

Health Education On TKBM Knowledge and Attitude About HIV And AIDS In The Gorontalo Port

Muammar,¹ Nur Nasry Noor,² M. Tahir Abdullah³

¹Departement of Epidemiology, Faculty of Public Health, Hasanuddin University

²Departement of Epidemiology, Faculty of Public Health, Hasanuddin University

³Departement Of Biostatistics, Faculty of Public Health, Hasanuddin University

Citation : Muammar., Noor N.N. & Abdullah M.T. (2019). Health Education On TKBM Knowledge and Attitude About Hiv And Aids In The Gorontalo Port.

Hasanuddin International Journal Of Health Research, 1(01):-11.

Keywords: Socialization, Brainstorming, Knowledge, Attitudes, HIV and AIDS

Correspondence : Muammar, Public Health Faculty Hasanuddin, University Makassar, 90245
Email: amaraimar88@gmail.com

Accepted: 18-July-2019;

Online first: 20-August-2019

Conflict Interest : The authors have declared that no competing interests exist

ABSTRAK

HIV and AIDS cases continue to increase every year and potentially increase in one of the key populations of loading and unloading workers in the port environment so that health and education methods that focus on promotion and prevention are needed to increase knowledge and attitudes. This study aims to determine the effect of health education methods on TKBM knowledge and attitudes about HIV and AIDS in Gorontalo Port. This study used a quasi-experiment with a randomized pre-test post-test design. The sample was taken by simple random sampling as many as 40 respondents divided by 20 respondents for socialization and brainstorming interventions. Data collection using questionnaires and interviews. Data is not normally distributed so it uses the Wilcoxon and Mann Whitney tests. The results showed that the characteristics of the respondents were in the most age group were 36-45 years with 55.5% with 92.5% male gender, married 95%, elementary school education 75% and average monthly income under 2 million Rupiah as much as 95%. The increase in the average score of knowledge (29.0 to 41.45) and attitudes (30.10 to 43.30) about HIV and AIDS before and after intervention in the socialization group, while knowledge (28.50 to 43.05) and attitudes (30.70 to 43.80) in the brainstorming intervention group. There were differences before and after the intervention method of socialization and brainstorming on Knowledge ($p = 0,000$) and Attitudes ($p = 0,000$) TKBM about HIV-AIDS, but there was no difference in the average score between the two groups with the p-value ($p > 0, 05$). The method of socialization and brainstorming is an option in increasing knowledge and attitude as a primary prevention effort, so it is recommended to become a program.

INTRODUCTION

AIDS can be defined as a syndrome or a collection of symptoms of the disease with characteristics of severe immune deficiency, and is a late-stage manifestation of HIV infection. Acquired

Immune Deficiency Syndrome (AIDS) caused by the virus Human Immunodeficiency Virus (HIV), where the virus attacks white blood cells or the human immune system, so that people



affected by this disease cannot fight various types of diseases that attack their bodies (Desmon, 2015).

In the report on the situation of the development of HIV and AIDS and Sexually Transmitted Infections (STIs) of the Republic of Indonesia Ministry of Health 2018 Second Quarter, stating that HIV infection in Indonesia was found to be a case of HIV infection until July 2018 (301,959). This has increased in the last 3 years, in 2016 as many as 41,250 cases and increased in 2017 as many as 48,300 cases, July 12 2018 reported reaching 21,336. Whereas for AIDS until July 2018 there were 108,829 cases reported. In 3 years, magic tends to fluctuate down to 10,146 cases in 2016, and in 2017 it dropped to 9,280 cases. As of July 2018 there were 6,162 cases (Kemenkes RI, 2018).

Gorontalo Province, from the recapitulation of the number of HIV and AIDS cases, the incidence has increased every year. In 2016 the HIV prevalence of 0.7 / 1,000 population increased in 2017 to 5.1 / 1,000 population. Then reported until July 2018 has reached 9 cases. Whereas for AIDS in 2016 there were 3.7 / 1,000 residents and increased in 2017 to 6.1 / 1,000 residents. As many as 30 cases have been reported up to July 2018 (Kemenkes RI, 2018). HIV is a disease that attacks the body's immunity with sexual behavior as the main transmission of transmission, especially sexual behavior in risk groups. TKBM (Loading and Unloading Workers) is one group of high-risk men based on a work approach according to the Integrated Biological and Behavior Survey.

The survey in Kalimas Port Surabaya was conducted to determine the relationship between characteristics, knowledge, and attitudes of TKBM with sexual risk behaviors for HIV transmission (Margawati et al., 2017). According to Integrated Biological and Behavior Survey data, population groups at risk of HIV transmission are women direct and indirect sex workers, IDUs, transgenders, MSM, teenagers and risky men including motorbike taxi drivers, public transport drivers, Shipmen, Labor and Personnel Loading and Unloading Work (TKBM) in ports (Margawati et al., 2017). The port is an area that has a large potential in the spread of HIV and AIDS cases. According to a preliminary survey with the Kalandara Non-Governmental Organization that runs the HIV and AIDS prevention and control program at the Tanjung Emas Port in Semarang in 2014, one of the port workers who has a high risk of HIV and AIDS is loading and unloading labor because access to sex services is easy, regular working hours and a daily wage system. In addition, there is access to sexual transactions around the port, namely entertainment venues in the port area (Mardalina, 2015).

Health education can be delivered formally or informally during daily interactions in increasing health behaviors at risk, one of that is knowledge about HIV and AIDS literacy (Taher et al., 2013). According to Notoatmodjo (2010) knowledge can be improved through two ways, through methods of health education and coercion/ pressure. As for health education methods are still the main alternatives in efforts to increase



knowledge and attitudes related to sexual behavior (Kasman et al., 2017).

There are two types of educational methods that are used to increase knowledge and attitudes, namely the active method and the socratic method. Didactic method is a one-way teaching learning method where socialization is one type of method that can be used and recommended in the program. Thus the socratic method is a two-way teaching and learning method where the brainstorming method is easier and more effectively implemented. Each method has advantages that are easy to implement and effective in the risk group. Socialization and brainstorming are two methods that can be recommended to improve health knowledge aimed at achieving behavioral change (attitudes of individuals, families and communities) in an effort to realize health degrees optimally (Notoatmodjo, 2010).

Based on the above background, it is considered necessary to conduct research that will look at the effect of the method of health education on the knowledge and attitudes of the Dismantling Workers (TKBM) about HIIV and AIDS specifically in Gorontalo Harbor. This research with promotive and preventive related focus methods was chosen to be carried out, so that later it was hoped that it could be input into information delivery activities especially to port communities (one of them TKBM) in an effort to prevent the main transmission of HIV and AIDS transmission to risk groups in Gorontalo Port.

METHOD

Research Design and Location

This research was conducted in Gorontalo Port, Gorontalo Province. Quasi-experimental research design with randomized pre and post-test design.

Population and Sample

The population in this study were all members of Gorontalo Port TKBM while the sample in this study was a portion of the total population of 40 respondents. Sampling for the intervention group was carried out by simple random sampling, with each intervention group as many as 20 people.

Data Collection

The sample was divided into two groups (group socialization method and group brainstorming method) that were active and fulfilling Gorontalo Gorontalo TKBM members (age > 17 years, able to communicate well, and able to read and write) then given a reading sheet, filling in the next pre-test questionnaire intervention and post-test were carried out at a distance of thirty (30) days after the intervention.

Data Analysis

The unit of analysis, that is all variables inherent in the observation unit of the dependent variable, are TKBM knowledge and attitudes about HIV and AIDS in Gorontalo Port. While the independent variable is the method of health education socialization and brainstorming. The data obtained were not normally distributed so that the non-parametric test was used, namely the Wilcoxon-test and the Mann-Whitney Test.



RESULTS

Table 1 shows that the average age of respondents in the two study groups was in the 36-45 year age group in the socialization intervention group as much as 12/20 and the 9/20 brainstorming intervention group, the sexes in the two study groups were dominated by men respectively 19/20 for brainstorming groups and 18/20 for socialization

groups. The marital status of the two groups intervened, both socialization and brainstorming, that were more married each 19/20. The last education was more in elementary school education, namely the brainstorming group as much as 16/20 and in the socialization group as much as 14/20.

Table 1. Characteristics of Respondents in Intervention Socialization and Brainstorming

Characteristics of Respondents	Socialization		Brainstorming		Total	
	n	%	n	%	N	%
Age (year)						
26 - 35	2	5,0%	1	2,5%	3	7,5%
36 - 45	12	30,0%	9	22,5%	21	52,5%
46 - 55	6	15,0%	8	20,0%	14	35,0%
≥ 56	0	0,0%	2	5,0%	2	5,0%
Gender						
Male	18	45,0%	19	47,5%	37	92,5%
Female	2	5%	1	2,5%	3	7,5%
Marital status						
Married	19	47,5%	19	47,5%	38	95,0%
Single	1	2,5%	1	2,5%	2	5,0%
Last education						
No school	1	2,5%	1	2,5%	2	5,0%
Elementary school	14	35,0%	16	40,0%	30	75,0%
High school	5	12,5%	3	7,5%	8	20,0%
Income						
< 2 million	19	47,5%	19	47,5%	38	95,0%
≥ 2 million	1	2,5%	1	2,5%	2	5,0%
Knowledge of HIV and AIDS						
Good	0	0,0%	0	0,0%	0	0,0%
Enough	20	100%	20	100%	40	100%
Less	0	0,0%	0	0,0%	0	0,0%
Attitudes on HIV and AIDS						
Good	0	0,0%	0	0,0%	0	0,0%
Enough	19	47,5%	20	50%	39	97,5%
Less	1	2,5%	0	0,0%	1	2,5%



Table 2. Knowledge Differences, Respondents' Attitudes Before and After Intervention

Statistical Results	Knowledge		p-value	Attitudes		p-value
	Before	After		Before	After	
Socialization						
<i>Min - Max</i>	22 - 34	30 - 47	0,000	25 - 41	38 - 48	0,000
<i>Mean ± SD</i>	29,0 ± 3,4	41,5 ± 4,4		30,1 ± 3,7	43,3 ± 2,6	
Brainstorming						
<i>Min - Max</i>	23 - 33	40 - 48	0,000	25 - 34	41 - 47	0,000
<i>Mean ± SD</i>	28,5 ± 3,0	43,0 ± 1,7		30,7 ± 2,4	43,8 ± 1,4	

While the amount of income per month, almost all respondents have income of less than 2 million with details in the socialization group and brainstorming at 19/20 respectively. The results also show that at the pre-test the respondents' knowledge in both groups was in sufficient category (100%) while the respondent's attitude was 5% of respondents in the attitude category that was lacking.

Table 2 showed that the average value and standard deviation of the knowledge score before and after the intervention is 29.0 + 3.4 to 41.5 + 4.4 (method of socialization) and of 28.5 + 3.0 to 43.0 + 1.7 (brainstorming

method) with a value of p-value of knowledge each of $0,000 < 0,05$, that means there is a significant difference in knowledge before and after the intervention of socialization and brainstorming. While the average and standard deviation of attitude scores before and after the intervention amounted to 30.1 + 3.7 to 43.3 + 2.6 (method of socialization) and by 30.7 + 2.4 to 43.8 + 1.4 (method of Brainstorming) with attitude value p-value $0,000 < 0,05$, that means there are significant differences in attitudes before and after the intervention of socialization and brainstorming.

Table 3. Differences in the Value of Knowledge and Attitudes of Respondents in the Socialization and Brainstorming Groups Against HIV and AIDS Prevention

Statistical Results	Socialization <i>Δ Mean ± SD</i>	Brainstorming <i>Δ Mean ± SD</i>	p-value
Knowledge			
<i>Pre-test vs Pre-test</i>			0,521
<i>Post-test vs Post-test</i>	12,45 ± 1,07	14,55 ± 1,42	0,397
Attitudes			
<i>Pre-test vs Pre-test</i>			0,194
<i>Post-test vs Post-test</i>	13,2 ± 1,15	13,1 ± 0,99	0,739



Table 3. Shows that the average value of changes in knowledge scores on the socialization method between pre-test and post-test was 12.45 with a standard deviation of 1.07, and attitude scores of 13.2 with a standard deviation of 1.15. While the average value of changes in knowledge scores in the brainstorming method between pre-test and post-test was 14.55 with a standard deviation of 1.42, and an attitude score of 13.1 with a standard deviation of 0.99. The statistical results also show that the comparison of knowledge and attitudes before each intervention is obtained that the value of p-value of socialization ($p = 0.521$; $p = 0.194$) while the comparison of knowledge and attitudes after each intervention p-value is obtained ($p = 0.397$; $p = 0.739$) that means the value of $p\text{-value} > 0.05$. Then it can be concluded that there were no significant differences between the two groups in increasing the knowledge and attitudes of TKBM about HIV and AIDS

DISCUSSION

This study showed that there are differences in knowledge and attitudes about HIV and AIDS in the loading and unloading labor force (TKBM) in Gorontalo Port that were significant before and after the intervention both in the treatment group socialization method and in the brainstorming method group. However, there were no differences in the comparison of mean values between the two treatment groups.

The method of health education through the method of socialization and brainstorming has a significant effect in increasing knowledge and attitudes about

HIV and AIDS in the loading and unloading labor force. According to Kusumawardani et al (2012) that the socialization of increasing knowledge in the less category increased to the medium category to the 30th day after intervention. This is reinforced again in his research Muliana (2014) stated that socialization increases knowledge and attitudes where the attitude of respondents in the experimental group in the post-test distribution increased to a good attitude.

The method of socialization is a process of planting or transferring habits or values of rules from one generation to another in a group or society. Socialization is a general concept that can be interpreted as a process in that we learn through interaction with other people, about how to think, feel, and act, that are all things that are very important in producing effective social participation. Socialization is a process that continues to occur throughout our lives. And socialization can also be interpreted as any activity intended to notify persuading or influencing the community to continue to use the products and services produced (Bakara et al., 2013).

A number of sociologists refer to socialization as a theory about the role (role theory). Because the socialization process is taught the roles that must be carried out by individuals. In this research, socialization is able to provide skills to someone to be able to live in a community. By giving socialization to individuals, the individual can ultimately easily learn to socialize to the community, so that the individual can be easily accepted by the community. Then develop the ability of someone to communicate



effectively. With socialization, individuals can get used to communicating with the outside world and society. Develop one's organic functions through proper introspection. By socializing, an organic function in the body / soul of a person will be trained properly, so that individuals can easily gather in the community. And, with good communication, these individuals can easily live side by side in society. And instill values and trust in someone who has a basic task in society. With socialization, individuals can easily get confidence because they have good communication in the community. With the existence of trust and communication, individuals can easily socialize with the community.

While brainstorming method is a creativity technique that seeks to find a solution to a particular problem by gathering ideas spontaneously from group members. This is in line with the research conducted by Maimun et al (2017) that showed a difference in attitudes in the brainstorming group before and after the intervention with the results of measuring scores of knowledge and attitudes. There are differences in attitudes about reproductive health in the brainstorming group before and after the intervention with the results of the score measurement, this shows that there is an increase in respondents' knowledge and attitude scores after receiving treatment from brainstorming facilitators (Handayani et al., 2009; Yanti et al., 2014; Ratnaningsih et al., 2015).

The brainstorming method has proven its benefits as a tool to explore information about knowledge and

attitudes to achieve goals. This method can be more in digging up more respondent information. The implementation of the brainstorming method can be guided by a facilitator who facilitates the process of discussion to run smoothly. The facilitator can act as a resource for the participants. A facilitator must have the ability to communicate well, listen to the opinions of each member of the discussion well, conclude their opinions, explore further information, and be able to make the atmosphere more familiar and comfortable. The facilitator must also respect the attitudes, opinions and feelings of each member of the discussion.

The brainstorming method is a method of socratic health education that is a method based on two-way or two-way traffic methods. In this method, both facilitators and participants are equally active, so participants can be active and creative. The brainstorming method is to provide the opportunity for participants to be able to display independence and self-direction, have openness and wholeness in choosing the best alternative actions, able to express opinions and actualize themselves in solving a problem and be able to respect the opinions of others. This brainstorming method gives participants the freedom to express their arguments and solve a problem and be able to respect the opinions of others. This method aims to gather ideas or opinions in order to determine and select various statements in response to questions related to learning (Sihite et al, 2017).

Rosenberg's theory states that knowledge and attitudes are related consistently. If cognitive ability



(knowledge) changes, it will also be followed by a change in attitude (Hutauruk, 2009). In accordance with the theory, there was an increase in the score of the knowledge and attitudes of the respondents in this study after the intervention was done both the socialization method and the brainstorming method.

CONCLUSION AND SUGGESTION

Based on the results of the research that has been carried out, it can be concluded that there are differences in the average score of knowledge and attitudes before and after the intervention method of socialization and brainstorming at the loading and unloading labor force on HIV and AIDS in Gorontalo Port but no difference in the average between the two treatment groups so that methods of socialization and brainstorming can be used in providing education in improving knowledge and attitudes about HIV and AIDS. In accordance with field observations, researchers suggest that health education on HIV-AIDS using socialization and brainstorming methods can be used as an option in increasing knowledge and attitudes as a primary prevention step, so it is good to be included in program recommendations both formal and informal activities.



BIBLIOGRAPHY

- Bakara D.M., Esmiati F. & Wulandari C. (2013). Pengaruh Penyuluhan Kesehatan Tentang HIV dan AIDS Terhadap Tingkat Pengetahuan Siswa di SMA Negeri 1 Selupu Rejang Year 2013. *Buletin Penelitian Sistem Kesehatan*, 17(3):227-231.
- Desmon K. (2015). *Epidemiologi HIV-AIDS*. Bogor: In Media.
- Handayani S., Emilia O., Wahyuni B. (2009). Efektifitas Metode Diskusi Kelompok Dengan dan Tanpa Fasilitator pada Peningkatan Pengetahuan, Sikap dan Motivasi Remaja Tentang Perilaku Seks Pranikah. *Berita Kedokteran Masyarakat*, 25(3):133-141.
- Hutauruk M.R. (2009). *Hubungan Antara Pengetahuan Dengan Sikap Orang Tua Tentang Kelainan Refraksi Pada Anak* (Tesis). Semarang: Universitas Diponegoro.
- Kasman K., Noorhidayah N., Persada K.B. (2017). Studi Eksperimen Penggunaan Media Leaflet dan Video Bahaya Merokok Pada Remaja. *Jurnal Publikasi Kesehatan Masyarakat Indonesia*, 4(2):57-61.
- Kemendes RI. (2018). *Data dan Informasi - Profil Kesehatan Indonesia (Data and Information - Indonesia Health Profil)*. Jakarta: Kementerian Kesehatan Republik Indonesia.
- Margawati K. & Hargono A. (2017). Perilaku seksual berisiko penularan HIV/AIDS pada tenaga kerja bongkar muat di pelabuhan kalimas surabaya. *Jurnal Promosi dan Pendidikan Kesehatan Indonesia*, 3(2):183-194.
- Maimun D.N., Dupai.L., Erawan P.E. (2017). Pengaruh Kesmas Cilik Dalam Meningkatkan Pengetahuan, Sikap dan Tindakan Perilaku Hidup Bersih dan Sehat Murid Kelas V Sekolah Dasar Negeri Poasia Kota Kendari. *Jurnal Ilmiah Mahasiswa Kesehatan Masyarakat*, 2(5)1-9.
- Mardalina A. (2015). Faktor-Faktor yang Berhubungan dengan Perilaku Seks Berisiko HIV/AIDS pada Tenaga Kerja Bongkar Muat (TKBM) di Pelabuhan Tanjung Emas Semarang. *Jurnal Kesehatan Masyarakat*, 3(3):869-876.
- Muliana, M. (2014). *Pengaruh Pendidikan Kesehatan Terhadap Tingkat Pengetahuan dan Sikap Remaja SMA X Dalam Upaya Pencegahan HIV dan AIDS di Kabupaten Karanganyar* (Skripsi). Fakultas Ilmu Kesehatan. Surakarta: Universitas Muhammadiyah Surakarta
- Notoatmodjo. (2010). *Promosi dan Perilaku Kesehatan Edisi Revisi*. Jakarta: Rineka Cipta.
- Ratnaningsih M., Zulkifli A., Hakim B.A. (2015). *Pengaruh metode simulasi permainan dan brainstorming terhadap pengetahuan dan sikap Pengurus PIK-R SMA tentang kesehatan reproduksi remaja di kota makassar* (Tesis). Fakultas Kesehatan Masyarakat. Makassar: Universitas Hasanuddin.
- Sihite P. et al. (2017). Pengaruh Edukasi Kesehatan Reproduksi Terhadap



Pengetahuan Siswa Tentang TRIAD KRR (Seksualitas, HIV/AIDS, dan NAPZA) di SMK Swadaya Kota Semarang. *Jurnal Kesehatan Masyarakat*, 5(4)237-246.

Taher B.F.T., Ticoalu S.H.R., Onibala F.,(2013). Pengaruh Penyuluhan Kesehatan Terhadap Tingkat Pengetahuan Siswa Tentang Cara Pencegahan HIV/AIDS di SMA Negeri 1 Manado. *Artikel e-*

journal keperawatan, 1(1):1-7

Yanti S.D. et al. (2014). Hubungan Pengetahuan remaja Puteri Tentang Menstruasi Terhadap Perilaku Higienis Pada Saat Menstruasi. *Jurnal Psikologi*, 1(2):1-8.

