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FACTOR ANALYSIS OF RELATIONSHIP OF PREVENTION ACTION OF HIV/AIDS SPREADING FROM ODHA IN NORTH HALMAHERA

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ABSTRACT

In Asia, the epidemic of HIV was still concentrated at *Injecting Drug User* (IDU), man did sex with man, and sex peddler (*heterosexual* or *homosexual*) with the customer or his fixed sex partner. The primary data was also got from observation of Prevention Action of HIV Spreading by ODHA. The instruments used such as notebook that was used to note important finding during the observation and camera that was used to help documenting the observation result. The secondary data was got through medic record, result of document note, report, journal, article, literature or written data related with the Prevention Action of HIV Spreading by ODHA. The testing of data validity in qualitative research could be done by credibility test or internal validity with triangulation technique.

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Acquired Immune Deficiency Syndrome (AIDS) was defined as a syndrome or collection of disease symptoms with characteristic of serious body immune deficiency and was the manifestation of final stadium of HIV stadium HIV (Notoatmodjo, 2007). AIDS was the most common secondary immune deficiency in the world, nowadays it became serious epidemic problem in the world. (Ignatavius & Wogman, 2010). HIV became the main cause of secondary immune system decreasing, by degrees became AIDS stadium. Whereas, the integration of immune system was really needed order to as self

defend toward microorganism and toxic product resulted. (Kresno, 2010).

In Asia, HIV epidemic was still much concentrated at *Injecting Drug User* (IDU), man did sex with man, and sex peddler (*heterosexual* or *homosexual*) with the customer or his fixed sex partner. In most countries with high capital income, sex inter men was importantly played role in spreading HIV while the role of IDU was varied. Since it was found in 1987, cumulatively the number of AIDS cases in Indonesia until 30 September 2009 were 18,442 cases. The highest AIDS spreading happened through using NAPZA injection/penasun (40,7%), and homosexual (3,4%). The most proportion of sufferers were found at the age of 20-29 years old (49,57%), followed with 30-39 years old (29,84%), and age of 40-49 years old (8,71%) (Anonim,2009).

Situation of HIV/AIDS epidemic in the world or in Indonesia were concerned. HIV/AIDS in Indonesia, since it was found at the first time 1987 until this time, its number was increasing. Cumulatively, the number of HIV/AIDS in Indonesia from 1 April 1987 until 30 June 2014 were 142.950 sufferers of HIV and 55.623 sufferers of AIDS, and had tug the life of 9.760 persons (Anonim,2014).

According to Ditjen PPM &PL Kemenkes RI (2014), the reality showed that many programs or activities in strategy of preventing and controlling HIV/AIDS in Indonesia were lack of attention or hadn't been adapted with the characteristics of each group/population. Generally, the preventive strategies of HIV/AIDS were implemented for all area, target groups, and less flexible. Whereas, the flexible efforts or programs of preventing and controlling were done with consideration which was appropriate with the characteristics of group/population would be more effective than the conventional one or wasn't appropriate with the characteristics of group/population (Anonym, 2014).

The characteristics of each group became important to be accommodated in order to implement the program and policy of preventing and controlling HIV/AIDS in Indonesia. Else, factor of geographic condition also needed to be highlighted; Indonesia geographic condition was archipelago country that included any areas with different topography. Geographic factor also had influence in implementing the strategies of preventing and controlling HIV/AIDS in Indonesia, for example the topography of provinces in Papua were mountains range, its accessibility was very difficult and all at one became the area that was far from capital, however many of its citizens were infected with

HIV/AIDS. From two provinces in Papua, that are Papua and West Papua, placed at the first and second rank in the number of HIV/AIDS cases per 100.000 citizens in 33 Provinces in Indonesia with 359.43 cases in Papua, and 228.03 cases in West Papua (Anonym, 2014).

HIV/AIDS cases in North Maluku were increasing. The last data that realized by Health Department of North Maluku Province in 2016, the HIV/AIDS cases in North Maluku were 627 cases consisted of 203 cases of HIV and 424 cases of AIDS. From those numbers, Ternate city became the area that had the highest cases of HIV/AIDS, that were 243 cases, followed with North Halmahera Regency with 229 cases, West Halmahera were 40 cases, and east Halmahera were 33 cases. HIV/AIDS in Archipelago of Tidore City were 31 cases, South Halmahera were 19 cases, Archipelago of Sula were 18 cases, Morotai Island were 10 cases, and Central Halmahera were 4 cases. (Anonym, 2015).

Based on the latest data, increasing number of HIV/AIDS sufferers in North Maluku were 800 persons as reported by Rumah Sakit Umum Daerah (RSUD) Chasan Boesorie Ternate. The increasing of AIDS sufferers in North Maluku were more and more 800 800 persons in 2016, from 300 sufferers in the previous year with the highest sufferers were from the house wives (Anonim, 2016), while the data of HIV/AIDS sufferers in North Halmahera Regency were 367 persons. (Anonim,2016).

The preventive action of HIV spreading especially by ODHA to other people was very important to be dome through the changing of risk behavior, in order to cut the chain of HIV spreading and reduced the social economy impact because of HIV/AIDS, so that was not become the problem of society health (Sujudi,2002; Notoatmodjo 2007). Else, until this time, the medicine or vaccine to care and prevent HIV/AIDS had been found yet. Although, today, the ART was provided, it was only functioned as the resistance of HIV growth and not functioned to care (Dachlia, 2000).

There were some factors that known included to influence the HIV spreading prevention action of from ODHA to other people, such as: knowledge and attitude, age, gender, married status, education level, profession, duration of getting suffered with HIV/AIDS and status of getting ART. However, globally, the HIV spreading was caused by the less knowledge of youth at the age of 15-24 years old (WHO, 2004 in Maimati, 2010). WHO established that youths were the core of prevention of HIV/AIDS pandemic growth. WHO estimated that youths at the age of 15-24 years old were 50% from total of new HIV infection cases and as the consequence, it

must be given the health education in order to decrease and reduce stigma toward HIV diagnose (Anonym, 2010).

In order to be able to determine the strategy of appropriate prevention action, it was needed supporting statistic data. However, for the statistic of those factors at ODHA in Indonesia, from the literature review, it wasn't found the data that showed the size which correlated with prevention action of HIV by ODHA.

METHODS

Data source from this research were from:

1. Primary data, that was got from the result of in depth interview toward informants by using in dept interview guidance that contained or open questions in order to get description and information about the implementation of infection prevention and controlling. Primary data was also got through observation by researchers in Health Department, KPA office, Hohidiai Clinic Tobelo, North Halmahera Regency.
2. Secondary data, that was data got from medic record, data/information in written form, documents, report, journal, article, or literatures which related with implementation of infection preventing and controlling, and the result of previous researches.

Instrument and Data Collecting Method

The main instrument in this research was the researcher himself. The primary data was found through in depth interview toward the informants. Instrument that were used such as recorder to record the interview, notebook to note the important information of interview result, and interview guide that contained of open questions in order to know the description and information about the prevention action of HIV spreading by ODHA.

Primary data was also got from observation of the prevention action of HIV spreading by ODHA. Instruments that were used such as notebook to note important finding during the observation and camera to help in documenting that observation result. Secondary data of this research was got through medic record, result of document note, report, journal, article, literature, or written data that related with the prevention action of HIV spreading by ODHA.

Data Tabulation and Analysis

The result of in dept interview was recorded, copied in the form of transcript. The data that was collected through in dept interview and observation and

studied document would be analyzed qualitatively. According to Miles dan Huberman that quoted by Sugiyono (2014), data analysis in qualitative research was done during the data collecting and after the data collecting. Activities in the analysis of qualitative data were done continuously until complete so that the data was saturated. The analysis steps of qualitative data consisted of:

1. Data reduction. The data from the field was much enough so that it was needed to be noted carefully and detailed, the data must be immediately analyzed through data reduction, such as summarizing, selecting the main things, focusing on important things, finding the theme and pattern. Data that had been reduced would give clearer description.
2. Data serving. Generally, the data of qualitative research was served in the form of brief explanation or narrative text, else it could be served in the form of matrix, chart, or diagram.
3. Drawing Conclusion. In this research, the data was analyzed qualitatively according to the steps above.

RESULTS

The examination of data validity in this research could be done through credibility or internal validity test with triangulation technique. Triangulation was meant as data checking from any sources and any times. Triangulation of this research were done in this research were:

1. Source Triangulation
Source triangulation meant re-compared an information through different sources. Triangulation was done by doing interview with different informants.
2. Technique Triangulation
Technique triangulation was effort to check the data validity or research finding by using more than one data collecting techniques in order to get the same data. In this research, beside using in dept interview, direct observation by the researcher and document studied were done.

DISCUSSION

The recent research result showed that there were 2 types of HIV that caused AIDS, HIV I and HIV 2, types of HIV that most common in all the world, firstly infected human in sub-Sahara Africa at certain time in the middle of twenty century. That virus was spread from chimpanzee while he hunted or sliced the

meats. It might that the virus be still in Africa during the years, one of the cause was transportation in Africa hadn't been run well. Finally, the virus spread out of Africa entered United States between the middle and end of 70s. the extraordinary cases and rare infection and cancer were firstly detected among the homosexual and bisexual between 1979-1981, and AIDS epidemic was stated occurred in 1981, while this report appeared for the first time in the medical journal, the clear proves that new epidemic was appeared. HIV was found in 1983, so the procedure of blood test and treatment could be found. This disease, firstly, reported infected homosexual and bisexual, but the risk groups were wider into the using of forbidden drug that was injected, pedophilia sufferers, and Haiti people. Human could be infected through sex without safety, influenced with infected blood or through partus or sucking. Today, it was estimated that more than 40 million children and adults were infected HIV in all the world (Harrison's. 2008)

Symptoms

In the Regulation of Health Minister of Republik Indonesia 2002 about Manual of Overcoming HIV/AIDS and sexual spreading infection mentioned that the early indication and symptom of HIV (category) clinical B. people who were infected with HIV might look like healthy people during the years but then any symptoms and indications began appearing. .

Major Symptoms :

- 1) The weight was decreasing more than 10% in a month
- 2) Chronically diarrhea that occurred more than one month
- 3) Long term fever, more than one month, decreasing of awareness, and neurologic disturbance
- 4) Dementia/HIV ensefalopati

Minor Symptoms:

- 1) Permanent cough more than 1 month
- 2) Dermatitis generalist
- 3) The appearance of *herpes zoster* multi segmental and recur *herpes zoster*
- 4) Kandidias orofangieal
- 5) Herpes simplex cronies progressive
- 6) Limfadenopati generalist
- 7) Recur fungi infection at the women genital
- 8) Retinitis virus sitomegalo

Infection

According to Indonesia National Commission for UNESCO (*United Nations Educational, Scientific and Cultural Organization*) HIV Virus couldn't be spread atomizing or outworn out of human body to live,

have reproduction, and spread to other people. That virus was spread through blood, sperm, fagina liquid, and mom's milk of HIV sufferers. There were three main methods of HIV virus spreading, such as:

- 1) Unsafe sexual activity. Sexual activity (through vagina, anal, or oral) with the HIV or AIDS sufferer. Biologically, women had higher risk toward the HIV infection through vagina sexual activity than men did. From cultural side, women were also susceptible to be infected because their gender status, they were not able to ask their spouse to do safe sex activity by using condom. Anal sex activity, either men and men or men and women, had same high risk, mainly for them who were infected. This was because the anus cover and anus axle (rectum) was easy to be damaged during the activity of oral sex and also had high risk when the sperm spread from ejaculation entered into the mouth, or when there was any pain or inflamed caused of sexually spreading infection (*sexually Transmitted Infections/STIs*) or caused of tooth brush or oral ulceration inflamed. This injury became the conductor of HIV/AIDS virus into the blood flow.
- 2) Through the blood that infected with HIV— the spreading of HIV virus happened when a person used unsterile hypodermic needle, injection tools, sharp things (razor blade) together, commonly occurred in the group of drus abuse users and there was among them who infected with HIV. The spreading was also happened in some health nursing places which didn't meet the standard or through blood transfusion which hadn't examined with screening toward HIV. The using unsterile tools of tattoo, piercing (pilling, etc), scraping were also spread the HIV virus.
- 3) Through mother toward the child – If a woman infected with HIV, it assured that 20% to 45% she would spread the HIV virus toward her child when pregnant, natal, or sucking period. By the treatment using certain medicine, this spreading could be reduced became 2.7% or lower. Many possibilities happened how a woman infected with HIV and spread it to her baby. A woman could be infected with HIV through the blood transfusion or through the unsterile hypodermic needle or she got HIV because did unsafe sexual activity with person of HIV sufferer, either of one's own accord or of necessity, it might be happened if the father had been infected during the sexual activity before getting married and spread the virus to his wife subconsciously or the husband had done sexual

activity without safety with other woman without communicating it to his wife.

According to Anonymous (2011) the risked behavior that spread HIV and AIDS were:

- 1) Using needle and tools which had been infected with HIV
- 2) Having one of sexual spreading disease/infection
- 3) Commercial Sex Worker (PSK)
- 4) Having sexual activity with many people

Prevention

According to Depkes (KPA Nasional, 2005), principally the prevention could be done by preventing the spreading of HIV virus through the changing of sexual behavior that known with "ABC" principle. This principle had been used and done internationally, as the most effective way in order to prevent the HIV infection through sexual activity with the prevalence level of 70-80%, those principles were:

- 1) Abstinence, that was avoiding sex until you get married or get long term relationship with your spouse.
- 2) Be faithful, that was to be faithful with your spouse in the marriage relationship or long term permanent relationship.
- 3) Condom, that was by using condom correctly and consistently for the commercial sex workers or people who were not able to do abstinence can be faithful.

Except those principles, it also needed to do prevention of HIV/AIDS spreading through any tools that infected with HIV, such as:

- (a) All tools that pierced the skin and blood (hypodermic needle and medical tools, tattoo needle, shaving knife) must be sterilized,
- (b) Don't use hypodermic needle or tools that pierced the skin commutatively with other people,
- (c) Do the screening toward all blood that would be transfused (the risk of spreading was 90%),
- (d) Prevent the spreading from mother with HIV/AIDS toward her fetus.

The HIV/AIDS overcoming needed to be focused in the effort of preventing through communication, information, and education (KIE). Education of reproduction health, program of peer educator (peer educator) were important thing in KIE, except other efforts such as Napza overcoming, counseling, coaching and nursing People with HIV/AIDS (ODHA).

The effort of preventing a disease and virus, included the prevention and tackling of HIV/AIDS all

this time had been much done by government or non-government organizations. The efforts that were done in the form of seminar, workshop, elucidation, training, book publishing, else pamphlet or sticker about the dangerous of HIV/AIDS and its preventing procedures. Many efforts of prevention was purposed to:

1. decrease to exclude the new HIV infection
2. decrease to exclude the death caused by AIDS
3. decrease the discrimination stigma toward ODHA
4. increase the live quality of ADHA, and decrease the social economy impact caused by HIV and AIDS at the individual, family, and society.

Considered to the achievement of those purposes, government through Health Department released *Peraturan Pemerintah Kesehatan* (PERMENKES) No.21 Year 2013 bout the tackling of HIV/AIDS where the details stated at Chapter 1 General Provision Section 1, No.1 that explained that the Tacking was all efforts that included some services, such as:

- a. Promote (comprehension function): that was functions of coaching and counseling that helped the counselee or client in order to have comprehension toward her own self (her potential), and her environments (education, professions, and religious norms). Based on this understanding, client was hoped to be able to develop her own potential optimally, and adjusted her environments dynamically and constructively.
- b. Preventive (preventing function): that was helped the individual to keep or prevent the problems for herself.
- c. Curative: that was helped individual to overcome the problems faced or experienced.
- d. Rehabilitative: this service was aimed to decrease the number of suffer, death, overcome the infection and spreading of disease so that the epidemic was not wider to the other area and reduce the negative impact.

Referred to PERMENKES NO. 21 year 2013 about the prevention of HIV/AIDS above, Health Department (Kemenkes) today was trying to overcome the HIV/AIDS cases in Indonesia.

The efforts to prevent the spreading of HIV/AIDS, the Health Department also implemented some strategies, such as:

- a. Increasing the society empowerment in preventing HIV and AIDS through national, regional, and global collaborations and at the aspects of legal,

organization, finance, facilities of health service, and human resources;

- b. Prioritizing national and international commitment;
- c. Increasing advocacy, socialization, and developing capacity;
- d. Increasing the effort of preventing HIV and AIDS which was spread evenly, reachable, quality, and justice, by giving the priority to the preventive and promote efforts;
- e. Increasing the scope of service at the high risk society, left behind area, outlying area, border and archipelago area, and health problems;
- f. Increasing the finance for preventing HIV and AIDS;
- g. Increasing the development and empowerment of human resources which was spread evenly and quality in preventing HIV and AIDS;
- h. Increasing the stock and scope of medical treatment, supporting checking of HIV and AIDS and guarantee the safety, benefit, and quality of medical stock and material/tool needed in preventing HIV and AIDS; and
- i. Increasing the management of preventing HIV and AIDS that was accountable, transparent, efficiency and effectiveness.

Thereby, the efforts of preventing and spreading HIV/AIDS were efforts that done in order to prevent which started from 35 controlling the rabbit population, risked or susceptible group of infection, then moved to people who did sexual activity with many partners, and prevented the spreading at the general society and baby, and empowered human resources which was spread evenly and quality in preventing HIV and AIDS.

Medical Treatment

Horisson (2008) said that today, had been many medicines to overcome HIV infection:

- 1) Nucleoside
 - a AZT (Zidovudin)
 - b Dd1 (didanosin)
 - c d4T (Stavudin)
 - d 3TC (lamivudine)
 - e Abakavir 23
- 2) Non Nucleoside reverse transcriptase inhibitor
 - a Nevirapin
 - b Delavirdin
 - c Efavirenz
- 3) Protease inhibitor
 - a Saquinavir
 - b Ritonavir
 - c Indinavir

d Nelfinafir

All of those medicines referred to prevent the virus reproduction so that slowed up the disease progressivity. HIV would immediately formed resistance toward those medicines if it was used just one. The most effective medical treatment was combination between 2 or more medicines, combination of medicines could slow up AIDS at the HIV positive sufferers and longed up the spark of live (Anonim, 2003).

CONCLUSION

People with HIV and AIDS (ODHA)

Person with HIV and AIDS or often called ODHA was someone who was infected HIV positive in his body that caused his immune became weak where it couldn't certainly and directly show who had the possibility of experiencing with HIV and AIDS, however, based on the pattern of AIDS spreading, it could be grouped the individual who had big possibility to experience with this disease.

This group was called high risked group, they were:

1. Individual who had many sexual partners, such as immoral women or men and their customers, procures or pimp, groups of homosexual or heterosexual, bisex or transgender.
2. Individual who often or ever got blood transfusion. It was suggested to carefully checked the blood that would be used in the transfusion.
3. Baby that was born by the woman with HIV.
4. Dope addict, especially for the addict who used injection, considered that the needle used there wasn't guaranteed it's sterile.
5. Couples from HIV and AIDS sufferers.

However, it was not hoped that the society took an action without reasons toward those people such as expel, judged, tortures or other actions. The society were hoped to know and be careful if they got relationship with those high risked individual in order not infected and hoped that the society avoided the risked behavior. Someone who was infected with HIV wasn't known physically, only through the blood test we knew whether we were infected or not (Nasution, 2000).

Someone who was infected HIV would experienced with infection for all his live and had risk to spread the virus to other people. Therefore, it needed a strategy to prevent it's spread. Since it was found the medicine of ARV and combination of ART, there was any change toward the decreasing of morbidity and mortality of HIV/AIDS from 60% became 90% and

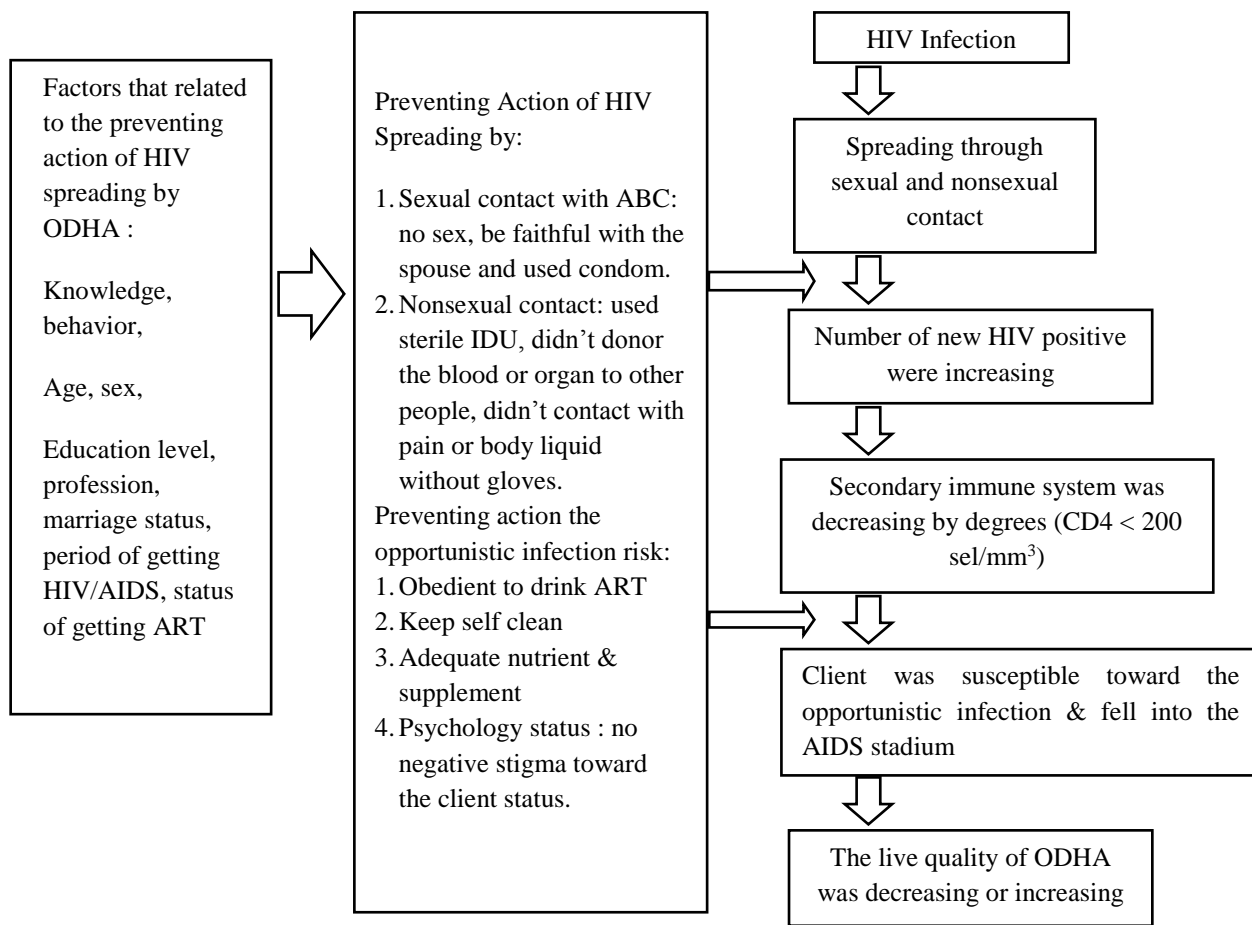


Figure 1. Theoretical framework that describe the relationship between factors that influenced the preventing action of HIV spreading by ODHA

The frame of schema above described the relationship between related factors that influenced someone action, especially ODHA in doing the prevention of HIV spreading by sexual or nonsexual and could do preventive efforts of complication caused by HIV infection and psychosocial impact experienced.

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