

## Method of Communicating in Public Lecture for HIV / AIDS Prevention in The District North Aceh

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**Abstract**— Development's Millennium Development Goal (MDG) on reducing infectious diseases including HIV / AIDS. The program still faces many obstacles, because the problem of HIV / AIDS is related to lack of knowledge and understanding of the community. The resistance of the socio-cultural aspects in counselling is happening, especially in Aceh province as religion-based province. In connection with the program to improve public knowledge in the prevention of HIV / AIDS, communication concept developed should always pay attention to the closeness between the aspects of culture, psychological, and social. This study aims to determine the appropriate method of communication in the prevention of HIV / AIDS in North Aceh District by religious leaders (religious teacher) and health counselors. This study is a quasi-experimental (quasi-experimental study pre-test and post-tests design). This study was conducted in North Aceh District covers three districts and each sub-district consists of two villages namely Lhoksukon Subdistrict (Desa Ara Abe and Village Nga), Dewantara subdistrict (Desa Paloh Lada and Village Bangka Jaya), Seunuddon districts (Village Ulee Rubeek West and the village of Ulee Rubeek Timu). This research has been conducted in April-May 2015. The populations were used as much as 14.020 couples of reproductive age and the samples were obtained using a sample size of at least 132, according Lemeshow in every village so that the entire sample of 492 couples of childbearing age. Data were analysed using a pre-test and post-test gain index, while hip dissertation test using Mann-Whitney U. Based on the results showed that the empirically proven that the model of health education approach method with religious leaders (religious teacher) proved more effective than the model of health education undertaken by health counsellors. There are differences in the level of knowledge about the prevention of HIV / AIDS significantly in women of reproductive after the health education provided by religious teacher and health counsellors, ( $p = 0.001 < 0.05$ ). Increased knowledge score Aged Women of Reproductive about the prevention of HIV / AIDS are taught by religious teacher was significantly higher than the score of knowledge of women of reproductive who receive counselling by health counsellors women of reproductive are more enthusiastic to follow counselling that delivered by religious teacher compare to the counselling which delivered by health counsellors. Proximity psychological, emotional, social and culture among women of reproductive age with religious teacher. This is because the religious teacher can customize the material submitted by the communicant sociopsychologic. During this time the role of religious teacher is more on improving the quality of faith and morality, while the implementation in the prevention of various diseases that can be affected the public. It is suggested that the religious teacher should be empowered to educate the public about health through religious approach by using effective communication methods to improve public knowledge.

**Keywords**—method communication; knowledge; people; prevention of HIV / AIDS

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### I. INTRODUCTION

AIDS (Acquired Immunodeficiency Syndrome), is a set of symptoms that are found in the final stage of infection with HIV (Human Immunodeficiency Virus). These symptoms depend on opportunistic infections that accompany HIV infection. Decrease in resistance due to damage the immune system by HIV as far as the onset of AIDS can take several years (to 15 years). Antiretroviral drugs can help prevent the progression of HIV infection to AIDS or can improve the condition of patients with AIDS [1].

HIV has infected more than 60 million people worldwide. Although the international community has responded incidence HIV / AIDS pandemic, HIV continues to spread causing more than 14,000 new infections every day. AIDS is currently the leading cause of death in Africa [2]. Meanwhile, the number of HIV / AIDS in Indonesia are likely to decline from the year 2010-2011, was 5744 cases with 4,162 cases, while in 2012 up to September reached 3,541 cases, so the case of HIV / AIDS in Indonesia cumulatively since it was first discovered in 1987-2012 120,000 cases. Approximately 75% of the number of AIDS cases in Indonesia experienced a productive age is 20-39 years [3].

## II. METHODOLOGY

### A. Research Design

This study is a quasi-experimental approach to pre-test and post-test in the 2 treatment groups aims to analyse the communication strategy undertaken by the religious teacher and health counsellors in the community in the prevention of HIV / AIDS at North Aceh District. Below is a quasi-experimental study scheme pre-test and post-test design to be used.



Fig. 1 Research Design

From the design of the study will be obtained changes and differences in values information:

Description :

- N1 = Treatment Group 1
- N2 = Treatment Group 2
- X<sub>1</sub> = Guidelines for HIV / AIDS by religious leaders (religious teacher)
- X<sub>2</sub> = Guidelines for HIV / AIDS counsellor District AIDS Commission
- O1 = Knowledge in the early stages of the intervention group
- O2 = Knowledge in the final stages of the intervention group
- O3 = Knowledge in the early stages of the control group
- O4 = Knowledge at the final stage of the control group

### B. Location and Time Research

This study was conducted in North Aceh district, on the grounds in the district there are people who are living with HIV / AIDS, highest in the year 2014 as many as 14 people (data from the year 2007 to 2014 as many as 48 people) of all districts / cities in the province Aceh. Researchers chose three Sub - district highest number of HIV / AIDS in North Aceh District, Lhoksukon Sub - district, Dewantara Sub - district, and Seunuddon Sub - district.

This study starts from the beginning until September 2015.

### C. Population and Sample

The population in this study were taken from all couples of childbearing age who live in the three Sub - district in North Aceh, Lhoksukon Sub - district, Dewantara Sub - district, and Seunuddon Sub - district as many as 14 020 women of reproductive age (Lhoksukon Sub - district as many as 5,005 women of reproductive age, Dewantara Sub - district as many as 4,713 women of reproductive age, and Seunuddon Sub - district as many as 4,302 women of reproductive age), three Sub - district is sub - counties with the largest number of people suffering from HIV / AIDS in northern Aceh district.

The sample in this study were women of reproductive age who are living in Lhoksukon Sub - district, Dewantara Sub - district, and Seunuddon Sub - district, and met the inclusion criteria as follows :

1. Age 21-45 years
2. Status Married
3. Willing to be a respondent

### D. Data Analysis

Data analysis was performed with multiple stages. Once the data from this study indicate that the data is processed. Processing research data has been conducted by using statistical data calculations. The processed data is the data about the test results in the form of a pre-test, post-test and gain normalized.

Data processing is done by statistical Product and Service Solutions (SPSS). The steps of the data processing are :

1) *Summary of Research Data.* Analysis of the data gain index is used to look at the increase in knowledge of couples of childbearing age. Gain data analysis views of couples of childbearing age pre-test and post-test. As revealed by Hake [4] that "to gain normalized average value it will be able to measure the effectiveness of knowledge in conceptual understanding".

Here is the formula gain normalized :

$$g = \frac{\text{score posttest} - \text{score pretest}}{\text{score maximum}(100\%) - \text{score pretest}}$$

Results are interpreted using the index calculation gain <g> classification according to Meltzer, [5] as follows :

TABLE I  
INDEX GAIN

Gain Index	Interpretation
$g > 0.70$	High
$0.30 < g \leq 0.70$	Medium
$g < 0.30$	Low

2) *Data Analysis of Pre-test and Post-test Control Class and Class Experiment*

#### a. Normality Test

Normality test is done to determine the distribution of the data from this study normal or not. A normal data is one of the requirements for parametric test. Meanwhile, if one of the data or the data were not normally distributed, the tests performed are non-parametric tests. In this study, the normality test is used the Shapiro-Walk test. Testing data normality can be used the Shapiro-Walk test. It can be performed with SPSS version 19 with a significance level was used 0.05. If the value of output in the column sig. the results of tests in SPSS is greater than the level of significance ( $p > 0.05$ ) then the data were normally distributed and vice versa if the output value in the column sig. SPSS test results in less than the significance level ( $p \leq 0.05$ ) then the data were not normally distributed.

#### b. Homogeneity Test

If the result of the normal distribution of data normality tests, homogeneity with Levine test. When the test results data normality is not normal, it was not done homogeneity, but directly tests the difference of two average statistical tests non-parametric Mann-Whitney U test of homogeneity was conducted to test whether or not the data is homogeneous samples drawn from the same population. Levine homogeneity test using the test. If the test results show the homogeneity of homogeneous data, then tested the difference in two averages using parametric statistical tests to examine the Independent Sample T-Test.

#### c. Knowledge Test Changes

Changes in knowledge tests on two samples are taken to determine changes in the level of knowledge of women of reproductive age after being given counselling by religious leaders and health counsellors. Tests were performed using Wilcoxon test.

### III. RESULT AND DISCUSSION

The result found that health information effectively increase knowledge of women of reproductive age on the prevention of HIV / AIDS, whether it is health education by the religious leaders with a communication method lecture through a psychological approach, cultural, and political education and health carried out by health counsellors ( $p < 0.001 < 0.05$ ). Based on data from previous knowledge pre-test and post-test counselling was given by religious leaders (the intervention group) that a change in the ranking after being given counselling by religious leaders. Respondents who experienced a positive change in the ranking of 390 respondents, which means that changes in knowledge score before and after of the category 'less' to 'please' or the category 'less' to 'Good' or the category 'Enough' to 'Good', Respondents who did not change the ranking of 6, which means that there is no change in knowledge score before and after counselling.

Likewise, the control group (counselling given by health counsellors) that change the ranking after being given counselling by health counsellors. Respondents who experienced a change in ranking were positive in 359 respondents, which means that changes in knowledge score before and after counselling were given by health counsellors. The category of 'Less' to 'please' or the category 'less' to 'good', or category 'Enough' to 'Good'. Respondents who did not change the knowledge of 30 people, which means that there is no change in knowledge score before and after counselling by health counsellors. On the prevention of HIV / AIDS. And respondents who experienced a change in negative ratings (decrease score after being given counselling) as many as 7 people, it means a change in knowledge score before and after counselling provided by counsellors category 'Enough' to 'less', or categories of 'good 'to' Pretty ', or the categories of 'good 'to' weak '.

Statistical test by Mann-Whitney U shows that there are significant differences between the two groups or in other words, the role of religious leaders is more effective than counselling given by health counsellors in increasing knowledge about HIV / AIDS ( $p = < 0.001 < 0.05$ ). Scores or knowledge before and after counselling in the intervention

group (extension by religious leaders / religious teacher) and the control group (counselling by health counsellors) were significantly different. It is seen that the increase in knowledge score in the intervention group (extension by religious leaders / religious teacher) is higher than the score of knowledge in the control group (counselling by health counsellors). Increased knowledge is one indication of the effectiveness of counselling is done [6]. The use of communication methods lecture approach (proximity) with a target extension is highly effective counselling to increase knowledge about the prevention of HIV / AIDS. Students with limited knowledge about HIV / AIDS have a higher risk for the stigma of people living with HIV / AIDS that those with good knowledge.

The study of students in Denpasar by Ekawati that focused on prevention and health promotion were needed. One of the efforts made through health promotion in schools that aim to increase students' knowledge about HIV / AIDS and the dangers of HIV / AIDS. The method is used the discussion and lecture with Leaflet media, books about HIV / AIDS [9]. Health education through effective health outreach activities shared responsibility of those directly involved in improving public health such as health authorities, health workers, as well as persons or entities that could be recruited to provide information about health as the religious leaders, community leaders and others, effective health education to provide the right information and the actual needs of the community in making ethical decisions that health [7]. This is consistent with the results of research conducted by Juang .M At All, in Sub-Saharan Africa, which got the results that health education has a positive effect on public awareness about HIV / AIDS and increased knowledge about the modes of transmission and prevention of HIV / AIDS [8]. The study results Amy A. Conroy [10] to increase HIV-related behaviour should consider the resources together in pairs and point maximum potential for empowerment at the level of partner. Efforts to just focus on the empowerment of women.

### IV. CONCLUSIONS

The results prove that the empirical model of health education with a strategic approach to its proximity to religious leaders to improve more effective than the model of health education carried out by the counsellor of the District AIDS Commission. There are differences in the level of knowledge about the prevention of HIV / AIDS significantly in couples of childbearing age after the health education provided by religious leaders and a counsellor from the district AIDS Commission. Health education by the religious leaders that was developed in this study to improve the knowledge of couples of childbearing age through experimental studies to have higher efficacy. Evident from the results of statistical test Mann-Whitney U, increase the value of reproductive-aged couples knowledge about the prevention of HIV / AIDS were taught by religious leaders (religious teacher) was significantly higher than the score of knowledge of fertile couples were counselled by counsellors District AIDS Commission. Experimental Study has been conceptually designed to develop an effective communication strategy to improve public knowledge through the aspects of proximity / closeness communicator

with communicant psychological, cultural, social, and political. This study provides important directives in the preparation and development of the concept of communication strategy, because it is a communication strategy through counselling with aspects of closeness that is developed in this study. It functionally has a rational basis. Couples of reproductive age were more enthusiastic to follow counselling deliver by religious leaders if compared to the counselling deliver by health counsellors, psychological closeness, emotional, social, and culture among women of reproductive age with religious leaders. so that with her no such closeness make them more comfortable, easier to receive information and ask directly if poorly understood, even the women of reproductive age will ask the things that were still forbidden. The material of lecture was deliver more meaningful method among adults age of the teenage years according to the results of research conducted by Ketut Indra's mouth full at all, the lecture method and peer education methods to the attitude control of HIV / AIDS Department students IKOR FOK Undiksha. Peer education methods improve student attitudes in controlling HIV / AIDS significant than lecture method. [11]. The communication strategy through the aspect of religious leaders proximity with the community, becoming one of the ways to promote health promotion programs should be a priority of the government, for example the transmission of this disease is very easy and effortless preventive involve a direct role of the community, such as dengue fever, malaria, stomachs, HIV / AIDS, and others.

Recommendations for the Implementation of Model Studies. This research resulted in a new paradigm in communication methods through health education to increase knowledge about the prevention of HIV / AIDS. The process of health education is earlier, more focused on the role of health workers and Non-Governmental Organizations (NGO), then based on the results of this study, the religious leaders can be used as an alternative and expanded across the province and other provinces that have a particular community in applying Islamic values, such as West Sumatra and other provinces. This is important because the role of religious leaders is more on improving the quality of faith and morality, while the implementation in the prevention of various diseases that can affect the public. It has not been optimal. To the religious leaders empowered to educate the public about health through religious approach using an effective communication strategy to improve public knowledge. The government, in this case the Provincial Health Office in Aceh and North Aceh District Health Office should have started to spread this model to base a policy on the implementation of health promotion on the prevention of HIV / AIDS. Health authorities also need to consider the allocation of education funds that can be drawn from the budget or the state budget, and created guidelines and technical guidelines for the implementation of activities can be run effectively and continuously. This model can also be applied as a follow-up, specifically addresses issues

associate with other health problems in the teaching activities of the event, women group in reading Alquran every Friday, lectures Ramadan, and others speech. The enthusiasm of people to listen to lectures of the religious leaders can be an important point in inviting people present at every meeting day. To avoid baoringfor studying the material about religious speech tha t given by religious leader.

Recommendations for further research, this study provides information that is relatively simple seen from a problem of communication strategy development models through health education aspects of closeness between religious leaders with people (couples of childbearing age). Therefore the assessment from the viewpoint of communication strategy by the religious leaders will always bring new problems and needs and has to obtain the optimal response of policy makers. Therefore, the site assessment model of health counselling approach other incentive-based community with cultural should be considered to be examined in a homogeneous society and has a high adherence to traditional leaders, involving traditional leaders, such as tribal Mentaway, Sasak, Bedouin tribes, and others. In this case study can be qualitative or ethnographic research paradigm.

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