

**GESIT MODELING (TOTAL SANITATION MOVEMENT) AS EFFORTS TO  
IMPROVE KNOWLEDGE AND BEHAVIOR OF MOTHER SANITATION  
IN DIARRHEA PREVENTION FRAMEWORK  
IN BANJAR REGENCY**

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**Abstract** - Diarrhea is ranked second as the leading cause of death in children under five. Every year around 2.5 billion cases of diarrhea occur in children under the age of five, and an estimated number of cases will be relatively the same over the past two decades. This community service activity was carried out in Sungai Tuan Ulu Village, Banjar Regency, South Kalimantan with a total of 50 respondents. The method of implementation of the activity consisted of 3 stages: Preparation, Implementation, and Monitoring and Evaluation. Focus of the program implemented in GESIT are as follows: defecate carelessly, behavior of CTPS (Hand Washing with Soap), management of drinking water and food, waste management, and management of household liquid waste. There is a significant increase in the number of correct answer when the respondent answers the post testquestionnaire about the variables of knowledge, attitude, and behavior about diarrhea.

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## I. INTRODUCTION

Diarrhea is ranked second as the leading cause of death in children under five. Every year around 2.5 billion cases of diarrhea occur in children under the age of five, and an estimated number of cases will be relatively the same over the past two decades. Diarrhea is a disease that tends to cause death in sufferers and toddlers are the most vulnerable group affected. The highest incidence of diarrhea occurs in the first two years of life and will decrease with age of the child (UNICEF / WHO, 2009).

Diarrhea is more prevalent in developing countries compared to developed countries. This is due to several factors, including the lack of safe drinking water, lack of awareness of hygiene and sanitation and poor nutritional status and public health status. It is estimated that around 2.5 billion people still have poor sanitation facilities and 1 billion people do not have access to safe drinking water (UNICEF Indonesia, 2012).

Diarrhea in Indonesia is still an endemic disease and is a potential outbreak disease accompanied by death. Health profile data in 2016 showed that there were 6,897,463 estimated cases of diarrhea in health facilities, while those handled were only around 2,544,084 (36.9%). There were 107,725 diarrhea cases in South Kalimantan, while only 9,986 (9.3%) were handled. Banjar Regency was the second highest district of diarrhea cases with a total estimated cases of 22,422, while 9650 (43%) were handled.

Diarrheal disease in South Kalimantan is still included in one of the largest groups of diseases whose incidence is relatively high. In South Kalimantan, diarrhea often affects infants and toddlers. If not treated immediately, it will cause dehydration which results in death. This situation is supported by environmental factors, especially the condition of basic sanitation which is still not good, for example the use of water for daily needs that do not meet the requirements, family latrines that are still lacking and lack of conditions, and housing sanitation conditions are still lacking and not hygienic.

The Total Sanitation Movement (GESIT) is a manifestation of the implementation of government policy on the National Community Led Total Sanitation (CLTS) strategy which is carried out in an interesting and participatory way, especially to reduce diarrhea rates. This movement was carried out to support the achievement of government programs in the field of sanitation and health, especially in Banjar District. Efforts to change hygiene and sanitation behavior using the CLTS method as a mainstay method for some sanitation actors may still be new. Previous sanitation programs, still using counseling methods in which there is an "effort to teach" the target. In addition, the method used is sometimes accompanied by the provision of material assistance for the construction of latrine facilities or other sanitation facilities. In this CLTS method, the habits of the method are eliminated and even contradict the basic principles of the CLTS method because this method approaches the community as a subject, and stimulates them to self-assess sanitation conditions in their community.

The results of the study from WHO (2007) in Decree of the Minister of Health of the Republic of Indonesia (2008) stated that the incidence of diarrhea decreased along with the increase in total sanitation in the community. There was a 45% decrease in line with the increase in hand washing with soap, decreased by 39% with safe drinking water management behavior in the household and decreased by 32% in line with increasing public access to basic sanitation (defecation facilities, waste and waste management facilities household). The definition of total sanitation according to Decree of the Minister of Health of the Republic of Indonesia No.852 / MENKES / SK / IX / 2008 concerning National Strategies for Community-Based Total Sanitation is a condition when the community does not defecate, wash hands using soap, manage drinking water and safe food, manage waste properly, manage household liquid waste safely.

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## **II. METHOD**

This community service activity was carried out in Sungai Tuan Ulu Village, Banjar Regency, South Kalimantan with a total of 50 respondents. The method of implementation of the activity consisted of 3 stages:

1. Preparation

The preparation stage is in the form of determining the location of activities, determining the time of implementation and licensing. The location of this community service activity is in the Banjar Regency and village government areas. Licensing is done with Balitbang to conduct GESIT modeling to improve maternal sanitation knowledge and behavior in order to prevent diarrhea.

## 2. Implementation

The implementation phase consists of making counseling materials, distributing pre-post test questionnaires, and forming GESIT models. The introduction of the preliminary questionnaire aims to find out the problems or information about the knowledge and behavior of maternal sanitation in the prevention of diarrhea. Before counseling, pre-test questionnaires were conducted to measure the knowledge of the results of knowledge transfer from the facilitator to the community. After counseling, a post-test was conducted to measure community knowledge after obtaining knowledge transfer. In addition, information was collected about parenting through questionnaires using the GESIT method.

Focus of the program implemented in GESIT are as follows:

1. Defecate carelessly
2. Behavior of CTPS (Hand Washing with Soap)
3. Management of drinking water and food
4. Waste management
5. Management of household liquid waste

The focus of the implementation of the GESIT Program in environmental control, in which concerns the description, which includes:

- a. Implementers of the GESIT program: Sanitarians, village governments, midwives and extension teams.
- b. Program objectives: Provide sanitation knowledge and behavior about 5 pillars
- c. Process Stages of Program Implementation: the GESIT modeling is expected to enable the Village Government to involve the whole community. Where the community is encouraged to become the main actor in building sanitation.
- d. Community Based Development: Several stages of the process include establishing communication with fellow implementing members and the general public. The second process step is the availability of resources in program implementation. As well as the last stage which is about the impact of the implementation of the community sanitation movement program, contributing to the environment, society or health.
- e. Environmental Control: Improving the progress of sanitation needs greatly affects the quality of the environment. So that it can be said that the effort to control the environment went well. so that it can be said that river water and soil will no longer be polluted due to the presence of feces, garbage, and waste.

## 3. Monitoring and Evaluation

Monitoring activities are carried out to monitor the progress of the implementation of activities that have been carried out. Meanwhile, evaluation is done to measure the success of an activity.

### III. RESULTS AND DISCUSSION

The characteristics of mothers who have children under five in this community service are as follows:

Table 1. Distribution of Frequency of Respondents by Age in Sungai Tuan Ulu Village

Variable	Frequency	Percentage (%)
<b>Age</b>		
17-25	3	6,0
26-35	33	66,0
36-45	12	24,0
46-55	2	4,0
<b>Education</b>		
Not completed in elementary school/ elementary school	3	6,0
Junior high school	18	36,0
Senior high school	25	50,0
University	4	8,0
<b>Work</b>		
Housewife	32	64,0
Farmers / Fishermen	4	8,0
Trader	9	18,0
Employee	5	10,0
<b>Clean Water Source</b>		
Drinking water company	43	86,0
Well dig	4	8,0
Pump well	2	4,0
Bottled water / gallon	1	2,0
<b>Diarrhea events</b>		
Diarrhea	29	58,0
Not Diarrhea	21	42,0
<b>Total</b>	<b>50</b>	<b>100</b>

Based on table 1, the results of the study showed that the highest respondents were found at the age of 26-35 years as many as 33 (66.0%) respondents. While in the age of 36-45 years there were 12 (24.0%) respondents. In addition, it was also found at the age of 17-25 years as many as 3 (6.0%) respondents and at the age of 46-55 years as many as 2 (4.0%) respondents. The highest level of education of respondents was found at the level of senior high school education as many as 25 (50.0%) respondents. While at the junior high school education level there were 18 (36.0%) respondents. In addition, it was also found at the level of college education (PT) as many as 4 (8.0%) respondents and at the level of education did not finish elementary school as much as 3 (6.0%) respondents.

Based on the employment status, the most respondents were found not working or as housewives (IRT) as many as 32 (64.0%) respondents. While the respondents who worked as traders were 9 (18.0%) respondents. Also found in the respondents who worked as employees or civil servants as many as 5 (10.0%) respondents and the respondents who worked as farmers or

fishermen as much as 4 (8.0%) respondents. The results of the activity showed that based on the use of clean water sources, respondents who used PDAMs were 43 (86.0%) respondents. While the respondents who used dug wells were 4 (8.0%) respondents. In addition, it was also found that respondents who used pump wells were 2 (4.0%) respondents and in respondents who used bottled water or gallon water there was 1 (2.0%) of respondents. The results of the activity showed that 29 children who had experienced diarrhea were 29 (58.0%) respondents. While for respondents who have never experienced diarrhea, 21 (42.0%) respondents.

Evaluation is an activity that intends to find out whether a predetermined goal can be achieved, whether the implementation of the program is in accordance with the plan, and or the impact of what happened after the program was implemented. Program evaluation is useful for decision makers to determine whether the program will be stopped, repaired, modified, expanded, or upgraded. With the implementation of an evaluation on a program, it will be known the impact of program implementation so that future program planning will be better and more perfect (Anggraini D, 2013).

Evaluation is done by comparing the results of the pre-test value before the material is delivered and the post-test value after the extension material is given. The results of pre-test and post-test in extension activities can be seen in the following table.

Table 2. Results of Pre Test and Post Material Tests Counseling about people's knowledge of diarrheal diseases.

Knowledge onPre-test			Knowledge onPost-test		
Correct amount	Frequency	Percentage (%)	Correct amount	Frequency	Percentage (%)
4	2	4,0	7	1	2,0
5	8	16,0	8	5	10,0
6	8	16,0	9	14	28,0
7	9	18,0	10	19	38,0
8	14	28,0	11	11	22,0
9	6	12,0			
10	3	6,0			
<b>Total</b>	<b>50</b>	<b>100</b>	<b>Total</b>	<b>50</b>	<b>100</b>

Based on table 2, results obtained a comparison between the value of the Pre Test and Post material test counseling about the community's knowledge of diarrheal diseases with a total of 50 respondents. From the results of the pretest about konowladge of respondents who answered with the correct number 4 were 2 (4.0%). Who answered with the correct number of 5 as many as 8 (16.0%). Who answered with the correct number of 6 as many as 8 (16.0%). Which answers with the correct number of 7 as many as 9 (18.0%). Who answered with the correct number of 8 as many as 14 (28.0%). Who answered with the correct number of 9 as many as 6 (12.0%). And those who answered with the correct number of 10 were 3 (6.0%).

Based on the results of the respondents' posttest who answered with the correct number of 7 as many as 1 (2.0%). Which answers with the correct number of 8 as many as 5 (10.0%). Who answered with the correct number of 9 as many as 14 (28.0%). Which answers with true journals 10 of 19 (38.0%). And those who answered with the correct number 11 were 11 (22.0%).

Knowledge is one of the factors that influence the incidence of diarrhea. Knowledge is the result of the learning process by seeing the senses of sight, hearing, smell, and taste. Knowledge

plays a major role in someone taking action, meaning that the level of one's knowledge affects the needs of both themselves and others. This knowledge can form certain beliefs so that someone behaves according to those beliefs (Notoatmodjo and Soekidjo, 2007 & Khomsan and Ali, 2004).

Table 3. Results of Pre Test and Post Test Material Counseling about people's attitudes towards diarrheal diseases.

Attitudes onPre-test			Attitudes onPost-test		
Correct amount	Frequency	Percentage (%)	Correct amount	Frequency	Percentage (%)
3	1	2,0	5	1	2,0
4	1	2,0	6	2	4,0
5	9	18,0	7	10	20,0
6	8	16,0	8	37	74,0
7	12	24,0			
8	19	38,0			
<b>Total</b>	<b>50</b>	<b>100</b>	<b>Total</b>	<b>50</b>	<b>100</b>

From the table 3, results obtained a comparison between the value of the Pre Test and the Post Test Material Counseling about the attitudes of the community towards diarrheal disease with the number of respondents as many as 50 people. From the results of the pretest, respondents who answered correctly were 3 (2.0%). Which answers with the correct number of 4 as many as 1 (2.0%). Who answered with the correct number of 5 as many as 9 (18.0%). Who answered with the correct number of 6 as many as 8 (16.0%). Which answers with the correct number of 7 as many as 12 (24.0%). And those who answered with the correct number of 8 were 19 (38.0%).

From the results of the respondents' posttest who answered with the correct number 5 were 1 (2.0%). Who answered with the correct number of 6 as many as 2 (4.0%). Which answers with the correct number of 7 as many as 10 (20.0%). And those who answered with the correct number 8 were 37 (74.0%).

Attitude is a form of evaluation / reaction to an object, impartiality which is a certain order in terms of feeling (affelsi), thinking (cognition) and predisposing action (konasi) someone towards an aspect surrounding it (Mulyana MM, Eli K., 2015).

Table 4. Results of Pre Test and Post Test Material Counseling about community behavior towards diarrheal diseases

Behavior onPre-test			Behavior onPost-test		
Correct amount	Frequency	Percentage (%)	Correct amount	Frequency	Percentage (%)
1	1	2,0	3	1	2,0
2	3	6,0	4	1	2,0
3	3	6,0	5	8	16,0
4	7	14,0	6	10	20,0
5	12	12,0	7	13	26,0
6	8	16,0	8	17	34,0

Behavior onPre-test			BehavioronPost-test		
Correct amount	Frequency	Percentage (%)	Correct amount	Frequency	Percentage (%)
7	6	12,0			
<b>Total</b>	<b>50</b>	<b>100</b>	<b>Total</b>	<b>50</b>	<b>100</b>

From the results of table 4, it is obtained a comparison between the value of the Pre Test and the Post Test Material. Counseling about the behavior of the community against diarrheal disease with a total of 50 respondents. From the results of the pretest the respondents who answered with the correct number 1 were 1 (2.0%). Which answers with the correct number 2 as many as 3 (6.0%). Which answers with the correct number 3 3 (6.0%). Who answered with the correct number of 4 as many as 7 (14.0%). Who answered with the correct number of 5 as many as 12 (24.0%). Who answered with the correct number of 6 as many as 8 (16.0%). And those who answered with the correct number 7 were 6 (12.0%).

From the results of the respondents' posttest who answered with the correct number 3 were 1 (2.0%). Which answers with the correct number of 4 as many as 1 (2.0%). Who answered with the correct number of 5 as many as 8 (16.0%). Which answers with true journals 6 of 10 (20.0%). Which answers with 7 correct notes of 13 (26.0%). And those who answered with the correct number of 8 were 17 (34.0%).

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