# Analysis Of Family Social Support With Compliance Of Taking Drug In Leprosy (Morbus Hansen) Patients In The Hospital Of Damaian In The District Of Lembata In 2018

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Abstract— Leprosy (Morbus Hansen) is a contagious and chronic disease caused by (Mycobacterium leprae) which attacks the skin, peripheral nerves and other body tissues. Treatment of people affected by leprosy is to break the chain of transmission, cure the patient's disease and prevent the occurrence of defects or prevent the increase that already exists before treatment. The purpose of this study is to determine the analysis of family social support by compliance of taking drug for leprosy in Damian Hospital, Lambata Regency. This research is an observational analytic study with a cross sectional design, namely research by collecting independent variable data and being bound at the same time. The population in this study were all Leprosy in Damian Hospital, Lembata Regency, amounting to 30 people and the sample of 12 people. The instrument used is a questionnaire. As for the research hypothesis test is to use the chisquer test. The results of this study obtained data, namely 1 respondent who had a low level of compliance (8.3%) but had good support. While for 11 respondents had a good level of compliance (91.67%) and good support from the family. As for good family social support, there were 12 respondents (100%). From the results of the chi-squer test obtained P-value> 0.05, which is 0.240, it can be concluded that the analysis of compliance of taking drug and family social support has nothing to do with.

**Keywords**— Leprosy, Damian Hospital in the District of Lembata, Compliance of Taking Drug, Family Social Support.

# I. INTRODUCTION

eprosy is also called Morbus Hansen is a chronic disease caused by the Mycobacterium leprae germ that first attacks the peripheral nervous system and can then attack the skin, mouth, upper respiratory tract, endothelial reticulo system, eyes, muscles, bones and testicles but not concerning the central nerve (Menaldi, 2015). Leprosy is an infectious disease that causes very complex problems. The problem in question is not only from a medical point of view but extends to social, economic and psychological aspects (Widoyono, 2008).

Damian Hospital is the largest leprosy hospital in NTT precisely located in Lembata Regency. This hospital not only accommodates patients from Lembata District but also from East Flores and Sikka Regencies. Based on

research conducted by the LPTK (Kupang Applied Psychology Institute) in 2016 at Damian Hospital, Lembata Regency, 76 people were identified as having leprosy. Out of 76 people, 33 people agreed to be handled by the LPTK. Of the 33 people, the remaining 20 people who were handled by the LPTK nurses until the end received negative results of leprosy through clinical and laboratory tests.

Treatment for people who is affected by leprosy aims to break the chain of transmission, cure illnesses, prevent defects or prevent the increase in existing defects before treatment. In patients who have experienced permanent disability, the treatment is done only to prevent further disability. The problem that is often encountered in the treatment process of leprosy is the emergence of patient disobedience in taking the drug; this is due to the long healing process of leprosy. If the person affected by leprosy does not take the medicine regularly, the leprosy germs can become active again and can cause new symptoms that will worsen the patient's condition.

In addition to medication compliance, the factors that influence disability in leprosy are the family role. The role of this family is related to efforts to prevent disability where sufferers with the support of good family members make prevention efforts (Ministry of Health, 2006).

Research conducted by Khotima in 2014 stated that family social support is one of the factors that play a role in compliance to taking leprosy medicine. A similar study was also conducted by Zakiyya et al., In 2015 stating that family social support was significantly related to compliance to taking medication in leprosy. Based on the results of a study conducted by Mukminatun (2016), the results of the percentage of respondents who did not adhere to taking medication in the family role were less than 76.0% higher than the good family role which was equal to 50.0%, while the family role was 8, 3%. The chi square test results obtained a significant value of 0.008 which means p <0.05, so it can be concluded that there is a relationship between the level of knowledge and compliance to taking medication.

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#### RESEARCH METHODS

#### A.Type of Research

This research is an observational analytic research with cross sectional design, the research by collecting data at once independent and dependent variables at the same time (Notoarmodjo, 2010).

# **B.Place and Time of Research**

# 1. Place of Research

The research will be conducted at the Damian Hospital in Lembata Regency.

#### 2. Time of Research

The research was conducted from January to June 2018.

# **C.Population and Samples**

# 1. Population

The population in this study were leprosy patients at Damian Lewoleba Hospital, Lembata District. The population in this study were 30 leprosy patients at the Damol Lewoleba Hospital in Lembata District.

# 2. Samples

The samples in this study were 12 leprosy patients at the Damian Lewoleba Hospital in Lembata District.

# D. Research Variables

# 1. Dependent Variable

The dependent variable is also called the free variable. The dependent variable in this study is family social support which includes: emotional support, material support, reward support, information support.

# 2. Independent Variables

The independent variable is also called the bound variable. The independent variable in this study is adherence to taking medication.

# E. Conceptual Framework

The conceptual framework in this study is as follows: Dependent Variables Independent Variables

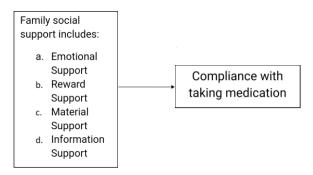


Figure 1. Conceptual Framework

# F. Operational Definitions

The operational definitions used to facilitate the conduct of research and so as not to become too broad are as follows

Table 1. Identification of Variables and Operational Definitions

Variable	Definition	Measuring instrument	Score	Scale
Compliance with taking medication	Compliance with taking medication is the level of behavior of patients in taking a treatment action,	Questionnaire	<ol> <li>The results of the compliance measurement using 2 parameters are as follows:</li> <li>Low compliance if the value of ≤ 90%</li> <li>Obedient if the value is&gt; 90%</li> <li>(Silvistari, et al., 2014)</li> </ol>	Nominal
Family social support	Family social support is attitudes, actions and family acceptance of its members which includes emotional support, award support, material support, information support. Emotional support is a sense of empathy, love and trust from other people, especially family as motivation.  Award support is an appreciation of the work done, giving feedback about the results or achievements achieved and strengthening and exaggerating feelings of price and trust in individual abilities. Material or instrumental support shows the availability of means to facilitate behavior that helps people who face problems in the form of material opportunities and opportunities.	Questionnaire	The results of measuring family support using 2 categories are as follows:  1.Less ≤ 90%  2.Good > 90%	Ordinal

Information support		
is support in the		
form of		
information,		
increasing one's		
knowledge in		
finding solutions or		
solving problems		
such as advice or		
direction.		

#### G. Tools and Materials

#### 1.Research Tools

A questionnaire is a way of collecting data or a study of a problem that generally involves many public interests. This questionnaire is done by circulating a list of questions in the form of forms, submitted in writing to a number of subjects to get responses, information, answers, etc. (Notoatmodjo, 2005). Based on the above, the research data collection tool used in this study is a family social support questionnaire and medication compliance questionnaire in leprosy.

# 2. Family support questionnaire

This questionnaire was taken from Silvitari, et al. (2013) which contains closed questions about family support, namely respondents only need to give " $\sqrt{}$ " to the alternative answers chosen.

#### H. Research Procedure

#### 1. Data Collection Tool

The data collection tool used in this study is a questionnaire. Questionnaires are written questions that logically analyze with research problems and each question is an answer that has meaning in testing the research hypothesis (Setiadi, 2007).

# 2. Form of Informed Consent

Is the consent sheet willing to be a respondent

# 3. Questionnaire

Questionnaire is a technique of collecting data through forms that contain questions that are submitted in writing to someone or a group of people to get answers or responses and information that is needed by the researcher (Mardalis, 2008).

#### 4. Data collection techniques

This study uses a questionnaire; the list of questions is structured with closed questions. The questionnaire used contained 20 questions which were a description of family social support by compliance to medication in leprosy patients. If it is answered correctly it gets a score of 2 and if it gets the wrong score 1. The category of social support is good if the number of scores> 4 and the social support category is not good if the score is  $\leq$  4. And the compliance category is good if the score <4 and compliance is low if the score is score 4.

#### 5. Research flow

a. At the early stage, the researcher prepares by compiling a research proposal, after being approved, the researcher submits ethical permits to the educational institutions, related agencies, and research locations. After obtaining a permit, the researcher coordinated to submit a permit to Damian Lewoleba Hospital, Lembata Regency to obtain research data.

- b. After getting the research data, the researcher then recruits informants according to the sample criteria and explains the objectives and research procedures to the informants.
- c. Before completing the questionnaire, informants were asked to read and sign an informed consent sheet.
- d. The researcher took the informant's identity data and the informants began to fill out the questionnaire.
- e. After the measurement data is obtained, the researcher conducts a data input and data analysis with a statistical program.

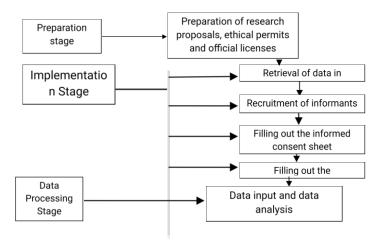


Figure 2. Research flow

#### I. Data Analysis

Data analysis in this study used the SPSS statistical test with bivariate analysis stages. Bivariate analysis is an analysis carried out on two variables that allegedly related or correlated.

Correlation analysis technique is a technique to find and test associative or analysis between independent variables and dependent variables with a significant level above or below 0.05.

Data analysis is done by chi-square test which is a correlation test of two variables if the data is in nominal form. The analysis technique used was the chi-square test with a confidence level of 95% (p <0.05). If p <0.05, it is

to see at the analysis between the independent variable and the dependent variable.

# RESULTS AND DISCUSSION

# A. Overview of Damian Hospital, Lembata Regency

In 1950 in the East Flores area there were many leprosy sufferers. Seeing this sad situation, on June 8, 1959, the Larantuka mission worked with leprosy organizations from Germany. They then built a hospital specifically dealing with leprosy sufferers. With the aim is to accommodating, treating and rehabilitating leprosy patients in Indonesia. And the hospital was named RS. Leprosy St. Damian Lewoleba Lembata which stands on 8 hectares of land. In 1980 the leprosy hospital St. Damian was taken over and managed by CIJ nurses or the Efata Foundation to this day. Damian Hospital is the largest leprosy hospital in NTT precisely located in Lembata Regency.

The Damian Hospital's land area is 102,200 m2 with a building area of 3,280 m2 while the classification of hospital classes is still in process. Damian Hospital has service facilities consisting of 24-hour emergency installations, outpatient installations and inpatient installations.

# **B.** General description of respondents

This research was conducted at the Lewoleba Damian Hospital. The sample in this study was 12 respondents who were leprosy patients. In this study, researchers used observational analytic techniques with a cross-sectional design, namely research by means of collecting independent variables and bound at the same time. Characteristics of respondents were seen from compliance to taking medication and also family social support.

# C. Univariate Analysis

1. Compliance with taking drug

Table 5. Frequency distribution of characteristics of respondents according to compliance with taking drug at the Damian Hospital in Lembata Regency

Compliance taking drug	with	Frequency	Percentage (%)
Good Low		11 1	91,67 8,33
Total		12	100,0

Table 5 shows that the majority of respondents had medication adherence as many as 11 respondents (91.67%) while respondents who had low medication adherence were 1 respondent (8.33%)

# 2. Family Social Support

ISSN: 1998-4510

Table 6. Frequency distribution of respondents' characteristics according to family social support at Damian Hospital,

Lembata Regency

Family social support	Frequency	Percentage (%)
Good	12	100
Less	-	
Total	12	100

Table 6 shows that good family social support is 12 respondents (100%).

# D. Bivariate Analysis

Bivariate analysis is an analysis that aims to determine the analysis of the independent variables with the dependent variable. The statistical test used is the chi-square test. In this study, researchers will connect between independent variables and dependent variables without taking into account the influence of other variables. If stated there is an analysis then determining the direction and magnitude of the volume of independent variable analysis estimates the occurrence of the dependent variable while to determine the level of significance (significant) calculation is  $P_{\textit{value}}$  at  $\alpha = 5\%$ .

The results of this study obtained data that there was 1 respondent who had a low level of compliance (8.3%) but had good support. While for 11 respondents had a good level of adherence (91.67%) and good support from the family.

The following are the results of the calculation chisquer

Case Processing Summary						
		Cases				
	Valid Miss			sing	Total	
	N	Perc	N	Perc	N	Perc
		ent		ent		ent
Compliance	12	100.	0	.0%	12	100.
* Support		0%				0%

In the Case Processing Summary table, it shows that there were 12 samples in the study. Nothing is missing so the validity level is 100%.

Chi-Square Tests					
	Value	Df	Asymp. Sig. (2-sided)		
Pearson Chi- Square	10.375 <sup>a</sup>	8	.240		
Likelihood Ratio	9.731	8	.284		
Linear-by-Linear Association	1.390	1	.238		
N of Valid Cases	12				

Chi Square (Chi Square) results count at 0.240. Significant level ( $\alpha$ ) = 5 % predetermined before conducting research. Decision  $\alpha$  = 0.05 < Asymp. Sig. (2-sided) so Ho is accepted and Ha is rejected (There is no analysis between compliance with family social support). If  $\alpha$ = 0.05 Asymp. > Sig. is (2-sided) so Ho is rejected and Ha is accepted (there is a relationship between compliance with family social support).

From the results of the Chi Square test, it can be seen that  $\alpha = 0.05$ , <Asymp. Sig. (2-sided) which is 0.240 so Ho is accepted and Ha is rejected. Or in other words there is no relationship between compliance with family social support.

Family social support is very important for sick family members, especially for family members suffering from leprosy. Families who are afraid of contracting leprosy will affect their participation in terms of health care for family members who suffer from leprosy, so that families do not provide support to sufferers in terms of providing information and health care facilities to treat the disease, (Rahayu, 2011).

In this study, the compliance to taking medication in leprosy was not influenced by family social support but from the sufferers themselves who were not compliance to treatment. From the results of the study, there were patients who did not comply because they experienced serious or unnatural side effects of drugs consumed such as brownish to blackish when consuming clofazimine or lampren, an itchy skin rash when consuming dapsone, allergic to urticaria when consuming dapsone and rifampicin so the treatment is stopped. There are patients who forget to take medication, replace anti-leprosy drugs with other drugs because they did not fit with the anti-leprosy drugs given from the Damian Hospital, and also patients stop treatment because they feel bored with medication for quite a long time.

# CONCLUSIONS AND SUGGESTIONS

#### A. Conclusions

The results of this study obtained data that there were 1 respondent who had a low level of compliance (8.3%) but had good support. While for 11 respondents had a good level of adherence (91.67%) and good support from the family. As for good family social support, there were 12 respondents (100%)

The results of the chi-square test in this study obtained values  $P_{value} > 0.05$  that is 0,240. Based on the hypothesis that if it is  $P_{value} > 0.05$  so Ho is accepted and Ha is rejected or it can be interpreted that there is no analysis between compliance with family social support. If it is  $P_{value} < 0.05$  so Ho rejected and Ha is accepted or it can be interpreted that there is an analysis between compliance with family social support. From the results of the analysis above obtained values  $P_{value} > 0.05$  that is 0,240 then there is no analysis between compliance to taking medication and family social support.

# **B.** Suggestion

Based on the conclusions above, the researcher gives the following suggestions:

- 1. For people affected by leprosy can improve complience in treatment and increase self-confidence because leprosy can be cured.
- For agencies, it is expected to increase the dissemination of information about leprosy with various types of media, especially in areas that are at

- risk or have cases of high leprosy. The government is expected to be able to increase the empowerment of former leprosy patients through education and training programs.
- **3.** For further researchers, it is expected to add several variables about other factors that influence medication compliance in leprosy patients.

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