FAMILY SUPPORT IN IMPROVING LUNG TB DRUG COMPLIANCE

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ABSTRACT:

Purpose of the study: The purpose of this study was to determine the relationship of family support with adherence to taking pulmonary TB drugs.

Methodology: The design of this research is correlational analytic with crossectional approach. The study population was all pulmonary TB patients who underwent pulmonary TB treatment in the working area of the Dlanggu Health Center, amounting to 35 people. Samples were taken with a total sampling technique of 35 respondents. Data were collected using a support and compliance questionnaire instrument, then tested with crosstabulation.

Main Findings: The results showed the better family support given to pulmonary TB sufferers, the more obedient the sufferers were in taking pulmonary TB drugs.

Applications of this study: TB medication adherence can be influenced by family support so that dropout rates can be prevented

Novelty/Originality of this study: Pulmonary TB sufferers must have a supervisor taking medication that comes from a family so they can provide support when undergoing treatment

KEY WORDS: Family Support, Compliance, Pulmonary TB.

INTRODUCTION:

Family support influences refusal to take medication or patient noncompliance with taking medication. In accordance with WHO and ISTC recommendations for taking effective and therapeutic TB drugs it takes six months without negligence while taking the drug. (RI Ministry of Health, 2014)

The length of time taking these drugs, many people with pulmonary TB who do not comply with the rules about taking pulmonary TB drugs so the risk of transmission is quite high. To support the government's success in eradicating TB, family and community psychosocial support is also needed (Ministry of Health, Republic of Indonesia, 2014). Based on existing data in East Java TB disease is the second leading cause of death, and currently it is estimated that the number of TB sufferers is around 139 per 100,000 population, with a

cure rate of only 90%. In addition, with the high failure rate, the risk of transmission will also be high, the risk of transmission in East Java is quite high and varies between 1-3%, meaning that every year among 1000 residents, 10-30 people will be infected and will be TB sufferers, currently the number of pulmonary TB sufferers with positive AFB in East Java is 26,152, and the TB findings in all cases are 54,811. (East Java Health Service, 2017). Mojokerto Regency itself the number of patients with pulmonary TB in 2018 was 785 people and in 2019 as many as 995 people. (Mojokerto District Health Office, 2018). While data from the Dlanggu Puskesmas medical record over the past 2 years shows, in 2017 there were 42 people with pulmonary TB, 40 people (95.23%) regularly taking medication and 2 people (4.76%) who did not regularly. and in 2019 the number of patients with pulmonary TB has increased by 65%, namely as many as 64 people, who regularly take medicine as many as 60 people (93.75%) and who are irregular as many as 4 people (6.25%).

The duration of pulmonary TB treatment causes the patient's lack of compliance in taking the drug and causes the patient to be resistant to the drug and the patient will repeat the treatment from the start which will certainly have an impact on the healing period. Besides pulmonary TB disease also affects a person's productivity, the wheels of the family economy, and ultimately also have an impact on the nation's productivity. It should be remembered that the impact of stopping taking medication prematurely will cause illnesses difficult to treat and can recur at any time. Patient's own obedience to taking medication is strongly influenced by family support because family support affects the refusal to take medication or the patient's non-compliance in taking medication. (RI Ministry of Health, 2013).

One of the efforts to prevent and eradicate pulmonary TB carried out nationally is by using the TOSS system (Discover, Treat Until Heal) and improve counseling both through cross-sectoral and cross-program meetings, distributing pamphlets, banners and through print media while also providing motivation to sufferers TB to take medicines regularly and appropriately and provide counseling to families to provide support to TB sufferers in taking their medicines, as well as good cooperation from doctors and other paramedics in providing motivation to take TB medicine to TB sufferers so that sufferers are obedient in taking the medicine. (Ministry of Health, 2014). The general objective of this study was to determine the relationship of family support with adherence to taking pulmonary TB medication at the Dlanggu Health Center.

LITERATURE REVIEW:
The concept of pulmonary TB:

Pulmonary tuberculosis is an infectious disease caused by the mycobacterium group, mycobacterium tuberculose. The cause of pulmonary TB is mycobacterium tuberculose, a type of stem-shaped germ with a length of 1-10 microns and a width of 0.2-0.6 microns, not spherical and not encapsulated, the mycobacterium tuberculose wall is very complex consisting of a layer of fat which is quite high (60%) , and is acid resistant by staining with the ziehlneelsen method. (Ministry of Health Republic of Indonesia, 2014)

Clinical manifestations of pulmonary TB are characterized by cough symptoms of two weeks or more accompanied by decreased body weight, fever for more than one month, night sweats, decreased appetite and weakness.

Pulmonary TB transmission occurs because TB sufferers whose sputum contains

positive smear TB germs when coughing or sneezing, sufferers will spread germs into the air in the form of sputum sputum, once coughing can spread 3000 germs in sputum sputum. Transmission occurs through sputum sputum which can last for several hours in a room that is not exposed to sunlight and moisture. The more germs found in a patient's body, the more likely it is to transmit it to others. (Ministry of Health Republic of Indonesia, 2014)

Treatment of pulmonary tuberculosis is done by administering OAT (anti-tuberculosis drug) which is the most important component in the treatment of TB, the principle of TB treatment is given in the form of OAT alloys that contain a minimum of four kinds of drugs to prevent resistance. OAT Alloys In accordance with WHO and ISTC recommendations used by the National Tuberculosis Control Program in Indonesia are Isoniasid, Rifamfisin, Pyrazinamide, Ethambutol, and Streptomycin, which are divided into:
1. Category 1 : 2 (HRZE) / 4 (HR) 3
2. Category 2 : 2 (HRZE) S / 5 (HR) 3E3
3. Child categories: 2 (HRZ) / 4 (HR)

As for the treatment of drug resistant TB, kanamycin, levofloxacin, capreomycin, etionamide, cycloserine, moxifloxacin and PAS and first-line OAT are pyrazinamide and ethambutol. Dosing in the treatment of pulmonary TB is adjusted for body weight. (Ministry of Health Republic of Indonesia, 2014)

To prevent pulmonary TB, we must behave clean and healthy, eat nutritiously balanced foods so that our immune system increases, sleep and adequate rest, BCG immunization in infants, not smoking, drinking alcohol and drugs, and maintaining the sanitation of the environment around us so that keep clean. (PPTI, 2010)

Basic Concepts of Compliance:

Patient compliance is the extent to which the patient's behavior complies with the provisions given by health professionals. (Niven, 2005). Patients who adhere to treatment are sufferers who complete treatment regularly and completely without interruption for at least 6 months to 9 months. Factors that influence adherence include patient or individual factors, which factor is divided into two, namely the attitude or motivation of individuals to recover and confidence factors, then the factor is family support, social support factors and health support factors. (Niven, 2005)

The level of adherence to take medication is seen based on a patient taking medication regularly according to the instructions given, and the type of medication taken. (Ministry of Health, 2014)

Family Support Concepts:

The family is two or more individuals who are interdependent with each other both emotionally, physically, financially and family members support themselves. (Standhope and Jeanette, 2004). The family component consists of two or more individuals who are joined because of blood relations, marital relations or adoption, and they live in a household that interacts with each other and in their respective roles creates and maintains culture.

In the family there are several types of support consisting of informational support, assessment support, instrumental support, and emotional support. Sources of support within the family refer to social support that is seen by the family as something that can be accessed or held for the family. (Friedman, 1998)

Factors that influence family support include age and socioeconomic family. The socioeconomic class here includes the level of income or occupation of parents and the level of education. In addition, parents with middle

socioeconomic classes have a higher level of support, affection and involvement than parents with lower socioeconomic classes.

METHODOLOGY:

The research design used in this study is a quantitative study with a cross-sectional study design/ Population in this study were all pulmonary TB patients undergoing pulmonary TB treatment in the working area of the Dlanggu Public Health Center, amounting to 35 people. Samples were taken with a total sampling technique of 35 respondents. Data collection was conducted at UPT Puskesmas Dlanggu on 1-30 November 2019. The first instrument for family support is to use a questionnaire with a statement consisting of two groups of statements, namely instrumental support and emotional support. Analize data used score T and test statiistic with ceoss tabulation.

RESEARCH RESULT:

In general, family support for patients with pulmonary TB at Dlanggu Health Center UPT as shown in table 1 below.

Table 1 Family support for pulmonary TB patients at the Dlanggu Health Center in November 2019

Family Support	Frequency	Percentage (%)
There is	25	71.42
There is no	10	28.58
Total	35	100

Compliance with taking TB drugs is shown in table 2.

Table 2 Compliance taking medicines for pulmonary TB patients at the Dlanggu Health Center in November 2019

Obedience	Frequency	Percentage (%)
Obey	26	74.28
Not obey	9	25.71
Total	35	100

Family support for compliance with pulmonary TB medication is presented in table 3

Table 3 Cross Tabulation between family support and adherence to taking pulmonary TB medication at the Dlanggu Health Center in November 2019

Family support	Obedience					
	Obey		Not obey		Total	
	f	%	f	%	f	%
There is	23	92	2	8	25	100
There is no	3	30	7	70	10	100
Total	26	74.28	9	25.72	35	100

DISCUSSION / ANALYSIS:
Family support for pulmonary TB sufferers:

Based on the results of research conducted at the Dlanggu Mojokerto Health Center of 35 respondents obtained data that the majority of patients with pulmonary TB received support from families as many as 25 respondents (71.42%).

Family according to some experts (Sudiharto, 2007) defines as follows the family is two or more individuals who live in one household because of blood relations, marriage or adoption. They interact with one another, have their respective roles and create and maintain a culture. Family Support is a social resource that can help individuals deal with a pressing event. Subsequent research proves that family support also has a positive relationship that can affect an individual's health and well-being or can increase individual creativity in adaptive adaptability to stress and pain experienced (Wangmuba, 2009).

Respondents in this study showed that the majority of pulmonary TB sufferers received support, this happened because in undergoing the process of pulmonary TB treatment, family support as indicated by the

results of filling out an average questionnaire in the family was quite capable of providing emotional support. The family has been able to understand the importance of emotional support that must be provided to people with pulmonary TB and also the information received by the family about how to take pulmonary TB medicine. In addition, family support in the form of emotional support and appreciation for pulmonary TB sufferers regarding their evaluation also plays an important role in encouraging pulmonary TB sufferers, this will also increase the social integrity of pulmonary TB sufferers because around the individual there will be good social interactions between the sufferer and his family. This shows that the family listens to the complaints of pulmonary TB sufferers in taking medicine, besides that the respondent also gets ease in getting information from his family and reminds the respondent to order medication in accordance with the specified time and in this case the family understands how to facilitate treatment treatment Routine TB.

Compliance with pulmonary TB patients in taking pulmonary TB drugs:

The results of research conducted on medication adherence showed that the majority of respondents complied with taking pulmonary TB medication were 26 respondents (74.28%).
Obedience is obeying an order or a rule. Compliance describes the extent to which patients behave to implement the rules in treatment and behavior suggested by health workers (Niven, 2008). Adherence is generally defined as the level of behavior of someone who receives medication, follows a diet, and / or implements a lifestyle according to the recommendations of the health care provider (WHO, 2012)

Compliance with pulmonary TB patients shows that many patients who have

obeyed the rules of taking pulmonary TB drugs, this happens because they have realized the importance of pulmonary TB treatment for themselves. This can occur because of the many backgrounds that influence pulmonary TB sufferers in behaving and behaving, which is very important in supporting the psychological condition of pulmonary TB sufferers undergoing long and long treatment.

Relationship between family support and compliance with control of pulmonary TB patients:

Based on the cross tabulation data in table 3 shows that of the 25 respondents who received family support the majority were compliant in consuming drugs as many as 23 respondents (92%) and those who were not compliant were 3 respondents (8%). While 10 of the respondents who did not get family support were disobedient (70%) and 3 respondents (30%) were obedient.

Based on the cross tabulation above shows that the better the family support given to pulmonary TB sufferers, the more obedient the respondents will be in taking pulmonary TB medicine so the results of this study indicate there is a relationship between family support and adherence to taking pulmonary TB medication at the Dlanggu Mojokerto Health Center.

Erawatyningsih et al (2009) mentioned the factors that influence non-compliance with treatment in patients with pulmonary tuberculosis, namely knowledge education, and family income significantly influence of non-compliance with treatment in patients with pulmonary TB and the most dominant factor is education. Of the various factors causing non-compliance with taking medication for patients with pulmonary TB, sufferers and family factors as the main cause of non-compliance with taking medication (Ivanti, 2010). Family social support is the will,

participation and ability of the family to provide assistance to one family member who needs good help in terms of problem solving, providing security and increasing self-esteem. Individuals who receive this support assume that they are loved, cared for, and valuable. If the individual is accepted and valued positively, then the individual tends to develop a positive attitude towards themselves and more accepts also respects himself (Niven, 2002 in Handayani, 2011). If family support is not given properly, the impact that will arise as a result of the patient stopping taking medication is the emergence of drug-resistant tuberculosis germs. Resistance that occurs will complicate therapy so that the death rate continues to increase due to tuberculosis.

This fact shows that families who have good knowledge and understanding of the importance of their roles and functions in treating pulmonary TB sufferers can provide good support to pulmonary TB sufferers so that with this support the pulmonary TB sufferers can adhere to the medication controls that must be lived. Whereas for pulmonary TB sufferers who have received good family support, but they are not compliant in undergoing treatment control, it occurs because they do not know how to provide support and also how to exercise good and proper medication control.

This happens because although there is good family support, adherence can also be influenced by internal factors predisposing factors of the respondent itself such as beliefs, attitudes and personality, level of education and knowledge as well as the presence of precipitation factors or precipitating factors such as illness and treatment experienced by people with pulmonary TB. Family support is a reinforcement factor for respondents coming from outside, although in the reinforcement factor the respondent is quite good, but in other factors such as trigger factors or weak respondents predisposing factors, this will affect the level of compliance of the respondent itself. The level of compliance of respondents in this study varies greatly because of many factors that influence respondents in addition to family support factors. The results showed 25 respondents who received family support there were 2 respondents who did not comply, this happened because besides family support there were other factors that affected compliance including lack of facilities provided and also less knowledge about pulmonary TB. Whereas in 10 respondents who did not get support there were 3 respondents who obediently took pulmonary TB medication, this happened because respondents still tried to take medicine according to the rules of health workers even though the family did not provide support properly, because the patient already had enough knowledge about treatment TB that must be lived.

CONCLUSION:

Most of the family support given to pulmonary TB patients at the Dlanggu Health Center has received the support of 25 respondents (71.42%).
1. Compliance with medication for pulmonary TB patients at the Dlanggu Health Center was mostly compliant with 26 respondents (74.28%).
2. There is a relationship between family support and adherence to taking pulmonary TB medication at the Dlanggu Mojokerto Health Center.

LIMITATION AND STUDY FORWARD:

This research is limited only to find out the relationship of family support to TB patients' compliance in taking drugs, further research on the causes of TB patients dropping out of treatment

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