

The Effect of Information Education Using Pocket Book To Knowledge Increase on Leprosy at Malanu Public Health Center Working Area Sorong City

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Abstract

Leprosy (Morbushansen) is a chronic infection disease caused by *Mycobacterium leprea* that firstly attack peripheral nervous then the skin, mucosamembrane, upper respiratory track, eyes and others body tissue except central nervous system. The province of West Papua have the largest number of leprosy in Indonesia. This number is shocking and make people worried. Data from public health office of West Papua province discovered as much as 607 cases of leprosy was found in West Papua distributed in many areas. From that data, West Papua province in 2015 was selected as endemic categories. The purpose of this research was to know the affect of information education using pocket book and audio visual to knowledge increase on leprosy and prevention behavior on leprosy patient at Malanu public health center working area sorong city.

Research design used was “Quasi experimental pre-post test design” with audio visual and pocket book intervention. This design used to learnt about “caused-effect correlation” framework phenomenon with giving intervention or manipulation on research subject, and then learn the effect of the intervention. Population in this research was all patient with leprosy at Malanu Public Health Center working area. Total sample in this research was 20 people for each group using purposive sampling technique, purposive sampling technique is a choosing a group of subject based on certain characteristic that has a strong bond with population characteristic that have been known before. The affect analysis of information education to knowledge increase on leprosy after intervention was meaningfully increase than before intervention as much as 0,000 (p value <0,05). Conclusion, there was a significance affect to respondent’s knowledge increase after intervention.

Keywords: *Leprosy, Pocket Book Information Education, Knowledge.*

Introduction

Leprosy (Morbushansen) is a chronic infection disease caused by *Mycobacterium leprosus* that first attack peripheral nervous, then skin, mucosamembrane, upper respiratory track, eyes and others body tissue except central nervous system. Data from World Health Organization (WHO)¹ showed 224.717 of leprosy cases and 259.017 cases in 2015. In 2013, Indonesia was the

third in the world after India and Brazil, with 16.856 new leprosy case and the amount of grade two disability among new case was 9,86²

The province of west papua have the largest number of leprosy case in Indonesia. The number was large enough to makes people worried. Data from west papuaprovince, showed that 607 cases found in many areas in west papua. From that data, in 2015 west papua was selected as high endemic categories. Based on preface survey on June 11 2018 at Sorong Public Health Office obtained as much as 122 cases found in the last quarter, and leprosy case in Malanu Public Health Center in 2018 was 20.

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Leprosy is a chronic infection disease caused by *Mycobacterium leprous* (*M leprae*) that itsintracellularobligate attack peripheral nervous first, then skin, mucosa membrane, upper respiratory track and other organs except central nervous system. Leprosy caused by *M leprous* that found by G.H Armauer Hansen in 1873 in Norwegia. This basil is acid resistant, pleomorflurus shape, slim stick and the rest has paralel shape with both ends, round with 1-8 um length and 0,25-0,3 um diameter.

Epidemiologi: The infection source is patient with so many multibasiler (MB) basil type. How its infected people is still unsure yet, just based on classic opinion that stated long and tight direct contact between skin. Other opinion stated trough inhalation,because *M leprosy*still could live for days in droplet.

Patophysiology: The exact leprosy infection mechanismis still unsure yet. Some hypothesis stated such as skin contact and airborne. Proved that not all people infected by *M. Leprous* experienced leprosy. Weather, diet, nutrition status, social economy status and genetic also play a role found after some research and observation was done on leprosy group on certain family.

Materials and Method

Design: This research using “Quasi experimental pre-post test design” with audio visual and pocket book intervention. This design can be use to learn the phenomenon on framework of “cause-effect correlation” with giving intervention or manipulated on research subject, then learn about its intervention effect³.

Population: Population is all individual who become the references of research result that have certain characteristic. Population in this research is all patient with leprosy on Malanu Public Health Center working area.

Sample: Sample is a part of population that chosen with certain way to represent the population also sample is a part or vice from target population. Sample used in this research contain with so many benefits, such as cheaper, easier, faster, specific and representing the population.

The amount of sample use in this research is 20 respondent for each group, using purposive sampling as the sample technique, a technique that choose a group of subject based on certain characteristic that considered

having strong relation with population characteristic that have been known before⁴⁻⁸.

Location: The research was done with home visited method to the family with leprosy member on Malanu Public Health Center working area.

Data Analysis:

Univariat: Univariat analysis done to describe every variable that measure on the research. Respondent characteristic including age, gender, education level and job are categorical data analyzed for measuring frequency and variable percentage.

Bivariat: Bivariat analysis done to prove the research hypothesis, is to see the affect of information education using audio visual and pocket book to knowledge increase about prevention of leprosy disability before and after intervention at Malanu Public Health Center working area using Mann Whitney T-Test.

Results

Univariat Analysis:

Table 1. Respondent distribution based on gender at Malanu Public Health Center working area.

No.	Gender	F	%
1	Male	12	60
2	Female	8	40
Total		20	100

Table 2. Respondent distribution based on age at Malanu Public Health Center working area.

No.	Age	F	%
1	15-40	15	75
2	41-60	4	20
3	>61	1	5
Total		20	100

Table 3. Respondent distribution based on education level at Malanu Public Health Center working area.

No.	Education Level	F	%
1	Elementary school	5	2
2	Junior high school	2	10
3	Senior high school	11	55
4	University	2	10
Total		20	100

Table 4. Respondent distribution based on occupation at Malanu Public Health Center working area.

No.	Occupation	F	%
1	Farmer	2	10
2	Civil	1	5
3	House wife	3	15
4	Private	3	15
5	Unemployee	8	40
6	Student	3	15
Total		20	100

Table 5. Respondent distribution based on leprosy period length at Malanu Public Health Center working area.

No.	Period	F	%
1	1 year	7	35
2	2-5 year	13	65
Total		20	100

Respondent distribution based on gender, age, education level, occupation and leprosy period length. Analysis result table 4.1 from 20 respondent, most of them is male as much as 12 (60%), the most or 15 respondent age are between 15 to 40 years old (75%), as much as 11 respondent education level are senior high school (55%), 8 respondent are unemployed (40%) and leprosy period length is between 1-5 years for 13 respondent (65%).

Bivariate Analysis: Result from Kolmogorov-Smirnov showed data distribution abnormally, then Wilcoxon Match Pairs Test was used.

Table 6. Ranks

Postespeng-pretespeng Negative Ranks	N	Mean Rank	Sum of Ranks
Positive Ranks	14 ^a	7.50	105.00
Ties	0 ^b	.00	.00
Total	6 ^c		

Test Statistic:

	Postespeng-pretespeng
Z	-3.557 ^a
Asymp. Sig. (2-tailed)	.000

Analysis of the affect of information education to knowledge increase on disability leprosy prevention after

intervention increase significantly and meaningfully than before intervention was given with p value 0.000 (p value < 0,05).

Discussion

This research purpose is to describe the affect of information education using pocket book and audio visual to knowledge increase of disability leprosy prevention. Ability of patient before intervention was mostly under 12 respondent from all (60%). This mean education and knowledge about leprosy is still below. This research was in line with research about the correlation of knowledge and infection prevention behavior of leprosy at TanjungAnom Public Health Center stated that knowledge is result from know and this happen after somebody using their senses on certain subject.

Respondent ability after intervention, increase into good rank as much as 10 respondent (50%). This mean there is showed an effect to their knowledge after intervention was given. Antari also stated the similar thing in her research that there is a significance correlation between knowledge and leprosy disability prevention⁹⁻¹⁶. The affect of education using pocket book and audio visual to behavior increase to leprosy disability prevention. Analysis about respondent behavior on Wilcoxon test resulted with 0,014 (p value <0,005), it means there is no significance affect to respondent behavior and attitude on leprosy disability prevention at Malanu Public Health Center working area.

Different with research done by AgustiNala at all stated that good behavior and attitude, surely will prevent the disability on leprosy which means respondent with bad attitude and behavior are 7 times more risk on disability of leprosy. So that, the higher the respondent knowledge about leprosy, the better their action to prevent disability caused by leprosy. All factor environmental and nutrition potential to affect the health status leprosy patients¹⁷⁻²⁶.

Conclusion

There is a significance affect to respondent knowledge after intervention 2 days in row at Malanu Public Health Center working area.

Suggestion:

For leprosy patient: Expected to increase their knowledge with actively seeking for information as much as possible about leprosy and how its spreading.

For health staff: Giving information about leprosy as optimal as possible, in hope to increase patient knowledge, as beginning step to prevent the disease and its spreading.

For researcher: For the next researcher, hope this research will help you to find any data or references.

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