DIMENSIONAL ANALYSIS TO ASSESS THE COMPETENCE OF HIV/AIDS PEER EDUCATORS IN REACHING HIGH-RISK GROUPS

SRI HANDAYANI[1,2*], RIZANDA MACHMUD[3], SATYA WYDYA YENNY[4] and YANTRI MAPUTRA[5]

[1]Doctor Program of Public Health, Faculty of Medical - Andalas University, Indonesia.
[2]Lecturer of Public Health, STIKES Syedza Saintika Padang.
[3]Professor of Public Health, Faculty of Medical - Andalas University, Indonesia.
[4]Lecturer of Medical Education, Faculty of Medical - Andalas University, Indonesia.
[5]Lecturer of Psychology, Faculty of Medical - Andalas University, Indonesia.
Email: ririhermana388@gmail.com

Abstract

The incidence of HIV/AIDS is still high and continues to increase. Worldwide, 37.9 million people suffer from HIV, of which 770,000 were reportedly died. In 2019, there were 50,282 HIV cases and 7,036 AIDS cases in Indonesia. Government programs for tackling STIs, HIV, and AIDS have been running in Indonesia for approximately 33 years. The low number of visits for early detection of HIV/VCT is one of the factors that make controlling the incidence of HIV/AIDS difficult. Such challenge has been associated with the lack of competency among the peer educators who are responsible to reach out to the groups with high for HIV/AIDS. This research was conducted to analyze the different dimensions in competence development of HIV/AIDS peer educators. The research design involved a cross-sectional research conducted in the Province of West Sumatra, Indonesia. A total of 43 peer educators was sampled out of the entire population. Data analysis was carried out computationally using SPSS 16 software. This research has made the following findings: 41.9% of the peer educators (respondents) studied in this research was not competent; 37.2% of respondents had poor knowledge; 41.9% of respondents demonstrated negative attitudes; 37.2% of respondents exhibited poor interpersonal communication skills when reaching out to the high-risk groups. There was a correlation between knowledge, attitudes, and interpersonal communication with the level of competence of HIV/AIDS peer educators who are responsible for reaching out to the high-risk groups. It is hoped that knowledge about the different dimensions in competency development of HIV/AIDS peer educators can be used as a reference in establishing competency standards for HIV/AIDS peer educators for effective reach out to high-risk groups.

Keyword: HIV/AIDS peer educator competence, attitude, knowledge, interpersonal communication.

Introduction

The incidence of HIV/AIDS is still high and continues to increase. Worldwide, 37.9 million people suffer from HIV. A total of 23.3 million people have undergone ARV therapy, whereas 770,000people reportedly died of AIDS-related diseases [1, 2]. The Ministry of Health RI reported in Disease Control Prevention that in Indonesia, there were 50,282 HIV cases and 7,036 AIDS cases in 2019, 46,659 HIV cases, and 10,190 AIDS cases in 2018, and 48,300 HIV cases and 10,488 AIDS cases in 2017. West Sumatra is ranked 19th in terms of the number of HIV cases in Indonesia [3], with 541 cases of HIV and 258 cases of AIDS in 2019, 624 cases of HIV and 347 cases of AIDS in 2018, and 563 cases of HIV and 267 cases of AIDS in 2017 [4].

Government programs for tackling STIs, HIV, and AIDS have been running in Indonesia for approximately 33 years since the discovery of the first AIDS case in 1987 [5]. Currently, programs for HIV and AIDS prevention are contained in Presidential Decree No. 124/2016 in the establishment of the AIDS Commission and Minister of Health Regulation No. 21/2013 [6]. Types of intervention in STI, HIV, and AIDS prevention programs have been specified to behavioral change and biomedical interventions (KEMENKES, 2014). HIV/AIDS prevention and control programs include firstly, the HIV Prevention through Sexual Transition (PMTS) program; secondly, the program for HIV/AIDS testing and counseling services called Voluntary Counseling and Testing (VCT) and the examination of Sexually Transmitted Infections (STI); and thirdly, program to increase understanding of HIV/AIDS among youths.

The lack of visits for early detection of HIV/VCT makes it difficult to control the incidence of HIV/AIDS, which also signifies the low impact of outreach programs conducted for the prevention of HIV/AIDS in high-risk groups. Estimates of PLWHA in 2016 were 640,443 cases, while the cases reported until December 2019 were 377,564 in total [4], which is equivalent to 58, 95% of the estimated number of cases.

Lack of ability among peer educators to reach high-risk groups has been reported. It can be seen in the low number of VCT visits and the poor achievement among peer educators in terms of achieving the outreach targets. As of December 2019, only 8,485 people in the high-risk groups performed VCT [4]. In addition, based on the PKBI report in 2020 (January – March 2020), the peer educators were only able to reach 47.6% of the targeted high-risk groups, i.e., Akbar, one of the peer educators only managed to reach out to 76% of people in targeted high-risk groups based on his performance record from January to July 2020.

Peer educators should maintain an optimal level of competence when reaching out to high-risk groups. However, there is no competency standard established for the HIV/AIDS peer educators to adhere to and practice when reaching out to high-risk groups. Therefore, the authors of this article were interested to investigate the different dimensions in competency development among HIV/AIDS peer educators in reaching out to high-risk groups.

Methods

At this stage, quantitative research was conducted using a cross sectional research approach. Cross-sectional is a research to research the dynamics of the correlation between risk factors and effects, by approaching, observing or collecting data all at once (point time approach) [7]. The instrument used in this research was a questionnaire related to the dimensions of forming the competence of peer educators in reaching risk groups. These dimensions include knowledge, attitudes, and interpersonal communication. This questionnaire is packaged in its entirety in that its preparation has been in consultation with the supervisory commission, the officer in charge of the HIV/AIDS field, and the HIV/AIDS peer leader. This questionnaire has been tested for

validity and reliability before being used. This instrument was distributed to HIV/AIDS peer educators as respondents by using a measuring scale used was the Likert and Guttman scale [8].

A validity test is a test used to show the extent to which measuring instruments are used in measuring what is being measured. The validity of the questionnaire was carried out to determine the extent of accuracy and accuracy of the measuring instrument in producing its measuring function and to provide confidence that the measuring instrument can be used with good accuracy and to see the correlation between the scores of each question and the total score of all respondents [9]. To see the validity of the questionnaire, the Bivariate Pearson correlation was analyzed. The calculated r-value is compared with the r table, if r count > r table, then the data is said to be valid [10]. The validity test of the questionnaire can be seen in Table 1 below.

Table 1: Test the validity of the questionnaire questions

Variable	Indicator	No Question	r count	r table (0.05)	Validity
Competence	Understanding the use of VCT	B.1.	0,879	0,3120	Valid
		B.2.	0,854	0,3120	Valid
	Understand the role of peer educators in reaching risk groups	B.3.	0,847	0,3120	Valid
		B.5.	0,781	0,3120	Valid
	Understanding the health problems experienced by at-risk groups	B.4.	0,780	0,3120	Valid
		B.6.	0,855	0,3120	Valid
	Motivating risk groups to want to do prevention and control of the incidence of HIV/AIDS	B.9.	0,919	0,3120	Valid
		B.10.	0,871	0,3120	Valid
	Able to provide basic information on HIV/AIDS, invite risk groups to do VCT and use condoms	B.7.	0,886	0,3120	Valid
		B.8.	0,926	0,3120	Valid
	Able to record and report the results of outreach activities every 6 months	B.11.	0,841	0,3120	Valid
		B.12.	0,864	0,3120	Valid
		B.13	0,857	0,3120	Valid
Knowledge	HIV/AIDS concept	C.1.	0,881	0,3120	Valid
		C.2.	0,905	0,3120	Valid
		C.5.	0,850	0,3120	Valid
		C.6	0,888	0,3120	Valid
		C.8.	0,845	0,3120	Valid
		C.9.	0,731	0,3120	Valid
		C.10.	0,827	0,3120	Valid
	Transmission	C.3.	0,970	0,3120	Valid
		C.4.	0,971	0,3120	Valid
		C.7.	0,972	0,3120	Valid
		C,12.	0,785	0,3120	Valid
		C.13.	0,828	0,3120	Valid
	Prevention	C.11.	0,810	0,3120	Valid
		C.14.	0,881	0,3120	Valid
		C.15.	0,848	0,3120	Valid
		C.16	0,835	0,3120	Valid
Attitude	Cognitive	D.1.	0,815	0,3120	Valid

Variable	Indicator	No Question	r count	r table (0.05)	Validity
		D.2.	0,787	0,3120	Valid
		D.3.	0,898	0,3120	Valid
		D.4.	0,741	0,3120	Valid
		D.5.	0,871	0,3120	Valid
		D.6.	0,765	0,3120	Valid
		D.7.	0,838	0,3120	Valid
		D.8.	0,707	0,3120	Valid
		D.9.	0,784	0,3120	Valid
		D.10.	0,722	0,3120	Valid
	Affective	D.11.	0,767	0,3120	Valid
		D12.	0,272	0,3120	Invalid
		D.13.	0,849	0,3120	Valid
		D.14.	0,825	0,3120	Valid
		D.15.	0,849	0,3120	Valid
		D.16.	0,853	0,3120	Valid
		D.17.	0,823	0,3120	Valid
	Conative	D.18.	0,847	0,3120	Valid
		D.19.	0,823	0,3120	Valid
		D.20.	0,837	0,3120	Valid
		D.21.	0,839	0,3120	Valid
		E.1.	0,767	0,3120	Valid
		E.2.	0,859	0,3120	Valid
		E.3.	0,858	0,3120	Valid
		E.4.	0,804	0,3120	Valid
		E.5.	0,721	0,3120	Valid
		E.6.	0,876	0,3120	Valid
		E.7.	0,848	0,3120	Valid
		E.8.	0,857	0,3120	Valid
		E.9.	0,837	0,3120	Valid
Interpersonal Skills		E.10.	0,738	0,3120	Valid
		E.11.	0,731	0,3120	Valid
		E.12.	0,797	0,3120	Valid
		E.13.	0,856	0,3120	Valid
		E.14.	0,797	0,3120	Valid
		E.15.	0,821	0,3120	Valid
		E.16.	0,824	0,3120	Valid
		E.17.	0,803	0,3120	Valid

In Table 1 it can be seen that there is one item in question no D.12 on the attitude variable which has a value of r table < r count, so statistically, this question is declared invalid. Meanwhile, the other question items, as many as 66 question items have r table (0.272) > r arithmetic (0.312) so that it is concluded that statistically, the question is valid (fit to be used as a question in the research instrument).

After the validity test is done, then the reliability test is carried out for each question item. Reliability comes from the word reliability, which means the consistency of measurement. Reliability is an instrument used in research to obtain reliable information as a data collection tool and able to disclose information that should be in the field [10, 11]. The

questionnaire is said to be reliable or reliable if a person's answer to the question is consistent or stable from time to time. High and low reliability, are empirically indicated by a number called the reliability coefficient. High reliability is indicated by the correlation coefficient of 0.70. The instrument reliability test here uses Cronbach's alpha formula [12]. The results of the reliability of the question items on the questionnaire that will be used in this research can be seen in Table 2 below.

Table 2: Reliability test of questionnaire questions

Variable	Indicator	No Question	Cronbach;s Alpha	Reliability
Competence	Understanding the use of VCT	B.1.	0,967	Reliabel
		B.2.	0,968	Reliabel
	Understand the role of peer educators in reaching risk groups	B.3.	0,968	Reliabel
		B.5.	0,969	Reliabel
	Understanding the health problems experienced by at-risk groups	B.4.	0,969	Reliabel
		B.6.	0,968	Reliabel
	Motivating risk groups to want to do prevention and control of HIV/AIDS incidents	B.9.	0,966	Reliabel
		B.10.	0,967	Reliabel
	Able to provide basic information on HIV/AIDS, invite risk groups to do VCT and use condoms	B.7.	0,967	Reliabel
		B.8.	0,966	Reliabel
	Able to record and report the results of outreach activities every 6 months	B.11.	0,968	Reliabel
		B.12.	0,967	Reliabel
		B.13	0,968	Reliabel
Knowledge	HIV/AIDS concept	C.1.	0,971	Reliabel
		C.2.	0,970	Reliabel
		C.5.	0,971	Reliabel
		C.6	0,971	Reliabel
		C.8.	0,971	Reliabel
		C.9.	0,973	Reliabel
		C.10.	0,972	Reliabel
	Transmission	C.3.	0,970	Reliabel
		C.4.	0,971	Reliabel
		C.7.	0,972	Reliabel
		C,12.	0,972	Reliabel
		C.13.	0,972	Reliabel
	Prevention	C.11.	0,972	Reliabel
		C.14.	0,971	Reliabel
		C.15.	0,971	Reliabel
		C.16	0,971	Reliabel
Attitude	Cognitive	D.1.	0,971	Reliabel
		D.2.	0,971	Reliabel
		D.3.	0,969	Reliabel
		D.4.	0,972	Reliabel
		D.5.	0.970	Reliabel
		D.6.	0,971	Reliabel
		D.7.	0,970	Reliabel

Variable	Indicator	No Question	Cronbach;s Alpha	Reliability
	Affective	D.8.	0,972	Reliabel
		D.9.	0,971	Reliabel
		D.10.	0,972	Reliabel
		D.11.	0,971	Reliabel
		D.13.	0,970	Reliabel
		D.14.	0,971	Reliabel
	conative	D.15.	0,970	Reliabel
		D.16.	0,970	Reliabel
		D.17.	0,970	Reliabel
		D.18.	0,970	Reliabel
		D.19.	0,970	Reliabel
		D.20.	0,970	Reliabel
		D.21.	0,970	Reliabel
Interpersonal Skills		E.1.	0,966	Reliabel
		E.2.	0,964	Reliabel
		E.3.	0,964	Reliabel
		E.4.	0,965	Reliabel
		E.5.	0,966	Reliabel
		E.6.	0,964	Reliabel
		E.7.	0,964	Reliabel
		E.8.	0,964	Reliabel
		E.9.	0,964	Reliabel
		E.10.	0,966	Reliabel
		E.11.	0,966	Reliabel
		E.12.	0,965	Reliabel
		E.13.	0,964	Reliabel
		E.14.	0,965	Reliabel
		E.15.	0,965	Reliabel
		E.16.	0,965	Reliabel
		E.17.	0,965	Reliabel

Based on Table 3, it can be seen that all indicators in each variable studied have a Cronbach's Alpha value > 0.70, so statistically this shows that all question items are reliable.

Results

As much as 41.9% of respondents were found incompetent; 37.2% of respondents were found to have limited knowledge about HIV/AIDS; 41.9% of respondents were found to demonstrate negative attitudes; 37.2% of respondents were found to have poor interpersonal communication. For more details, it can be seen in Table 3 below.

Table 3: Frequency distribution of the level of competence of the HIV/AIDS peer educators responsible for reaching out to the high-risk groups

Competence	F	%
Incompetent	18	41, 9
Competent	25	58, 1
Knowledge	**F**	**%**
Not enough	16	37,2
Well	27	62,8
Attitude	**F**	**%**
Negative	18	41,9
Positive	25	58,1
Interpersonal Communication	**F**	**%**
Not good	16	37, 2
Well	27	62, 8

While in Table 4 shows that with knowledge as a variable, from 16 respondents who were found with poor knowledge about the disease, 75% of them were found incompetent, with the remaining 25% found as competent. On the other hand, from 27 respondents found with good knowledge about the disease, 77.8% of them proved competent, with the remaining 22.2% found as incompetent in reaching out to high-risk groups. The results demonstrated a correlation between knowledge and the level of competence among peer educators responsible to reach out to groups with high risk for HIV/AIDS (p-value of 0.001 with OR = 10.5). It was also found that respondents with poor knowledge of the disease have 10.5 times the risk of being incompetent as compared to those with good knowledge.

Among the18 peer educators found to demonstrate bad attitudes, 66.7% of them were proved incompetent, while the remaining 33.3% were found competent(p-value of 0.013 with OR = 6.33). Meanwhile, out of the 25 respondents with good attitudes, 76% of the respondents were found competent, with the remaining 24% found incompetent in reaching out to high-risk groups for HIV/AIDS. The respondents with a bad attitude have a 6.33 times the risk of being incompetent when conducting outreach programs.

Table 4: Relationship between the different dimensions of competency (Knowledge, Attitude and Interpersonal Communication with HIV/AIDS Peer Educator Competencies)

No	Variable	Competence				Total		P-value	OR
		Incompetent		Competence					
		F	%	f	%	F	%		
1	**Knowledge**								10,5 (2,462 – 44,781)
	Not enough	12	75	4	25	16	100	0,001	
	Well	6	22,2	21	77,8	27	100		
2.	**Attitude**							0,013	6,33 (1,65 – 24,25)
	Negative	12	66,7	6	33,3	18	100		
	Positive	6	24	19	76	25	100		
3.	**Interpersonal Communication**							0, 000	19, 067 (3,899 – 93, 227)
	Not good	13	81,2	3	18, 8	16	100		
	Well	5	18, 5	22	81, 5	27	100		

Based on bivariate analysis on interpersonal communication variables (Table 5), it can be seen that from the 16 respondents with poor interpersonal communication, 81.2% of them were found incompetent, with only the remaining 18.8% exhibiting a good level of competence. On the other hand, from 27 respondents with good interpersonal communication, 81.5% of them were proven competent, with the remaining 18.5% found incompetent (p-value of 0.000 with OR = 149,067). Respondents with poor interpersonal communication have 19,067 times the risk of being incompetent in carrying the job of reaching out to the groups with high risk for HIV/AIDS as compared to respondents with good interpersonal communication.

Multivariate modeling identified knowledge and interpersonal communication as variables in competency development of HIV/AIDS peer educators who are responsible to reach out to groups with high risk for the disease, with p = 0.007 and p = 0.002, respectively.

Table 5: The multivariate analysis results

No.	Variable	Sig	Exp(B)	95, 0% CI for Exp(B)	
				Lower	Upper
1.	Knowledge	0, 007	24, 125	2, 405	241, 962
2.	Interpersonal Communication	0, 002	40, 492	3, 952	414, 915

Discussions

The results showed that 41.9% of the respondents were found incompetent. Competence is a condition where a person can perform a task based on the skills, knowledge, and attitudes required for carrying out the work [13]. As many as 37.2% of the respondents demonstrated poor knowledge about HIV/AIDS. The table shows that with knowledge as a variable, out of the 16 respondents with poor knowledge, 75% (12 people) of them were

incompetent, with only the remaining 25% (4 people) found competent to carry out the job. On the other hand, from the 27 respondents with good knowledge, 77.8% (21 people) were found competent while the remaining 22.2% (6 people) were proved incompetent to carry out the outreach programs. There was a correlation between knowledge and level of competence of peer educators tasked to reach out to groups with high risk for HIV/AIDS. The results showed that respondents with poor knowledge have 10.5 times the risk of being incompetent than those with good knowledge (p-value of 0.001 with OR = 10.5).

[14] In its module stated that to become a peer educator, one must have sufficient knowledge of HIV/AIDS, although not an expert. Also, a peer educator must be able to inform the target groups about the available sources of information related to HIV/AIDS, in addition to being sensitive, open/non-judgmental, a good listener, and intermediary, and demonstrating good leadership, and motivational skills. The author of this article assumed that poor knowledge about HIV/AIDS is still prevalent among the peer educators and that is due to the lack of education given to these peer educators. Programs to empower peer educators with knowledge about HIV/AIDS are usually carried out at intervals, which usually involve the newly joined peer educators.

Therefore, the dissemination of new knowledge about the disease has not been carried out evenly, leaving many peer educators unequipped with the latest knowledge about the disease. Knowledge was found to be closely associated with the level of competence. The more knowledge the peer educators have about HIV/AIDS, the higher the level of competence demonstrated by the peer educators in carrying the job related to reaching out to the groups with high risk for the disease. It is hoped that this finding will encourage the authority to conduct more intensive programs to empower peer educators with the latest knowledge about HIV/AIDS. Considering that it is not possible to involve all peer educators in educational activities, the author suggests that knowledge improvement can be carried out during evaluation meetings which are held monthly, or via dissemination of leaflets/modules/other media to keep the peer educators informed about new knowledge regarding HIV/AIDS.

As many as 41.9% of the respondents were found to demonstrate negative attitudes. Out of 18 respondents with poor attitudes, 66.7% (12 people) were found incompetent with only the remaining 33.3% (6 people) demonstrating a good level of competency. On the other hand, out of the 25 respondents with good attitudes, 76% (19 people) proved competent, with the remaining 24% (6 people) proved incompetent in carrying out the job to reach out to the groups with high risk for HIV/AIDS (p-value of 0.013 with OR = 6.33). There was a significant relationship between attitudes and the level of competence of the HIV/AIDS peer educators in reaching out to HIV/AIDS risk groups. Respondents with bad attitudes have 6.33 times the risk of being incompetent in carrying out outreach programs as compared to respondents with good attitudes. The findings from this research are in line with the findings published by [15], which demonstrated the relationship between attitude and competence of an individual. Attitudes are complex combinations of elements

such as personality, beliefs, values, behavior, and motivation. Attitude constitutes three components namely feelings, cognition (thoughts or beliefs), and behavior (actions). Attitude determines how we see situations, and how we behave toward the situations or objects. Based on the findings, the author suggests that bad attitudes among peer educators responsible to reach out to the groups with high risk for HIV/AIDS are still prevalent.

The author also pointed out to lack of exposure to proper learning and training as the reason behind bad attitudes among peer educators. It is suggested that the authority should conduct educational/training programs related to HIV/AIDS which aim to increase the knowledge of peer educators regarding HIV/AIDS. This research also found that attitude was closely associated with the level of competence of peer educators because peer educators are often regarded as role models to the target groups. Therefore, the attitude of peer educators greatly affects their ability to influence the target group, which then determines the outcome of the outreach programs.

As much as 37.2% of respondents were found to have poor interpersonal communication. Based on the bivariate analysis using interpersonal communication as a variable, it was found that out of the 16 respondents identified with poor interpersonal communication, 81.2% (13 people) proved incompetent, leaving only the remaining 18.8% (3 people) competent. Meanwhile, of the 27 respondents with good interpersonal communication, 81.5% (22 people) proved competent, with a small fraction of 18.5% (5 people) found incompetent in carrying out the task to reach out to the high-risk groups (p-value of 0.000 with OR = 149.067). There was a significant relationship between interpersonal communication and the level of competence of the HIV/AIDS peer educators responsible for reaching out to the groups with a high risk of the disease. Respondents with poor interpersonal communication have 19, 067 times the risk of being incompetent in carrying out the job as a peer educator compared to respondents with good interpersonal communication. [16] in an article entitled Communication Experience of Women Sex Peddlers (FSW) as Peer Educators in HIV Prevention Efforts asserted that the competency of a peer educator in communication greatly influences the success of persuasive communication. Also, communication is influenced by factors including knowledge, motivation, as well as skills which become a single unit that must be embraced by peer educators. Based on the findings, the author suggests that poor interpersonal communication among peer educators is still prevalent due to the lack of understanding on behalf of the peer educator regarding theories and methods in communication. The association between interpersonal communication and the level of competence of the HIV/AIDS peer educators in reaching out to the groups with high risk for the disease was found in this research. The findings demonstrate the urgent need for peer educators to learn the technique or method in getting closer to the target group so that they can advocate the use of VCT to the group. It is hoped that in addition to equipping themselves with knowledge about HIV/AIDS, peer educators also work on gaining understanding regarding interpersonal communication so they can better reach out to the groups with high risk for the disease.

The multivariate analysis using SPSS revealed that the dominant variables influencing the level of competence of peer educators are knowledge and interpersonal communication. The findings demonstrated that these variables are the determinant factors influencing the outcome of the outreach programs carried out by peer educators.

Conclusions

As much as 41.9% of respondents were found incompetent, 37.2% of respondents demonstrated poor knowledge about HIV/AIDS, 41.9% of respondents exhibited negative attitudes, and 37.2% of respondents have poor interpersonal communication. There is a correlation found between the variables namely knowledge (0.001), attitude (0.00), interpersonal communication (0.013), and the level of competence of the HIV/AIDS peer educators responsible to carry out outreach programs. The dominant variables affecting the level of competence of the HIV/AIDS peer educators were identified as knowledge and interpersonal communication.

References

1. AVERT. Global HIV and AIDS Statistics. AVERT. https://www.avert.org/global-hiv-and-aids-statistics 2020 [Accessed on3 January2021].

2. Zavialov, A.V., Antipina, O.V. BIOETHICS. Research guide. Federal State Budgetary Educational Institution of Higher Education "Irkutsk State Medical University" of the Ministry of Healthcare of the Russian Federation Department of Clinical, Social Psychology and Humanities. 2020

3. Riset Kesehatan Dasar (Riskesdas) 2017. Badan Penelitian dan Pengembangan Kesehatan Kementerian RI tahun 2018. http://www.depkes.go.id/resources/download/infoterkini/materi_rakorpop_20 18/Hasil%20Riskesdas%202018.pdf. 2018

4. Kementerian Kesehatan [KEMENKES]. Laporan Pekembangan HIV/ AIDS dan Infeksi IMS Twiwulan pada periode IV tahun 2019; 2020. Pencegahan, Pengendalian Penyakit Kemenkes RI,

5. Riono, P., Jazant, S. The current situation of the HIV/AIDS epidemic in Indonesia. AIDS education and prevention, 16(Supplement A), 2004; 78-90.

6. Prihati, P., Arizal, A., Yandra, A. The Mayor's Political Leadership in HIV/AIDS Prevention and Control in Pekanbaru City. JOELS: Journal of Election and Leadership, 2021; 2(1), 1-6.

7. Notoadmodjo, S. Metodologi Penelitian Kesehatan. PT Rineka Cipta; Jakarta. 2012.

8. Massof, R. Likert and Guttman scaling of visual function rating scale questionnaires. Ophthalmic epidemiology, 2004; 11(5), 381-399.

9. Azwar, S.Sikap Manusia Teori dan Pengukurannya. Yogyakarta: Balai Pustaka. 2013

10. Notoadmodjo, S. Ilmu Perilaku dan Seni. Jakarta; Rieneka Cipta. 2013

11. Walizer, M., Wiener, P. L., Sadiman, A. Metode dan Analisis Penelitian: Mencari Hubungan Jilid 2. 1987

12. Bland, J. M., Altman, D. G. Statistics notes: Cronbach's alpha. Bmj, 1997; 314(7080), 572.

13. Wibowo. 2012. Manajemen Kinerja Edisi ketiga. Jakarta: PT.Raja Grafindo Prasada.

14. Bahl, A. Lessons learned from designing, tailoring, and implementing culturally appropriate peer-led HIV/AIDS prevention training programs in India: A presentation and analysis of three cases studies (Dissertation, Teachers College, Columbia University). 2013

15. Mustari, R., Indriyana, I. Gambaran Pengetahuan Remaja Tentang Kesehatan Reproduksi Di Dusun Pallantikang Desa Balumbungang Kecamatan Bontoramba Kabupaten Jeneponto Tahun 2017. 2018

16. Easter, M., Pradekso, T., Rahardjo, T. Pengalaman Komunikasi Wanita Penjaja Seks (WPS) Sebagai Peer Educator Dalam Upaya Pencegahan HIV. Interaksi Online; 2014; 2(1).