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## **The Influence of Communication Models, Regulations and Partnership on Ownership of Private Family Toilets in Rompu Village Masamba Sub-district, North Luwu District**

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### **Abstract**

The existence of a regulation requires the community to hold a party to have a latrine and not to defecate in any place, causing the ownership of latrines to increase. This study aims to determine the effect of cultural communication model, regulation and partnership on the ownership of latrines of community families in Rompu Village, Masamba Sub district, North Luwu District, Province of South Sulawesi. This research is a quantitative research by using quasi intervention design with two pre-test and posttest design. The sample of 150 family heads is divided into three groups. One group of lectures, one group of modules and one group were not given lectures and modules. Data were analyzed by paired t test and anova. The result of the research shows that there is influence of cultural communication model to increase the ownership of family latrine. Increased latrine ownership after intervention in group 1 was 11, in group 2 was 1, while group 3 there was no addition of latrine. The provision of intervention in the form of modules and lectures with cultural communication model can increase the knowledge of respondents about the regulation of ownership of latrines and partnerships formed by the government to accelerate the community to have family latrines. It is recommended that village governments will make regulations governing the ownership of family latrines for each house and to build partnerships with others to help communities to build latrines.

**Keywords:** latrine ownership; regulation; partnership.

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## **1. Introduction**

Fecal disposal needs special attention because the disposal of human feces that do not meet health standard can be a source of transmission of various diseases such as diarrhea, typhoid, vomiting, dysentery, intestinal worms and itching. Feces can also cause environmental contamination of water sources and foul smells and aesthetics.

Many factors that cause the community are reluctant to make and use family latrines such as: the low level of public knowledge about the importance of family latrines, so they lack of response to be able to receive useful information for them. Their low income so they cannot make latrines. In addition there is a habit of people who defecate any places [1].

The ownership of family latrines is influenced by the ability of the family to build latrines (the economy), village government regulations requiring each house to have latrines, and assistance from the government [2].

This study aims to determine the effect of regulation and partnership on the ownership of community family latrines in Rompu Village, Masamba Sub District, North Luwu District, and Province of South Sulawesi.

## **2. Materials and Methods**

The type of research used is Quantitative research by using quasi intervention design with design of two groups of pretest and posttest that are intervention group and control group to intervene cultural communication model to the use of latrine. This research was conducted in Rompu Village, Masamba Sub District, North Luwu District, and Province of South Sulawesi.

The samples were divided into 2 (two) groups i.e. the control group without giving anything and the intervene group who followed the lecture and given the module.

The number of sample are 150 family heads consisted of 50 families for the control group and 100 families for the intervention group consisting of 50 families attending lectures and 50 families without attending lectures but given modules. The data were collected by using questionnaires. Data analysis using Mc Nemar test.

## **3. Results and Discussion**

### **3.1 Results**

The result of the research shows the existence of regulation about latrine according to the most respondent in group 1 that is 19 people and the least in group 3 that is 6 people.

Mc Nemar test results showed that there was a change of knowledge about the existence of regulation at the beginning of measurement with the end of the measurement in all groups ( $p < 0.05$ ) (Table 1).

Knowledge of partnership by respondent the most is in group 1 that is 44 people and the least is in group 3 that is 26 people. The Mc Nemar test results indicate that there is a change of knowledge about the partnership at the

start of measurement with the end of the measurement in all groups ( $p < 0.05$ ) (Table 2).

The ownership of latrines in group 1 increased by 11 units while in group 2 increased by 1 unit and in group 3 there was no addition of latrine.

The results of the Mc Nemar test showed that there was a change in the number of family latrine ownership in group I ( $p < 0.05$ ) whereas in group 2 and group 3 there was no difference of family latrine ownership before and after intervention ( $p > 0.05$ ) (Table 3).

**Table 1:** Knowledge of the existence of latrine ownership regulation

Regulation	Group					
	I		II		III	
	n(50)	%	n(50)	%	n(50)	%
<b>Beginning</b>						
Pre-intervention	3	6,0	0	0,0	0	0,0
Post-intervention	47	94,0	50	100,0	50	100,0
<b>Ending</b>						
Pre-intervention	19	38,0	15	30,0	6	12,0
Post-intervention	31	62,0	35	70,0	44	88,0
p	0,000		0,000		0,000	

Source: Primary data

**Table 2:** Change of knowledge about partnership in making latrine

Partnership	Group					
	I		II		III	
	n(50)	%	n(50)	%	n(50)	%
<b>Beginning</b>						
Pre-intervention	2	4,0	0	0,0	1	2,0
Post-intervention	48	96,0	50	100,0	49	98,0
<b>Ending</b>						
Pre-intervention	44	88,0	40	80,0	26	52,0
Post-intervention	6	12,0	10	20,0	24	48,0
p	0,000		0,000		0,000	

Source: primary data

**Table 3:** Change of latrine ownership

	Group					
	I		II		III	
Latrine ownership	n(50)	%	n(50)	%	n(50)	%
Pre-intervention	33	66,0	38	76,0	40	80,0
Post-intervention	44	88,0	39	78,0	40	80,0
Frequency Difference	11		1		0	
p	0,001		1,000		1,000	

Source: Primary data

#### 4. Discussion

The result of the research shows that there is effect of giving module and lecture with cultural communication model that can increase the knowledge and interest to build latrines. The giving of lectures and modules increased the respondents' knowledge of the latrine ownership regulation and enhanced the partnership in building latrines.

Family latrine is a building that is used to remove stools or human feces that commonly called toilet / WC [3]. Family latrines should be built, owned and used for one family with placements that are easily accessible by the inhabitants of the house whether inside and outside the house. Utilization of family latrines is strongly influenced by the level of knowledge, attitudes and actions of the community.

Generally respondents use the river as a place of defecation because they live around the river. Many factors that cause the community are reluctant to make and use family latrines such as: the low level of public knowledge about the importance of family latrines, so they lack the response to be able to receive information useful for them. Besides that the attitude and actions that leads to the habits of people who always defecate in any places [1].

Many countries have developed program to encourage society to increase their behavior in sanitation and hygiene program [4-8]. Studies have revealed that behavior intervention has a strong correlation with water and sanitation program [9-11]. Indonesia also has a strong effort to solve this problem especially their correlation with many diseases [12-15].

#### 5. Conclusion

There is an effect of the cultural model of on increasing the ownership of latrines. After intervention in group 1 of 11 units, in group 2 of 1 unit, while group 3 there was no addition of latrine. The provision of intervention in the form of modules and lectures with cultural communication model can increase the knowledge of respondents

about the regulation of ownership of latrines and partnerships formed by the government to accelerate the community have family latrines, and interest in building latrines. The giving of lectures and modules increased the knowledge of the respondents about the regulation of ownership of latrines. The giving of lectures and modules enhances community participation in community activities. The effectiveness of lectures with cultural communication models is higher when compared with no lectures in increasing the knowledge of respondents.

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### **6. Competing Interest**

The authors declare that they have no competing interests.

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