

## **The Effect of the Counseling Method to Improvement of Knowledge and Preserve the Environment Attitude in the Coastal Area of Makassar**

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### **Abstract**

This research aimed to analyze the effect of the extension methods that has been conducted on coastal communities, in the form of training with the module and with the film through the LCD. This research to was aimed determine changes in the level of knowledge and attitude toward coastal communities and coastal environments to analyze the differences between the two variables. This research used a quasi-experimental design with pretest-posttest design group. The research was conducted in the District Ujung Tanah involving 64 household. Samples were divided into two groups: group discourse modules and discourse with films via LCD which the number of sample was 32 people each. For the analysis of the data before and after counseling is done by using T-test. The results showed that the knowledge and attitudes of both groups before being given a good education with the discourse method by using a module or discourse with a film is similar majority being knowledgeable and a negative attitude. After trained there is an increased knowledge and attitudes. Counseling using discourse and modules more meaningful in improving the knowledge and attitudes of coastal communities about environmental sanitation compared with extension methods discourse and films via the LCD. Based on the results, it can be concluded that the extension by both methods is a significant influence on increasing the knowledge and attitudes of coastal communities. Discourse method and module can be used as an alternative in the implementation of the extension in coastal areas.

**Keywords:** Environmental Knowledge, Preserve the Environment Attitude, there is an, Coastal communities.

## **INTRODUCTION**

In improving the quality of the environment and natural resources especially in coastal areas is expected participation of the community, not only by the government but also the people are expected to participate actively, such as the pseudo shape, practice cooperation and empowerment process (Mikkelsen, 2005).

At a conference organized by the World Bank Water Sanitation Program (WSP) was revealed, that Indonesia was second in the world as a country with poor sanitation. According to data published by the United Nations (UN), 63 million people in Indonesia do not have sanitation namely toilets and dustbins, still defecate and garbage anywhere in the river, sea or land surface (KSAN, 2013). According to data from Indonesia Millennium Development Goals (MDG), in 2010 the coverage of water and sanitation in Indonesia reached 46 percent. In fact, the target in 2015, Indonesia should have reached 68.87 percent. Meanwhile, a targeted access to proper sanitation should reach 62.41 percent (MDG 2010).

According to Chiras (1990), that the history of mankind uses his knowledge to control the environment, shaping it and secure it so that lives can be successful and harmonious. But our sense of control and securing the environment does not always obtain satisfactory results. Disruption of water, clogged rivers, pollution, population, the outbreak of the disease is the result of human activities that are not anticipated. Because it takes a special interest in activities that posed a new result. Krech (1988), suggests that a person's knowledge is the result of learning that are organized collectively on a number of factors, information as well as its principles of various experiences with others. He also affirmed that knowledge one can form a personality. According Soedjatmoko (2007), have conceptual knowledge alone is not enough because the knowledge learned should be used to build a better community livelihood. There are still many things that are not known for certain, then mankind is entering also a time of great uncertainties, which are difficult to predictable (unpredictability), in which people feel very threatened (vulnerability). Therefore, the human must have abilities, and most importantly the ability to be creative to new challenges, along with an ability to anticipate developments and innovate.

Based on observations in the District Ujung Tanah there are 47.133 household live in slum area scattered region 12 villages (BPS, 2012). Cambayavillage located in the coastal areas. The most dominant ethnic is Bugis-Makassar most of the livelihood of fishermen, laborers/private sector varies the level of education is not complete primary school, complete primary school, never graduated from junior high school, junior high school graduation, never graduated from high school, graduated from high school.

The results of observations conducted by researchers at the date of April 21 to 22, 2015 found that the quality of the environment inhabited coastal communities, seen from the indicators: First, take out the garbage under the column above the stagnant seawater home because it has no permanent trash; second, throwing feces anyplace because there is no effort to create a safe family privy to environmental health; Third, the water needs of households (water wells) turbid and do not have a model for purification of safe drinking water on human health. All three indicators signify that knowledge, attitudes and behavior is coastal communities to preserve the

environment, especially landfills are environmentally still low. Factors influencing the three indicators mentioned above is the lack of government attention on infrastructure environmental sanitation.

Problems local faced community in the District Ujung Tanah generally is a matter of jobs, poverty increases, social unrest due to the rising crime rate, health care and education are low, most of the land settlements in coastal areas and land with the status of non-proprietary, a lack of greening areas, household trash heap, there are those who perform bowel habits to the canal and the use of clean water is not available for household needs due to unavailability of infrastructure proper environmental sanitation, which has the potential to cause the spread of disease (BPS, 2012). Through programs of environmental improvement settlements with the concept of community empowerment. However, in reality, not all programs can be run properly. This is because not all people have a concern for the environment. For that need to be studied further public awareness in environmental sanitation at coastal settlements in the village of Tabaringan and Pattingalloang.

To cultivate the participation is required to deliver information to the public through media outreach in the environment, so that the knowledge, attitudes, and behavior in the utilization of the facilities and infrastructure maintain maintaining environmentally sustainable.

### **RESEARCH METHODS**

This research was conducted in the city of Makassar on May to November 2015. The population in this study were all heads of household in village District of Ujung Tanah Cambaya Makassar City totaling 1,572 people. The sampling technique in this research is purposive sampling as many as 64 household and divided into two groups, namely: (1) group I counseled with a discourse and modules; (2) Group II are educated with a discourse and movies via the LCD, each group numbered 32 household. This type of research is a quasi-experimental design with pretest-posttest group design (Pratomo, 1986). Design of this research are as follows:

O1	X1	O2
O3	X2	O4

O1 and O3 is a pre-test to assess knowledge and attitudes prior to treatment counseling discourse by discourse method and extension modules with the film through the LCD. X1 and X2 for treatment counseling methods discourse and modules and counseling methods discourse and films via the LCD. O2 and O4 are post-test to assess knowledge and attitudes conducted after treatment counseling methods discourse and modules and extension methods discourse and films via the LCD.

Analysis of the data gathered manually and continued with SPSS 20. Data were analyzed by descriptive and analytic to see the effects and differences in knowledge

and attitudes of respondents before and after counseling and determine the most effective counseling methods using T-test test on 95% confidence level.

## RESEARCH RESULTS

### Description Data

#### *Community Knowledge before being given Counseling*

The results showed that the respondents' knowledge before being given counseling with a discourse and modules as well as a discourse and the film is being a moderate knowledgeable, that on discourse method and modules as many as 28 people (87.50%) as well as a discourse and movies as many as 27 people (84.38 %) which can be seen in Table 1.

**Table 1:** Frequency Distribution of Respondents by Knowledge before being given Counseling

Knowledge	Conseling Method	Percentage	Conseling Method	Percentage
	Discourse and Modules	%	Discourse and Film	%
Good	4	12,50	5	15,62
Moderate	28	87,50	27	84,38
Total	32	100,00	32	100,00

#### *Community attitudes before being given Counseling*

The results showed that the respondents' attitudes before being given Counseling using discourse and modules majority is negative, namely discourse method and modules as many as 26 people (81.25%) as well as discourse method and films as many as 30 people (93.75%) which can be seen in Table 2.

**Table 2:** Frequency Distribution of Respondents by attitude before being given Counseling

Attitude	Conseling Method	Percentage	Conseling Method	Percentage
	Discourse and Modules	%	Discourse and Film	%
Positive	6	18,75	2	6,25
Negative	26	81,25	30	93,75
Total	32	100,00	32	100,00

#### *Community knowledge After being given Counseling*

The results showed that the respondents' knowledge given counseling after the well with discourse method and modules as well as discourse method and films a good knowledgeable, namely discourse method and modules as many as 29 people (90.62%) as well as discourse method and films as many as 25 people (78, 12%) which can be seen in Table 3.

**Table 3.** Frequency Distribution of Respondents by Knowledge after being given Counseling

Knowledge	Conseling Method	Percentage	Conseling Method	Percentage
	Discourse and Modules	%	Discourse and Film	%
Baik	29	90,62	25	78,12
Sedang	3	9,38	7	21,88
Total	32	100,00	32	100,00

**Community Attitude After being given Counseling**

The results showed that the respondents' attitudes after being given Counseling using discourse and modules majority is positive, namely discourse method and modules as many as 30 people (93.75%) as well as discourse method and films as many as 27 people (84.38%) which can be seen in Table 4.

**Table 4:** Frequency Distribution of Respondents by attitude after being given Counseling

Attitude	Conseling Method	Percentage	Conseling Method	Percentage
	Discourse and Modules	%	Discourse and films	%
Positive	30	93,75	27	84,38
Negative	2	6,25	5	15,62
Total	32	100,00	32	100,00

**Data Analysis****Comparison of Mean Values of Respondents Knowledge Before and After Counseling with Discourse and Module Method**

The results showed that the average knowledge of the respondent before being given counseling with the lecture method and the module is 12.64 and increased to 19.65 after being given counseling. The mean value of 7.01,  $p = 0.00$ , it means that there is a significant difference of knowledge before and after counseling which can be seen in Table 5.

**Table 5:** Comparison of Mean Values Respondents Knowledge Before and After given Counseling with discourse and Module Method

Group Knowledge with Discourse and Modules method	Mean	Mean Difference	P Value	N
Before	12,64	7,01	0,00	64
After	19,65			

**Comparison of Mean Values Respondents Knowledge Before and After Counseling with Discourse and films Method**

The results showed that the average knowledge of the respondent before being given counseling with discourse method and films was 12.97 and increased to 17.52 after being given counseling. Seen a mean difference of 4.55  $p = 0.00$ , it means that there is a significant difference between knowledge before and after counseling which can be seen in Table 6.

**Table 6:** Comparison of Mean Values Respondents Knowledge Before and After given Counseling with Discourse and films Method

Group Knowledge with Discourse and film method	Mean	Mean Difference	P Value	N
Before	12,97	4,55	0,00	64
After	17,52			

**Comparison of Mean Values Respondents Attitudes Before and After Counseling with discourse and Module Method**

The results showed that the average attitude of the respondent before being given counseling with the discourse method and the module is 12.65 and thereafter increased to 19.87. Looks mean difference value at 7.22  $p = 0.00$ , it means that there is a significant difference between knowledge before and after counseling which can be seen in Table 7.

**Table 7:** Comparison of Average Value Attitudes of Respondents Before and After given Counseling with discourse and Module Method

Group Attitude with Discourse and module method	Mean	Mean Difference	P Value	N
before	12,65	7,22	0,00	64
after	19,87			

**Comparison of Mean Values Respondents Attitudes Before and After Counseling with Discourse and films Method**

The results showed that the average attitude of the respondent before being given counseling with discourse method and films was 13.16 and increased to 18.85 after being given counseling. Seen the mean difference of 5.69  $p = 0.00$ , it means that there is a significant difference between knowledge before and after counseling which can be seen in Table 8.

**Table 8:** Comparison of Average Value Attitudes of Respondents Before and After given Counseling with Discourse and films Method

Group Attitude with Discourse and film method	Mean	Mean Difference	P Value	N
before	13,16	5,69	0,00	64
after	18,85			

**Comparison of Mean Values Respondents Knowledge After Counseling According the Methods**

Results showed that the average value of the knowledge of coastal communities given counseling after the discourse method and the module is of greater value, namely 19.65 compared discourse method and films with a value of 17.52. P value = 0.002 means that statistically there is a significant difference between the extension services and modules discourse method by discourse method and films to enhance the knowledge which can be seen in Table 9.

**Table 9:** Comparison of Mean Values Respondents Knowledge After given Counseling according the Methods

Knowledge of Counseling	Mean	P Value	N
Discourse – module method	19,65	0,002	64
discourse-film method	17,52		

**Comparison of Average Value Attitudes of Respondents After Counseling According the Methods**

Results showed that the average value of the attitude of coastal communities after given counseling with discourse and module method is of greater value, namely 19.87 compared discourse and films method with a value of 18.85. P value = 0.007 this means that statistically there is a significant difference between the extension services and modules discourse method by discourse and films method to enhance the attitude can be seen in Table 10.

**Table 10:** Comparison of Average Value Attitudes of Respondents After given Counseling according the Method

Attitude of Counseling	Mean	P Value	N
Discourse – module method	19,87	0,007	64
discourse-film method	18,85		

**DISCUSSION**

The results showed that the respondents' awareness of environmental sanitation before the counseling (discourse method and module or discourse method and film) showed that people have the knowledge being, while the attitude of the respondent before the given counseling (using the discourse method and module or with discourse method and film) is a negative attitude. This shows prior to counseling both groups of respondents have the characteristics of knowledge and attitudes about environmental sanitation are equivalent. This situation is in accordance with the opinion of Arikunto (2005) who argued that one of the requirements is to try an experimental study two groups of respondents in the same conditions so that exposure of the end result can be truly the result of the presence or absence of treatment.

Community knowledge about environmental sanitation after being given counseling by using both methods is good. Then the attitude of community after being given counseling is positive. The results showed that an increase in knowledge and attitudes coastal communities after receiving counseling with discourse method and modules as well as discourse method and film. This situation illustrates that the counseling of environmental sanitation is an activity that can influence the behavior of respondents changes include changes in knowledge and attitudes.

Given the counseling of the environmental sanitation, the community is expected there is a change from previously unknown to knowing. The results are consistent with research Hayani, et al. (2004) in the city of Palu, Central Sulawesi Province stated that there is increasing knowledge of UKS teachers after receiving training on PSN-DBD. In this situation can be described that counseling methods and media used in this study also play a role in these changes. Further research Basuki (2006) found that there was a significant association between counseling methods with increased knowledge of hygiene on primary school students in Indragiri Hulu. It is also appropriate Mulyana opinion (2005), that the success rate of delivering the meaning of a message is strongly influenced by the appropriate methods and the delivery of interest in the message.

Based on the analysis of the mean value of the knowledge and attitudes before and after extension using discourse method-module and discourse method-films, it was found that there are differences between the mean value of the knowledge and attitudes of respondents before and after by counseling, in the form of an increase in the average value of knowledge and the respondents' attitudes are significant.

Modules are teaching materials arranged in a systematic and interesting that includes content, methods and evaluation that can be used independently to achieve the expected competencies (Anwar, 2010). The media usually consist of an overview a number of words, images or photographs in full color, making it easier comprehension and can increase the passion to learn. Counseling with discourse-module method greatly contribute to improving the knowledge and attitudes of respondents on environmental sanitation.

Film is the audio-visual media that can be heard and seen. This media has advantages such as easier to understand, more interesting, is already known to the people, face to face, involving all five senses, the presentation can be controlled and repeated, as well as the coverage relatively large. As ancounseling media is an audio visual films are often more effective to influence knowledge and attitudes even more skill than the method performances (Mardikanto, 1992).

Improved knowledge before and after using the counseling-module discourse method and discourse method-film was obtained the mean difference was 7.01 and the value of 4.55. This situation shows that the discourse method modules increased knowledge compared with discourse method-films. To increase seen attitudes mean difference of 7.22 on discourse method-module counseling and a 5.69 on discourse method-films. This shows that the discourse method modules further enhances the attitude than the discourse method-films. As it is known that the film is a face of communication that plays only while the module is a communication that can be repeated



understanding so that more can cause a response from readers. Something that are repeated tends to be embedded on the human psyche (Sanyoto, 2006).

## **CONCLUSION**

Based on the results of research and discussion, it can be concluded that; First, the level of knowledge of environmental sanitation communities at coastal area in the village of Cambaya, District Ujung Tanah is moderate. Second, the attitude of preservation of the environment of coastal communities Cambaya village is a negative attitude. Third, the high and low level of environmental knowledge of community will affect his attitude to preserving the environment. The higher the level of knowledge, the attitudes, the better to preserve the environment. To improve the knowledge and attitude of preservation of the environment of coastal communities Makassar city is one of the efforts done empowerment by using discourses-modules method counseling on environmental sanitation.

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