

The Relationship between Self-Care Agency and the Level of Disability to Patient with Leprosy at Daha Husada Hospital, Kediri

Agustin Widyowati¹⁾, Ika Ratna Hapsari²⁾, Anik Nuridayanti²⁾

¹⁾STRADA Indonesian Institute of Health Sciences Kediri

²⁾Ganesha Husada Institute of Health Science

ABSTRACT

Background: Leprosy has a tendency to have physical impacts with disability on sufferers so that it affects community stigma, social isolation, welfare to quality of life. One of the efforts to prevent disability with good self-care. The objective was to determine the relationship between self-care agency and the level of disability to patients with leprosy at Daha Husada Hospital Kediri.

Subjects and Method: A cross sectional study was conducted in Daha Husada Hospital, Kediri, East Java, in March, 2021. A sample of 115 patients was selected by purposive sampling. The dependent variable was the level of disability. The independent variable was self-care agency. Data were collected using questionnaires and observation sheets with ordinal scale, then analyzed using statistical test of Spearman's Rho.

Results: Less ability of leprosy patients in self care agency, the greater the level of disability ($r=0.62$; $p < 0.001$).

Conclusion: Less ability of leprosy patients in self-care agency, the greater level of disability. Patient are needed to improve the awareness in self-care activities and follow counseling in health services.

Keywords: self care agency, the level of disability, patient with leprosy.

Correspondence:

Agustin Widyowati. STRADA Indonesian Institute of Health Sciences Kediri. Jl. Manila No.37, Tosaren, Kec. Pesantren, Kota Kediri, East Java 64123. Email: agustwidy@gmail.com. Mobile: +62857-3539-9728.

Cite this as:

Widyowati A, Hapsari IR, Nuridayanti A (2022). The Relationship between Self-Care Agency and the Level of Disability to Patient with Leprosy at Daha Husada Hospital, Kediri. *Indones J Med.* 07(03): 344-349. <https://doi.org/10.26911/theijmed.2022.07.03.11>.



Indonesian Journal of Medicine is licensed under a Creative Commons Attribution-Non Commercial-Share Alike 4.0 International License.

BACKGROUND

Leprosy is a disease caused by *Mycobacterium Leprae* and is a chronic infectious disease that attacks the skin, peripheral nervous system and other tissues that have a tendency to cause physical effects in the form of disability in sufferers. Disability is a term used to cover three aspects, namely structural and functional damage (impairment), activity limitations and participation problems. The resulting disability has an impact on stigma, social isolation and a

decrease in quality of life (Das et al., 2020; Achdiat et al., 2021).

In 2017, the number of leprosy patients reported from 150 countries throughout the WHO region was 210,671 new cases of leprosy. The number of patients who are still registered for treatment is 192,713 cases, with a grade 2 disability rate of 1.6 per 1,000,000 population. The prevalence rate of leprosy in Indonesia in 2018 was 0.70 cases/10,000 population and the new case finding rate

was 6.42 cases per 100,000 population. The number of new patients in East Java in 2018 was 3,259 people, 13.72% with a record level 1 and 10.40% with a record level 2 (Kemenkes RI, 2019).

In people with leprosy who have disabilities, self-care is important so that the leprosy experienced does not get worse and causes expansion (Astutik and Kiptiyah, 2016). Physically, leprosy can cause the skin to become very dry due to damage to the nerves that control sweat. Cracked skin is often found in the creases of the hands, around the heels and in the creases between the toes. Broken skin is a wound that should not be ignored if it is not treated it can be an entry point for infection (Hartanti, 2015).

The above phenomenon provides an overview of the lack of self care agency. Self care agency is the ability or power possessed by an individual to identify, determine, make decisions, and implement self-care (Alligood, 2017). Self care agency is influenced by factors of knowledge, attitudes, beliefs, education and work, infrastructure and distance from health services, the role of family support and the existence of rules (Nursalam, 2016).

SUBJECTS AND METHOD

1. Study Design

A correlational analytical research design with a Cross Sectional approach in Daha Husada Hospital, Kediri, East Java, in March 2021.

2. Population and Sample

The population were all leprosy patients in the Outpatient Installation of Daha Husada Hospital was 163 people. A sample of 115 Leprosy patients was selected purposively.

3. Study Variables

The independent variable in this study is the Self Care Agency, the dependent variable in this study is the level of disability.

4. Operational definition of variables

Self care agency is the ability or power possessed by an individual to identify, determine, make decisions, and implement self-care.

Disability rate is a broad term whose meaning includes any impairment, limitation of activity affecting a person. Assessment of disability in leprosy patients identified in the eyes, hands and feet.

5. Study Instruments

In this study, the measuring instrument was a questionnaire Denyes self-care agency instrument (DSCAI-90) and WHO disability level observation sheet

6. Data analysis

The data analysis used is univariate test and bivariate test. Univariate test was carried out to see the characteristics of respondents used frequency distribution and descriptive statistical results. Bivariate test was conducted to prove the research hypothesis used the Spearman Rho statistical test.

7. Research Ethics

The research ethics sheet obtained is a certificate of ethical feasibility from IIK Strada Indonesia, namely Number: 1968/-KEPK/XII/2020.

RESULTS

1. Sample Characteristics

Based on table 1 shows that most of the respondents are male as many as 81 respondents (70.4%), a small portion of respondents aged > 55 years as many as 81 respondents, (25.2%), almost all of the respondents have marital status. married as many as 102 respondents (88.7%), almost half of the respondents have a high school education level as many as 42 respondents (36.5%), almost half of the respondents have jobs as farmers as many as 43 respondents (37.4%). Most of the respondents with a diagnosis of morbus leprosy Hansen mukti bacillary RFT were 69

respondents (60%), almost all of the respondents had received information about self care agency as many as 114 respondents

(99.1%), and almost half of the respondents did not have a comparison diagnosis. as many as 54 respondents (47%).

Table 1. Frequency Distribution of Respondents' Characteristics

Characteristics	n	%
Gender		
Man	81	70.4%
Woman	34	29.6%
Age		
< 25 age	12	10.4%
>25-30 age	14	12.2%
>30-35 age	6	5.2%
>35-40 age	11	9.6%
>40-45 age	11	9.6%
>45-50 age	13	11.3%
>50-55 age	19	16.5%
>55 age	29	25.2%
Marital status		
Not married yet	13	11.3%
Marry	102	88.7%
Last education		
No school	4	3.5%
Primary School	33	28.7%
Junior High School	36	31.3%
Senior High School	42	36.5%
College (PT)	0	0%
Work		
Student	6	5.2%
Doesn't work	22	19.1%
Farmer	43	37.4%
Trader	24	20.9%
Employee	20	17.4%
Leprosy Diagnosis		
Mobus Hansen Multi Basiler	16	14 %
Mobus Hansen Multi Basiler RFT	69	60 %
Release from Treatment	25	21.7 %
Mobus Hansen Multi Basiler RFC	5	4.3 %
Informasi Self Care Agency		
Haven't received any information	1	0.9 %
Already got information	114	99.1%
Comparative Diagnosis		
There isn't any	54	47%
Pedis Ulcer	10	8.7%
Plantar Ulcer Pedis	7	6.1%
Neuropathy	26	22.6%
Erythema nodusum leprosum (ENL)	9	7.8%
Tinea Corporis	2	1.7%
Neuritis	7	6.1%

Table 2. Characteristics of Specific Data for Research Subjects

Characteristics	n	%
Self Care Agency		
well	88	76.5%
Not good	27	23.5%
Disability Level of Leprosy		
Defect 0	33	28.7%
Disability 1	62	53.9%
Disability 2	20	17.4%

Based on the table 2, it shows that the data shows that almost all of the respondents have a good Self Care Agency as many

as 88 respondents (76.5%) and that most of the respondents have disability level 1 as many as 62 respondents (53.9%).

2. Bivariate Analysis

Table 3. Cross tabulation of Self Care Agency with Disability Behavior in Leprosy Patients at Daha Husada Hospital Kediri

Self care Agency	Disability Rate				Total		r	p		
	n	%	n	%	n	%				
Well	32	36.4	55	62.5	1	1.1	88	76.5	0.621	0.001
Not good	1	3.7	7	25.9	19	20.4	27	23.5		

Based on the table 5.4 above, it shows that almost all of the leprosy patients with good self care agency as many as 88 respondents (76.5%) have a disability level of 0 and 1, and a small part of the respondents who have poor Self Care Agency as many as 27 respondents (23.5%) experienced a disability level 2. The results of the analysis using the Spearman Rho test obtained a $p < 0.001$ at a significant level (α) = 0.05, with a correlation = 0.621 and, it can be concluded that there is a significant relationship between Self Care Agency and the level of disability in leprosy patients with a strong correlation level, meaning that the less the ability of leprosy patients in Self Care Agency, the greater the level of disability they experience.

1 disability. Level 1 disability was caused by invisible sensory nerve damage (Aditama, 2012). According to Susanto, (2013), physical problems that arise due to leprosy disability are peripheral nerve function disorders, namely sensory, motor, autonomic or a combination of the three that attack the eyes, palms/feet.

Disability will have an impact on emotional responses, attitudes, social interactions and poor quality of life due to the stigma felt by leprosy patients despite having sufficient knowledge (Achdiat et al., 2021). Therefore, support from the family as a support system is needed to improve abilities, self-concept and quality of life, through coping strategies such as reading books, social care programs, stigma, acceptance, social support and knowledge (Jatimi et al., 2020).

Leprosy patients are also a population at risk with a lifestyle factor approach. This is because the life style factor is related to the lifestyle of leprosy patients who gene-

DISCUSSION

Leprosy has a tendency to cause physical impacts in the form of disability in sufferers, especially level 1 and 2 disability levels. In this study, most of them had level

rally pay less attention to personal and environmental hygiene (Susanto, 2013). In this study, almost all leprosy patients have a good self care agency so that it can reduce the level of leprosy disability.

Routine self-care habits to prevent an increase in disability in leprosy patients (Nadhiroh et al., 2018; Herawati, 2019). This is in line with the research of Eze et al., (2021) that self-care intervention for 6 months in leprosy patients can reduce treatment costs, increase quality of life scores, and decrease disability status). Other studies also state that self-care measures are one of the efforts to prevent disability in leprosy patients so that there is a need for family support (information support) through optimizing family-based self-care group programs (Laili, 2016). This is in line with the research of Shrestha et al., (2021) that self-help and self-care groups combined are effective in preventing disability, improving quality of life, social interaction and welfare of leprosy patients.

The level of disability of leprosy patients can be prevented with a good self-care agency including ego strength, valuation of health, health knowledge and making capability, energy, feelings, and attention to health. It is hoped that families, communities, health workers can provide support so that the patient has a good self-care agency.

AUTHORS CONTRIBUTION

Agustin Widyowati, Ika Ratna Hapsari and Anik Nuridayanti conceived and designed the experiments. Ika Ratna Hapsari performed the experiments. Anik Nuridayanti analyzed the data. Agustin Widyowati wrote the paper.

ACKNOWLEDGEMENT

The authors would like to thank the management dan research participants at Daha Husada Hospital Kediri.

FINANCIAL AND SPONSORSHIP

None.

CONFLICT OF INTEREST

There is no conflict of interest.

REFERENCE

- Achdiat PA, Ariyanto EF, Simanjuntak MN (2021). A Literature Review: The History of Psychological Impact of Illness amongst People with Leprosy (PwL) in Countries across the Globe. *Dermatol Res Pract*. Doi: 10.1155/2021-5519608.
- Aditama TY (2012). National Guidelines for Leprosy Control Programs. Jakarta: Directorate General of Disease Control and Environmental Health Ministry of Health RI.
- Aligood M (2017). *Nursing Theorists and Their Work* (8th Edition). Singapore: Elsevier.
- Das N, De A, Naskar B, Sil A, Das S, Sarda A, Chatterjee G (2020). A quality of life study of patients with leprosy attending the dermatology OPD of a tertiary care center of Eastern India. *Indian J Dermatol*. 65(1): 42-46. Doi: 10.4103/ijd.IJD_729_18.
- Eze CC, Ekeke N, Alphonsus C, Lehman L, Chukwu JN, Nwafor CC, et al. (2021). Effectiveness of self-care interventions for integrated morbidity management of skin neglected tropical diseases in Anambra State, Nigeria. *BMC Public Health*. 21: 1748. Doi: 10.1186/s12889-021-11729-1.
- Hartanti R, Listyorini L, Karima M (2015). Self-Care for Leprosy Patients. *J*.

- HEALTH Sci. 7(1): 1978-3167. Doi: 10.48144/jiks.v7i1.58.
- Herawati C (2019). Perawatan Diri Sebagai Faktor Risiko Kecacatan Pada Penderita Kusta. JKMI. 14(1): Doi: 10.26-714/jkmi.v14i1.4791.
- Jatimi A, Nenobais AN, Jufriyanto M, Heru MJA, Yusuf A (2020). Mekanisme dan Strategi Mengurangi Stress pada Pasien Kusta. J Community Health Nurs. 4(1): 41-45. Doi: 10.20473/-ijchn.v4i1.17540.
- Laili AFN (2016). Hubungan Dukungan Keluarga Dan Pengetahuan Terhadap Perawatan Diri Penderita Kusta Di Puskesmas Grati Tahun 2016. IJPH. 12(1): 13-26. Doi: 10.20473/ijph.-v12i1.2017.13-26.
- Nadhiroh U, Dharmawan R, Murti B (20-18). Determinants of Disability in Patients with Leprosy at Kelet Hospital, Central Java. J Epidemiol Public Health. 03(02): 143-252. Doi: 10.26-911/jepublichealth.2018.03.02.04
- Shrestha D, Napit IB, Ansari S, Choudhury SM, Dhungana B, Gill P, Griffiths F, et al. (2021). Evaluation of a self-help intervention to promote the health and wellbeing of marginalised people including those living with leprosy in Nepal: a prospective, observational, cluster-based, cohort study with controls. BMC Public Health. 21(873). Doi: 10.1186/s12889-021-10847-0.
- Susanto T (2013). Patient Care in the Community. TEAM.