International Journal of Science and Healthcare Research
Vol.3; Issue: 4; Oct.-Dec. 2018
Website: www.ijshr.com
Original Research Article *ISSN: 2455-7587*

Factors Related to HIV/AIDS Transmission by People with HIV/AIDS in Dogiyai District Papua Province

Isak Waine[1], A.L. Rantetampang[2], Yermia Msen[3], Anwar Mallongi[4]

[1]Magister Program of Public Health, Faculty of Public Health, Cenderawasih University, Jayapura.
[2,3]Lecturer of Postgraduate Program. Faculty of Public Health, Cenderawasih University, Jayapura
[4]Environmental Health Department, Faculty of Public Health, Hasanuddin University, Makassar

Corresponding Author: Isak Waine

ABSTRACT

Background: HIV/AIDS is increasingly high in transmission to other people due to behavior by people with HIV/AIDS who are at risk through sketch relationships, blood transmission and sharing of needles and syringes. This situation is very risky to control and hamper regional development so that the transmission of diseases needs to be minimized by knowing the actions of HIV/AIDS transmission by people with HIV/AIDS.
Research objectives: Factors related to HIV transmission by PLWHA in Dogiyai District
Research Method: Analytic with cross sectional study design. The study was conducted in July 2018 in patients with HIV who visited the Moanemani Health Center and Bomomani Health Center in the ARV service were 100 patients by consecutive sampling. Data were obtained using questionnaires and analyzed using chi square test and logistic binary regression.
The results of the study: Factors related to actions HIV / AIDS transmission in Dogiyai Regency is marital status (p-value 0.038; RP = 1.498; CI95% (1.077 - 2.063), knowledge (p-value 0,000; RP = 10.376; CI95% (3.488 - 30.861), attitude (p -value 0.025; RP = 1.541; CI95% (1.107 - 2.144) and long time to suffer from HIV / AIDS against HIV / AIDS transmission in Dogiyai District (p-value 0.599; RP = 0.879; CI95% (0.622 - 1.242). Factors that are not related to the act of transmission of HIV / AIDS in Dogiyai Regency are age (p-value 0.107; RP = 1.595; CI95% (0.899 - 2.830), gender (p-value 0.203; RP = 0.764; CI95% (0,528 - 1,105), education level (p-value 0,145; RP = 1,358; CI95% (0,981 - 1,979) and work (p-value 0,388; RP = 0,827; CI95% (0,587 - 1,165). The dominant factor HIV/AIDS transmission is marital status with a risk level of 7.125 times for unmarried respondents to HIV / AIDS transmission.

Keywords: HIV/AIDS Transmission Measures

1. INTRODUCTION

In Indonesia the total number of deaths due to AIDS in 2016 reached 13,360 people (Directorate General of PP & PL of the Indonesian Ministry of Health, 31 December 2016), until December 2016 the number of new AIDS cases reported was 86,780 cases, and it is estimated that the number of PLWHA will increase, with cumulative numbers AIDS cases are 10.46 per 100,000 population (2009 BPS data, Indonesia's population is 230,632,700 people) (Directorate General of PP and PL of the Indonesian Ministry of Health, 2011). Meanwhile, according to Indonesian epidemiologists in their study of trends in the HIV / AIDS epidemic, if there is no significant increase in prevention efforts, then in 2015 the number of AIDS cases will be 1 million with a mortality rate of 350,000 people (KPA, 2010a; Nasronudin, 2007) This is because the phenomenon of the iceberg of HIV cases will continue to occur, namely the number of cases known to be less than the unknown HIV cases (Directorate General of PP & PL of the Indonesian Ministry of Health, 2008).

Cases of HIV / AIDS in Papua Province continue to increase. The latest data released by the Papua Provincial Health Office as of June 30, 2017, a total of 26,000 HIV / AIDS cases. Whereas for Dogiyai

regency is an expansion regency with a total of 381 cases of HIV / AIDS (Dinkes Dogiyai, 2017). The latest data on HIV transmission pathways reported by the Directorate General of PP & PL of the Indonesian Ministry of Health as of December 2016 were heterosexual 58,846, IDU 9,080, perinatal 2,587, and LSL4,034, blood transfusions / blood transfusion 222, and unknown 12,011. Unprotected sex between sex workers and their clients is the second largest mode of transmission in Indonesia, first through various heterosexuals. There are several factors that are known to influence the HIV transmission from ODHA to other people such as: knowledge and attitudes, age, sex, marital status, level of education, occupation, long suffering from HIV / AIDS. But globally, HIV transmission is caused by a lack of knowledge of young people aged 15-24 (WHO, 2004, in Maimaiti, 2010). WHO stipulates that young people are at the core of preventing the development of the HIV / AIDS pandemic (WHO, 2004, in Maimaiti, 2010). WHO estimates that young people aged 15-24 are 50% of the total number of new HIV infections and consequently health education should be provided to reduce transmission and reduce stigma against HIV diagnosis (WHO, 2004, in Maimaiti, 2010).

To be able to establish a suitable preventive action strategy supporting statistical data is needed. However, for the numerical statistics of these factors for PLWHA in Indonesia, there are no data from the literature search results that show the magnitude associated with HIV transmission prevention measures. Based on these matters, the Researcher felt the need to examine and analyze factors related to HIV transmission by PLWHA in Dogiyai District. It is hoped that the results of this study will be taken into consideration to assist the HIV transmission prevention program in the Meepago customary area, especially the Dogiyai district of Papua.

2. MATERIALS AND METHODS

Analytic with cross sectional study design. The study was conducted in January 2018 in PLHIV patients who came to Moanemani Health Center and Bomomani Health Center which were in ARV services as many as 100 patients in consecutive sampling. Data were obtained using a questionnaire and analyzed using the chi square test and logistic binary regression.

3. RESEARCH RESULTS

Bivariate Analysis

a. Age Relationships against Transmission of HIV / AIDS

Table 1. Age Relationship to HIV / AIDS Transmission in Dogiyai District

No	Age	HIV / AIDS Transmission				n	%
		Transmit		Not Transmit			
		N	%	N	%		
1	Young	48	60,8	31	39,2	79	100
2	Old	8	38,1	13	61,9	21	100
Total		56	56	44	44	100	100
p-value = 0,107; RP = 1,595; CI95% (0,899 – 2,830)							

Table 1 shows that out of 79 young people, 48 people (60.8%) transmit HIV / AIDS and as many as 31 people (39.2%) do not transmit HIV / AIDS. While from 21 people aged old, as many as 8 people (38.1%) transmitted HIV / AIDS and as many as 13 people (61.9%) did not transmit HIV / AIDS. The results of the chi square statistical test on the significance value of 95% ($\alpha = 0.05$) were obtained p-value 0.107 or $p > \alpha$ (0.05), thus there was no relationship of age to HIV / AIDS transmission in Dogiyai District. When viewed from the value of RP = 1,595; CI95% (0.899 - 2.830) with a lower value that does not cover 1, so that age is not risked for HIV / AIDS transmission.

b. Sexual Relationship to HIV / AIDS Transmission

Table 2. Sex Relationships against HIV / AIDS Transmission in Dogiyai District

No	Sex	HIV / AIDS Transmission				n	%
		Transmit		Not Transmit			
		N	%	n	%		
1	Male	21	47,7	23	52,3	44	100
2	Female	35	62,5	21	37,5	56	100
Total		56	56	44	44	100	100
p-value = 0,203; RP = 0,764; CI95% (0,528 – 1,105)							

Table 2 shows that out of 44 people, there were 21 men (47.7%) transmitting HIV / AIDS and as many as 23 people (52.3%) did not transmit HIV / AIDS. While from 56 people of female sex, as many as 35 people (32.5%) transmit HIV / AIDS and as many as 21 people (37.5%) do not transmit HIV / AIDS. The results of the chi square statistical test on the significance value of 95% (α = 0.05) obtained p-value 0.203 or p> α (0.05), thus there was no sex relationship to HIV / AIDS transmission in Dogiyai District. When viewed from the value of RP = 0.764; CI95% (0.528 - 1.105) does not cover 1, so that gender is stated not at risk of transmission of HIV / AIDS.

c. Relationship Level of Education against Transmission of HIV / AIDS

Table 3. Relationship between education level towards HIV / AIDS transmission in Dogiyai Regency

No	Education level	HIV / AIDS Transmission				n	%
		Transmit		Not Transmit			
		N	%	n	%		
1	Low	36	63,2	21	36,6	57	100
2	High	20	46,5	23	53,5	43	100
Total		56	56	44	44	100	100
p-value = 0,145; RP = 1,358; CI95% (0,981 – 1,979)							

Table 3 shows that of 57 low-educated people 36 people (63.2%) transmitted HIV / AIDS and as many as 21 people (36.6%) did not transmit HIV / AIDS. While of 43 highly educated people, as many as 20 people (46.5%) transmitted HIV / AIDS and as many as 23 people (53.5%) did not transmit HIV / AIDS. The results of the chi square statistical test on the significance value of 95% (α = 0.05) obtained p-value 0.145 or p> α (0.05), thus there was no correlation between the level of education for HIV / AIDS transmission in Dogiyai District. When viewed from the value of RP = 1,358; CI95% (0.981 - 1.979) with a lower value not including 1, so that the level of education stated is not at risk of transmission of HIV / AIDS.

d. Employment Relationship against HIV / AIDS Transmission

Table 4. Relationship of education level to HIV / AIDS transmission in Dogiyai Regency

No	Occupation	HIV / AIDS Transmission				n	%
		Transmit		Not Transmit			
		N	%	n	%		
1	Work	31	51,7	29	48,3	60	100
2	Not work	25	62,5	15	37,5	40	100
Total		56	56	44	44	100	100
p-value = 0,388; RP = 0,827; CI95% (0,587 – 1,165)							

Table 4 shows that of the 60 respondents who worked as many as 31 people (51.7%) transmitted HIV / AIDS and as many as 29 people (48.3%) did not transmit HIV / AIDS. While from 40 highly educated people, 25 people (62.5%) transmitted HIV / AIDS and as many as 15 people (37.5%) did not transmit HIV / AIDS. The results of the chi square statistical test on the significance value of 95% (α = 0.05) obtained p-value 0.388 or p> α (0.05), thus there was no work relationship to HIV / AIDS transmission in Dogiyai District. When viewed from the value of RP = 0.827; CI95% (0.587 - 1.165) does not cover 1, so it is stated that work is not at risk of transmission of HIV / AIDS.

e. Relationship of marital status to HIV / AIDS transmission

Table 5. Relationship of Marital Status to HIV / AIDS Transmission in Dogiyai District

No	Marital status	HIV / AIDS Transmission				n	%
		Transmit		Not Transmit			
		N	%	n	%		
1	Not married	25	71,4	10	28,6	35	100
2	Married	31	47,7	34	52,3	65	100
Total		56	56	44	44	100	100
p-value = 0,038; RP = 1,498; CI95% (1,077 – 2,063)							

Table 5 shows that of the 35 unmarried respondents, 25 people (71.4%) transmitted HIV / AIDS and as many as 10 people (28.6%) did not transmit HIV / AIDS. While from 65 people with marital status, 31 people (47.7%) transmitted HIV / AIDS and as many as 34 people (52.3%) did not transmit HIV / AIDS. The results of the chi square statistical test on the significance value of 95% (α = 0.05) obtained p-value 0.038 or p <α (0.05), thus there is a relationship between marital status of HIV / AIDS transmission in Dogiyai District. When viewed from the value of RP = 1,498; CI95% (1,077 - 2,063) which is interpreted that ODHA with unmarried status are at risk

of transmitting HIV / AIDS by 1,498 times higher than ODHA with unmarried status.

f. Relationship between Knowledge about HIV / AIDS Transmission

Table 6. Relationship of Knowledge to HIV / AIDS Transmission in Dogiyai District

No	Knowledge	HIV / AIDS Transmission				n	%
		Transmit		Not Transmit			
		N	%	n	%		
1	Less	53	84,1	10	15,9	63	100
2	Good	3	8,1	34	91,9	37	100
Total		56	56	44	44	100	100
p-value = 0,000; RP = 10,376; CI95% (3,488 – 30,861)							

Table 6 shows that out of 63 respondents who lack knowledge as many as 53 people (84.1%) transmit HIV / AIDS and as many as 10 people (15.9%) do not transmit HIV / AIDS. While from 37 people with good knowledge, as many as 3 people (8.1%) transmit HIV / AIDS and as many as 34 people (91.9%) do not transmit HIV / AIDS. The results of the chi square statistical test on the significance value of 95% ($\alpha = 0.05$) obtained p-value 0,000 or $p < \alpha$ (0.05), thus there is a relationship of knowledge about HIV / AIDS transmission in Dogiyai District. When viewed from the RP value = 10.376; CI95% (3,488 - 30,861) which was interpreted that knowledgeable PLWHA were less at risk of transmitting HIV / AIDS by 10.376 times higher than those with good knowledge.

g. Relationship between Attitudes toward Transmission of HIV / AIDS

Table 7. Relationship between Attitudes towards HIV / AIDS Transmission in Dogiyai District

No	Attitude	HIV / AIDS Transmission				n	%
		Transmit		Not Transmit			
		N	%	n	%		
1	Less	26	72,2	10	27,8	36	100
2	Good	30	46,9	34	53,1	64	100
Total		56	56	44	44	100	100
p-value = 0,025; RP = 1,541; CI95% (1,107 – 2,144)							

Table 7 shows that of the 36 respondents who had less attitudes, 26 people (72.2%) transmitted HIV / AIDS and as many as 10 people (27.8%) did not transmit HIV / AIDS. While from 64 people with good attitude, as many as 30 people (46.9%) transmitted HIV / AIDS and as many as 34 people (53.1%) did not transmit HIV / AIDS. The results of the chi square statistical test on the significance value of 95% ($\alpha = 0.05$) obtained p-value 0.025 or $p < \alpha$ (0.05), thus there was a relationship between attitudes towards HIV / AIDS transmission in Dogiyai District. When viewed from the value of RP = 1,541; CI95% (1,107 - 2,144) which is interpreted that ODHA who are less at risk of transmitting HIV / AIDS is 1,541 times higher than ODHA who are good.

4. DISCUSSION

4.1. Relationship between the age of PLWHA and HIV transmission

The results showed that there was no relationship of age to HIV / AIDS transmission in Dogiyai Regency and age was not at risk for HIV / AIDS transmission, where young respondents as much as 60.8% did transmit HIV / AIDS, while those with older age were lower as many as 38.1% did transmit HIV / AIDS. This shows that transmission of HIV / AIDS is mostly done by respondents who are young. Older respondents were caused by stigma and revenge which encouraged respondents to transmit HIV / AIDS to others and prior behavior. People with a more mature age will have sexual behavior that is different from the age of adolescents. According to the Ministry of Health the incidence of transmission of HIV / AIDS is more common in the adult age group. Until the end of 2012, 73.7% of HIV cases occurred at the age of 25-49 years, 15% at the age of 20-24 years and 4.5% occurred at the age of >50 years (Ministry of Health, 2012).

4.2. Sexual relationship between PLWHA and HIV transmission

The results showed that there was no sex relationship to HIV / AIDS transmission in Dogiyai District, namely 47.7% of male respondents transmitted HIV / AIDS while 32.5% of female respondents transmitted HIV / AIDS. This shows that higher levels of HIV transmission are carried out by men

and are equally at risk in the lack of HIV / AIDS transmission. The cause of the high number of men who transmit HIV / AIDS is because of the higher frequency of sex than women and unsafe sexual behavior and not using condoms. Whereas for women who lack transmission of HIV / AIDS due to not using condoms because of their ignorance in the transmission of HIV / AIDS in sexual intercourse due to coercion from their partners. The high proportion of men suffering from HIV / AIDS is assumed because of the large number of men who have risky sexual intercourse and injecting drug use (IDUs) compared to women who get it more often from their sexual partners.

4.3. Relationship between the level of education of PLWHA and HIV transmission

The results showed that there was no relationship between the level of education of HIV / AIDS transmission in Dogiyai District, where respondents with low education were 63.2% transmitting HIV / AIDS while respondents who were highly educated were 46.5% transmitting HIV / AIDS. This shows that among respondents who were of low and high education both had the opportunity to lack HIV / AIDS transmission. The phenomenon of HIV / AIDS infection in respondents with a higher education level and also a good economic level was also mentioned by Dunkle, et al. (2003) in Darmayasa (2013), revealed that it was related to the delay in marriage due to the concentration of the woman in the field of work. But on the other hand, the woman in fulfilling her biological needs as an adult woman, tends to have sexual relations without commitment in exchange for money or only on the basis of liking. This multipartner sexual relationship will have an increased risk of being infected with HIV / AIDS. When this woman decides to settle down and become pregnant, the risk of them getting pregnant with HIV infection will also increase. Similarly, the risk of transmission to their husbands will also increase.

4.4. Relationship between the work of PLWHA and HIV transmission

The results showed that there was no work relationship to HIV / AIDS transmission in Dogiyai District. Respondents who worked as many as 51.7% did transmit HIV / AIDS, while respondents who were highly educated as much as 62.5% transmitted HIV / AIDS. so that the work was declared not at risk of transmission of HIV / AIDS. Most of the respondents who worked were men compared to women. Men who work with less actions are caused by the work they have allowed men to be able to use the services of female commercial sex workers while in women it is because they are more infected by their partners and do not know how to do good prevention that has an impact on transmission to the fetus when pregnant. The number of people with HIV-AIDS among workers, especially men, can be due to the level of active worker activity, and high mobility, so that it interacts with the general public and various environments including interacting with HIV-AIDS sufferers who are not known to be seropositive.

4.5. Relationship between the status of married PLWHA and HIV transmission

The results showed that there was a relationship between marital status of HIV / AIDS transmission in Dogiyai Regency and a risk of 1,498 times higher than PLWHA with unmarried status. Unmarried respondents as many as 71.4% transmit HIV / AIDS while the status of marriage is as many as 47.7%. Respondents in actions that lack status are caused by sexual physiological needs that tend to engage in sexual relations by hiring the services of female commercial sex workers and injecting types of narcotics that are widely circulated in the localization of female sex workers. Besides that the sexual behavior that is used is more varied than the oral and anal play which is higher which causes less transmission. According to Susilowati

(2016) in men who hire the services of female sex workers, where the behavior of female sex workers is still the main trigger for increasing HIV / AIDS found that the majority of female sex workers in lokalisasi and non lokalisasi were inconsistent in using condoms.

Respondents who did not marry were more likely to practice less transmission to their partners. This is due to sexual behavior that is carried out when having sex that does not use condoms. Anal sex behavior. In addition, women who lack knowledge in doing prevention are included with HIV transmission to their fetus.

4.6. Relationship between knowledge of PLWHA and HIV transmission

The results of the study showed that there was a relationship between knowledge about HIV / AIDS transmission in Dogiyai District. Knowledgeable respondents were less at risk of transmitting HIV / AIDS by 10.376 times higher than those with good knowledge. Respondents whose knowledge is less than 84.1% transmit HIV / AIDS while respondents who have good knowledge as much as 8.1% transmit HIV / AIDS. This shows that knowledge is very important for someone to act. The low level of knowledge of respondents because of the low level of education, where as many as 57% of respondents had low education. Susilowati (2016) revealed that the low level of education relates to one's knowledge of measures to prevent HIV / AIDS transmission.

Some knowledge questions among respondents in Dogiyai District showed that there was a lack of respondents' respondents where 59% stated that having intercourse with more than one partner could increase the likelihood of someone contracting HIV and 42% stating that someone could not get HIV from oral sex (smoking genital partner with mouth).

4.7. Relationship between the attitude of PLWHA and HIV transmission

The results showed that there was a relationship between attitudes towards HIV / AIDS transmission in Dogiyai District, PLWHA who were less at risk of transmitting HIV / AIDS were 1.541 times higher than PLWHA who were good. Respondents with less attitudes as much as 72.2% transmitted HIV / AIDS more than those with good behavior 46.9% transmitted HIV / AIDS.

The lack of respondent's attitude in HIV / AIDS transmission in Dogiyai Regency can be attributed to the low availability of condom use which is consistent as it relates to steps. This can occur because of the inconsistency of government policies in HIV / AIDS prevention by providing condom banks that are spread in Puskesmas or some localization of female commercial sex workplaces.

The same thing was also found that the attitude of people with HIV / AIDS was related to the policies of the local government by providing condo and the readiness of the officers in providing health education in changing attitudes and actions (Maengkom, 2013).

4.8. Long-standing relationship with HIV / AIDS with HIV transmission

The results showed that there was no long-standing relationship with HIV / AIDS to HIV / AIDS transmission in Dogiyai District. Respondents who were long suffering from HIV / AIDS <6 months were 52.7% transmitting HIV / AIDS, while respondents with a long time suffering from HIV / AIDS> 6 months were as much as 60% transmitting HIV / AIDS. This shows that patients who are new and old are equally at risk of HIV / AIDS transmission. The dominant factor influences HIV transmission by PLWHA.

The multivariate test results showed that the dominant factor in HIV / AIDS transmission was marital status with a risk level of 7,125 times for unmarried respondents for HIV / AIDS transmission. This is because respondents who are not

married or do not have a partner are at risk of changing partners, so that they transmit HIV / AIDS to others, especially if the respondent migrates which causes the spread of HIV / AIDS to be higher.

5. CONCLUSION

a. There is no relationship of age to HIV / AIDS transmission in Dogiyai District (p-value 0.107; Rp. 1.595; CI95% (0.899 - 2.830).
b. There is no sex relationship to HIV / AIDS transmission in Dogiyai District (p-value 0.203; RP = 0.764; CI95% (0.528 - 1.105).
c. There is no relationship between the level of education for HIV / AIDS transmission in Dogiyai District (p-value 0.145; Rp. 1.358; CI95% (0.981 - 1.979).
d. There is no work relationship to HIV / AIDS transmission in Dogiyai District (p-value 0.388; RP = 0.827; CI95% (0.587 - 1.165).
e. There is a relationship between marital status of HIV / AIDS transmission in Dogiyai District (p-value 0.038; RP = 1.498; CI95% (1,077 - 2,063) which is significant.
f. There is a relationship of knowledge about HIV / AIDS transmission in Dogiyai District (p-value 0,000; RP = 10,376; CI95% (3,488 - 30,861) which is significant.
g. There is a relationship between attitudes towards HIV / AIDS transmission in Dogiyai District (p-value 0.025; RP = 1.541; CI95% (1.107 - 2.144) which is significant

REFERENCES

- Adekeye, O. A., &Adeusi, S. O. (2011). Attribution Patterns, Attitude And Knowledge of HIV/AIDS on Sexual Behavioural Change Among Students of Covenant University, Ota, Nigeria. *Ife PsychologIA*, *19*(1), 257.
- Ackley, B. J., Ladwing, G. B., Swan, B. A., & Tucker, S. J. (2008). *Evidence-BasedNursing Care Guidelines Medical-Surgical Nursing*. Louis Missouri: MosbyElsevier, Inc.
- Black, J. M., & Hawks, J. H.(2009).*Medical Surgical Nursing Clinical Management for Positive Outcome*. Edisi 8 Volume 2. St. Louis, Missouri: Elsevier Saunders.
- Carey, M. P., & Schroder, K. E. E. (2002).Development and psychometric evaluation of the brief HIV knowledge questionnaire. *AIDS Education and Prevention, 14*(2), 172-182.
- Dachlia, D. (2000). *Faktor-Faktor Yang Berhubungan Dengan Perilaku Seksual Berisiko Terinfeksi Pada Pelaut /Pekerja Pelabuhan Di Jakarta, Manado, dan Surabaya (Analisis Data SurveiSirveilans Perilaku 1999)*.Tesis (Tidak dipublikasikan). Jakarta: Program Studi Ilmu Kesehatan Masyarakat Program PascaSarjana Universitas Indonesia.
- DeLaune, S. C., & Ladner, P. K. (2002).*Fundamental of Nursing: Standards &Practice*. Second Edition. New York: Delmar/Thomson Learning, Inc.
- Dochterman, J. M., & Bulechek, G. M. (Eds.).(2004). *Nursing Intervention Classification (NIC)*.Fourth Edition. St. Louis, Missouri: Mosby Elsevier.
- DFID., Education Development Center., Education International., European Commission., ILO., UNESCO., et al. (May, 2003). *HIV/AIDS & Education: A Strategic Approach*. Paris: International Institute for Educational Planning/UNESCO. Diakses 20 November 2017, dari http://portal.unesco.org/aids/iatt-education.
- https://www.papuatoday.com/2017/03/22/data-baru-dinkes-papua-temukan-26-ribu-kasus-hivaids/
- Essien.,Monjok, E., Hua Chen., Abughosh, S., Ekong, E., Peters, R. J., et al. (2010). Corelation of HIV Knowledge and Sexual Risk Behaviors Among Female Military Personnel. *AIDS and Behavior, 14*(6), 1401.
- Haryono,D. (penyunting).(2009).*Kamus Besar Bahasa Indonesia*. Edisi Baru.Jakarta: KepustakaanNasional Phoenix.
- Hasan, A. (2005). *Pengetahuan, Sikapdan PerilakuMerokokPelajar SMP di Kota Surakarta*. Tesis (Tidakdipublikasikan). Jakarta: Bagian Pulmonologi danKedokteran Respirasi Universitas Indonesia.

- Honarvar, B. (2010). The Knowledge, Attitude and Behavior of HIV/AIDS Patients' Family toward Their Patients Before and after Counseling. *Iranian Journal of Medical Sciences, 35*(4), 287-292.
- Ikob, R. (2002). *Faktor-Faktor Yang Berhubungan Dengan Perilaku Pencegahan HIV/AIDS Siswa SMUN 13 Palembang 2002*.Tesis (Tidakdipublikasikan).Jakarta: Universitas Indonesia..
- Irmanigrum, Y., Priyono, J. B., Syahboedin, I., Siahaan, T., Ruslam, P., &Sutrisna, A. (2007).*SituasiPerilakuBerisikodanPrevalensiHIV di Tanah Papua2006: Hasil STHP Tahun 2006 di Tanah Papua*. Jakarta: Badan Pusat Statistik dan Direktur Jenderal PP & PL DepKes RI. Diakses 23 Oktober 2017, darihttp://www.aids-ina.org/files/publikasi/sthppapua2006.pdf.
- Kamilah EM (2013). *Hubungan Karakteristik Pasien, Perilaku Beresiko dan Infeksi Menular Seksual dengan Kejadian HIV/AIDS di Klinik VCT (Voluntary Counselling and Testing) Puskesmas Cikarang Kecamatan Cikarang Utara Kabupaten Bekasi*. http://www.fkm.ui.ac.id diakses 20 Maret 2018.
- Kasjono, H. S., &Yasril.(2009). *Teknik Sampling untuk Peneltian Kesehatan*. Yogyakarta: GrahaIlmu.
- Kee, J. L. (2007). *Pedoman Pemeriksaan Laboratorium*. Edisi 6. Jakarta: EGC.
- Novitamala N (2016). Analisis Penyebab Kasus Penularan Hiv/Aids Ditinjau DariFaktor Predisposisi, Pemungkin dan Pendorong(Studi Kasus di Kelompok "x"). http://www.unlamu.ac.id diakses 20 Maret 2018.
- Nursalam, Kurniawati, N, D, 2007, *Asuhan Keperawatan Pasien Terinfeksi HIV/AIDS, Jakarta, Salemba Medika.*
- Nursalam M dan Kurniawati N.D, 2009. *Asuhan Keperawatan Paada Pasien Terinfeksi*. Edisi 2. Jakarta: Salemba Medika.
- Polit, D. F., & Beck, C. T. (2005).*Nursing Research Principles and Principles andMethods*.7th edition.Lippincott: Williams & Wilkins.
- Sastroasmoro, S. (2010).*Sample Size Estimation in Clinical Studies*. Mata Kuliah Metodologi Penelitian S3 FIK UI. Jakarta: Departemen of Child Health Medical School, University of Indonesia..
- Smeltzer.,& Bare. (2008). *Brunner & Suddarth's Textbook of Medical-Surgical Nursing*.10th editions. Philadelphia: Lippincott.

How to cite this article: Waine I, Rantetampang AL, Msen Y et.al. Factors related to hiv/aids transmission by people with hiv/aids in dogiyai district papua province. International Journal of Science & Healthcare Research. 2018; 3(4): 91-98.

******