient's confidence to behave obediently in taking medication.

From the explanation above, it can be understood that a family has an important role in motivating a sick family member to comply with the established treatment regimen. Therefore, the researcher is interested in conducting this research on the relationship between the implementation of family duties in care with motivation and adherence for the treatment of

pulmonary TB patients in community health centers.

MATERIALS AND METHODS

The design of this study used a correlational analytic method with a cross-sectional study design. The population in this research was all pulmonary TB patients who lived with their families and were undergoing treatment at the Community Health Center. The sample was taken based on consecutive sampling. The selection of samples is conducted by specifying subjects that meet the research criteria that would be included

in the study until a certain period. Thus, the number of clients needed can meet the qualifications of this study (Hidayat, 2007). The sample consisted of 50 pulmonary TB patients and their families. The variables in this study were family health tasks in the treatment of pulmonary TB patients, motivation, and treatment adherence. The data was collected based on questionnaires that were given. The data were analyzed by applying univariate and bivariate methods with frequency and percentage distributions.

RESULTS

Table 1. Frequency distribution of respondent characteristics based on respondent demographic data at the community health center

Demography		Respondent(s)				Total (Σ) of respondents
		Family		Patient		
		n	%	n	%	
Age	15-40	37	74	22	44	50
	41-64	13	26	28	56	50
Education	No education	0	0	13	26	50
	Elementary school	14	28	17	34	50
	Middle school	14	28	11	22	50
	High school	12	24	8	16	50
	University	10	20	1	2	50
Gender	Woman	33	66	27	54	50
	Man	17	34	23	46	50
Family relationship with the client(s)	Husband	11	22			50
	Wife	3	6			50
	Parents	1	2			50
	Children	17	34			50
	Relative	18	36			50
Occupation	Unemployment / Housewife	6	12	15	30	50
	Farmer(s)/Fisherman	11	22	20	40	50
	Entrepreneur(s)	15	30	10	20	50
	Government employee(s)	6	12	0	0	50
	Others	12	24	5	10	50
Types of Family	Nuclear family	35	70	35	70	50
	Extended family	15	30	15	30	50
Phases of treatment	Intensive			20	40	50
	Advance			30	60	50

Table 1 showed that the majority of respondents of patients' families aged 15-40 years are 37 respondents (74%). The majority of respondents are junior and elementary school graduates, with the same proportion of 14 respondents (28%). The majority are women, in which the number of respondents is 33 respondents (66%). The majority have family relationships with patients as relatives and 18 respondents (36%). The total of the majority who work as entrepreneurs is 15 respondents (30%). Meanwhile, the majority of

pulmonary TB patient respondents have an age range of 41- 65 years old, and the total is 28 respondents (56%). The total of the majority who graduated from elementary school only is 17 respondents (34%). Based on gender in Table 1, it has almost the same proportion between female and male patients: 27 female respondents (54%) and 23 male respondents (46%). The majority of patients who work as farmers/fishermen are 20 respondents (40%). The majority who live in nuclear families are 35

respondents (70%). The total number of patients 30 respondents (60%) undergoing an advanced phase of treatment is

Table 2. Frequency distribution of respondent characteristics based on variables measured in pulmonary TB patients

Measured Variable	Category	n (Total)	%
Family Duty	Good	33	66
	Enough	17	34
	Less	0	0
	Total	50	100
Treatment Motivation	Good	42	84
	Enough	8	16
	Less	0	0
	Total	50	100
Treatment Adherence	Adhere	46	92
	Not Adhere	4	8
	Total	50	100

Table 2 showed that the majority of respondents who carried out family health tasks in the care and were categorized as a good category are 33 respondents (66%). The majority of respondents who have treatment motivation and are

categorized as a good category are 42 respondents (84%). The total of patients who have adherence in taking medicines for pulmonary TB is 46 respondents (92%) and this is categorized as obeying category.

Table 3. Frequency distribution of respondent characteristics based on each component of family health task in the treatment

Implementation of family health task	Category					
	Good		Enough		Less	
	n	%	n	%	n	%
Family health problem	24	48	22	22	4	4
Taking decisions for good actions	39	78	11	22	0	0
Caring for sick family members	22	44	21	42	7	14
Modifying a healthy family environment	3	6	38	76	9	18
Using health service facilities	34	68	14	28	2	4

Table 3 showed that most components of family health tasks that are carried out by patients' families are making the decision to take appropriate actions, and the total is 39 families (78%).

Table 4. Cross-tabulation items of the treatment phase with family health task treatment motivation and treatment adherence

Phases of treatment	Variable	Criteria	Amount	Total	%
Intensive	Family duty	Good	14	20	70
		Enough	6	20	30
		Less	0	20	0
	Treatment motivation	Good	17	20	85
		Enough	3	20	15
		Less	0	20	0
Treatment adherence	Obey	20	20	100	
	Not obey	0	20	0	
Advance	Family duty	Good	19	30	63
		Enough	11	30	37
		Less	0	30	0
	Treatment motivation	Good	25	30	83
		Enough	5	30	17

	Less	0	30	0
Treatment adherence	Adhere	26	30	87
	Not adhere	4	30	13

Table 4 explained the implementation of family health tasks for most patients in the intensive phase of treatment, and 14 respondents (70%). Patients who are on intensive and advanced treatment are equally well-motivated. In terms of medication adherence, patients who are in the intensive phase of treatment are in the category of adherent treatment equal to 20 respondents (100%). Meanwhile, patients who are in the advanced phase of treatment, there are only four respondents (13%) in the category of non-adherent.

DISCUSSION

The results showed that the implementation of family health tasks has a significant relationship with the treatment motivation of pulmonary TB patients. Social support from the closest people, such as family, can provide high motivation for patients to achieve healing (Sudarma, 2008). Patients who have support from the closest people will feel that they can go through difficult times. Besides, they will feel comfortable with the treatment they are undergoing because those closest people will consider patients are still useful and recognized so that they will be motivated to continue the treatment. The greater the support from the closest people, the higher the motivation for treatment.

The results of the data analysis show that the treatment phase has a significant influence on the treatment motivation towards pulmonary TB patients. Treatment motivation tends to be lower in patients in the advanced treatment phase. The treatment period causes boredom or feeling healed so that patients tend to stop treatment unilaterally before the treatment period expires (Kemenkes RI, 2011). Based on the recognition of patients who are in the advanced phase of treatment, most of them say that they rarely want to go to the health center to take medicine. They usually ask for help from family members to get the medicine. A long treatment period makes patients feel bored, yet they are forced to continue to take medicine because they want to get well.

The study results showed that the implementation of family health task treatment has a significant relationship with pulmonary TB patient treatment adherence. Adherence in treatment will increase when patients' families help them. Meanwhile, patients who do not have a family will affect the

termination of treatment early and unsatisfactory results (Glick, Stekoll, & Hays, 2011). Based on the Theory of Planned Behavior (TPB), healthy behavior arises from individuals because there is a desire within themselves to behave in a healthy manner where the motivation for treatment is also determined by normative beliefs factors which is encouragement and expectations from the closest people (Ajzen, 2005). Family support dramatically helps the success of one's treatment by reminding patients to take medicine, giving a deep understanding to patients who are sick, and encouraging them to continue the treatment. The good role given by the patient's family is the role that has a psychological impact on the pulmonary TB patient's adherence to the treatment that they are undergoing. Thus it will encourage the patient to adhere to treatment until the treatment period ends.

The results of the data analysis show that the treatment phase has a significant influence on the adherence of pulmonary TB patients for treatment. The treatment period causes boredom or feeling healed so that patients tend to stop treatment unilaterally before the treatment period ends (Kemenkes RI, 2011). It can be proven by the research which is conducted by Erawatyningsih & Purwanta in 2009 that there is a significant effect between the duration of treatment for non-adherence treatment for pulmonary TB patients (Erawatyningsih & Purwanta, 2009). Patients in the advanced phase of treatment tend to have higher values of non-adherence than patients in intensive phase treatment. The treatment that requires a long period will provide psychological pressure for patients. The old treatment makes some complaints less, which will make patients feel healed and lazy to continue the treatment. Additionally, families are more difficult to make patients aware of continuing to take medication for a specified time.

CONCLUSION

This study concludes that the implementation of family health tasks is related to the treatment motivation towards pulmonary TB patients at the community health center. Most families have carried out family health tasks, categorized as a good category, and most pulmonary TB patients have motivation in the adequate category. Of the five components of family health tasks, the most

widely done by respondents is making decisions for appropriate actions. Most of the treatment motivation toward pulmonary TB patients comes from intrinsic motivation, which is the treatment of their own volition. Health workers, particularly nurses in the community health center, are expected to be able to improve their coaching families' abilities, such as conducting health education about the concept of disease, treatment, and prevention of pulmonary TB, especially for patients who have recently been diagnosed positive. In addition, families are expected to be able to improve their knowledge of pulmonary TB treatment by consulting with competent health workers or routinely attending seminars and counseling activities. They can motivate patients so that they remain adherent to undergo treatment.

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