

The Effect Education of Hiv-Aids Knowledge Grades Reactive Patients in Voluntary Counseling and Testing Hospital Level.Ii Marthen Indey Jayapura

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ABSTRACT

Nurses have a big responsibility to facilitate patients and the community to obtain information about HIV-AIDS. Education is about disease, curative, and preventive. One of the preventive steps to prevent HIV-AIDS is health education. Health education will have a good effect or output if the process uses good methods and media. Health promotion media are tools used by educators in delivering educational and teaching materials. Education aims to increase knowledge of HIV-reactive patients about maintenance and improvement of health. The research objective: to determine the effect of HIV-AIDS education methods on the level of knowledge of HIV-AIDS reactive patients in VCT at level II Marthen Indey Hospital, Jayapura. This research instrument using a questionnaire. The population was 75 patients with HIV-AIDS reactive in VCT at the level II Marthen Indey Hospital, Jayapura, with a total sample of 43 respondents. The sample selection technique uses Purposive Sampling. The data analysis used was univariate and bivariate analysis using Paired T test. The results showed that the paired t test obtained a significance value of 0.001 ($p < 0.05$), then H_a was accepted, meaning that there was an effect of increasing knowledge before and after (pre and post) education in HIV reactive patients at level II Marthen Indey Hospital.

Keywords: Education, HIV-AIDS, Knowledge Grades

1. PRELIMINARY

The HIV virus is a virus that specifically attack immune system or human immunity and causes AIDS. HIV positive is a person who has been infected with the HIV virus and the body has formed antibodies (anti-virus) against the virus. They are potential sources of transmission for others. AIDS (Acquired Immunodeficiency Syndrome / Syndrome Deficiency Immune Acute / SIDA) is a collection of clinical symptoms as pe nurunan s i stem immune arising from HIV infection - AIDS often manifests with the emergence of various infectious diseases opportunistic, malignancy, impaired metabolism and others (Module PMTCT MOH RI, 2011). According to the *World Health Organization* (WHO) at the end of 2013, there were 35.3 (32.2-38.8) million people infected with HIV (Human Deficiency Virus). As many as 35 million people are infected each year and as many as 1.7 million people have died from AIDS. The trend of HIV and AIDS cases has decreased in most countries in the world, but in Indonesia, it is one in 9 countries that has an increase in cases of HIV infection at the age of 15-49 years of more than 25% so that HIV and AIDS is a global mistake. (UNAIDS 2013).

Based on the foregoing, the Ministry of Health of the Republic of Indonesia has made efforts to prevent and control HIV-AIDS throughout Indonesia with health promotion and education activities to break the chain of HIV transmission. Some of the health education media included in the *Aku Bangga Aku Tahu* program are audiovisual media, animated films, leaflets and posters of HIV / AIDS. (Riza H & Dian, 2018). Fear, stigma and discrimination against people living with HIV - AIDS (PLWHA) are still major obstacles. Kelu a RGA and children living with HIV - AIDS are vulnerable to stigma and discrimination, which can be seen from the reduced access to services, loss of dignity and increasing poverty and deprivation. In Tanah Papua, only 20.2% of young people go to school and 15% of young people do not attend school have an accepting attitude towards people living with HIV. Fear creates resistance to HIV testing, embarrassment to start treatment and in some cases reluctance to receive education about HIV. All of this complicates epidemic control. (Unicef Indonesia, 2012). Although voluntary and confidential Voluntary Counseling and Testing (VCT) testing services have increased throughout Indonesia, knowledge of the existence of these services is still limited, especially in Papua and West Papua in 2010, only 6% of the population over 15 years of age knew about VCT

services. (Unicef, Indonesia 2012). The formulation of research problems that can be raised based on the above background is Is there an Effect of HIV- AIDS Education on the Knowledge Level of VCT Reactive Patients at TK. II Marthen Indey Hospital Jayapura. This research is also expected to be able to educate the wider community about the ins and outs of HIV - AIDS, how it is transmitted, prevention to treatment of patients with HIV - AIDS at Level. II Marthen Indey Hospital, Jayapura.

2. LITERATURE REVIEW

Education or often referred to as education is any effort planned so that other people (individuals, groups or communities) can be influenced to do what is expected by the person carrying out the education. Education is a learning process from those who don't know to know. (Notoadmojo, 2012). Education or education must be planned, monitored, used methods, described and evaluated how the results will be on the knowledge of what methods and methods are known to the public or who need health services. In general, the goal of health education according to WHO 1954 in Notoatmodjo 2011 is to change people's behavior in the health sector. These objectives can be further broken down into: Making health something of value in society. Helping individuals to be able to independently or in groups hold activities to achieve a healthy life. Encouraging the development and proper use of existing health service facilities. The scope of health education / education can be seen from various dimensions, including the dimensions of health education targets, the place of implementation of health education and the level of health education services (Fitriani, 2013).

1) Target health education

- Individual health education with individual targets
- Group health education with target groups
- Public health education with the target community.

2) The place for implementing health education

- Health education in schools
- Health education in health services
- Health education in workplaces targeting workers or employees.

The material or message that will be delivered to the community is adjusted to the health / nursing needs of the individual, family, group and community so that the material presented can be useful language. The learning process of

nutrition and health cannot be separated from the influence of the use of teaching aids or media that can support the teaching and learning activities. Media can be interpreted as all means or efforts to present the message the communicator wants to convey to the target so as to increase knowledge which in turn can change the target's behavior in a positive direction (Arimurti, 2012). Health education media is essentially an educational aid. Known educational media for these tools is a tool channel (channel) to deliver health because these tools are used to facilitate the acceptance of health messages to the public or clients (Fitriani, 2013). The function of the media is to channel health messages (media). Media can be divided into 3 (three) namely:

Print media as a tool to convey health messages varies widely, including:

- *Booklet* is a medium for conveying health messages in the form of a book, both in writing and in pictures.
- *Leaflets* are a form of conveying health information or messages through folded sheets. Information content can be in the form of a sentence or image, or a combination.
- *Flyer* (leaflet) is like a leaflet but not in the form of a fold. *Flip chart* (flipchart) is a medium for delivering messages or health information in the form of flipcharts. Usually in the form of a book where each sheet (page) contains a demonstration image and behind it contains a sentence as a message or information related to the image.
- Rubric or writings in newspapers or magazines about the discussion of a health problem or health related to health.
- The poster is the form of print media contains messages or health information, are posted on the walls, in the public place,
- Photos that reveal health information.

Electronic media

Electronic media as a target to deliver the message the message or health information, different species, among others:

- Television
- The delivery of messages or health information through television media can be in the form of plays, soap operas, discussion forums or questions and answers about health issues, speeches (lectures), TV spots, quizzes or quizzes and so on.
- Radio
- The delivery of health information or messages via radio can also take various forms, including

chat (question and answer), radio plays, lectures, radio spots and so on.

Board (billboard) that is installed in public places can be used and filled with messages or health information. The media board here also includes messages written on zinc sheets affixed to public vehicles (buses and taxis). The media convey messages outside the room, either through printed or electronic media such as billboards, banners, exhibitions, banners and big screen televisions. The advantages of this media are that it is easier to understand, more attractive, as general information and entertainment, face to face, includes all five senses, the presentation can be controlled and its reach is relatively large. The weakness of this media is higher costs, a little complicated, it needs sophisticated tools for its production, careful preparation, equipment is always developing and changing, it requires storage skills and skills to operate (Cit Rawati, 2012). According to Gagne in Cit Rawati (2012), the media are classified into seven groups, namely: objects to be demonstrated, oral communication, printed media, still images, moving images, sound films and machine learning. The seventh group learning media is associated with the ability to fulfill the functions according to the hierarchy of learning developed, namely a catapult stimulus learn, towing interest in learning, for example perilaku learning, giving external conditions, leading to a way of thinking, put over science, assessing the achievements and giving feedback.

HIV - AIDS

Human Immunodeficiency Virus (HIV) is an infection by one of the two types of viruses that progressively destroys white blood cells called *lymphocytes*, causing *Acquired Immunodeficiency Syndrome* (AIDS) and other diseases as a result of immune disorders (Ratna, 2010). HIV belongs to a group of viruses known as retroviruses, which indicates that these viruses provide their genetic material in *Ribonucleic Acid* (RNA) and not in *Deoxyribo Nucleic Acid* (DNA). *Acquired immunodeficiency syndrome* is defined as the most severe form of persistent illness associated with HIV infection. (Brunner & Suddarth, 2002 in Saputra 2011). *Human Immunodeficiency Virus* (HIV) belongs to a class of retroviruses known as lentiviruses or "slow" viruses. Characteristics are the length of the interval between initial infection to the onset of serious symptoms, like other retroviruses, HIV infects Tubu h the incubation period p gathering is (clinic-latent), and the main signs and symptoms of AIDS. HIV causes some damage to the immune

system and destroys it. This happens by using DNA from the *Cluster of Differentiation 4⁺* (CD4⁺) and lymphocytes to self-replicate, in the process, the virus destroys CD4⁺ and lymphocytes (Ninuk & Nursalam, 2008 in Saputra 2011). *Acquired Immunodeficiency Syndrome* (AIDS) is a disease syndrome that was first recognized in 1981. This syndrome describes the final clinical stage of HIV infection. Several weeks to several months after infection, some people will develop acute "self-limited mononucleosis-like" disease that will last 1 or 2 weeks. People who are infected may not show signs or symptoms for months or years before clinical manifestations others appear, the severity of infection "opportunistic" or the emergence of cancer after infection with HIV, generally associated driving direct ng with the degree of damage s i stem immunity resulting (Ministry of Health RI 2011).

Infection occurs after the HIV virus enters cells, in this case white blood cells called *lymphosis*. Geneti material k virus is inserted into the DNA of infected cells. Inside the cell, the virus multiplies and eventually destroys the cell and releases new viral particles. The new virus particles then infect other lymphocytes and destroy them. The virus attaches to lymphocytes which have an outer membrane protein receptor. The cells that have the CD4 receptor are usually called CD4⁺ or helper T lymphocytes. T lymphocytes function to activate and regulate other cells of the immune system (eg macrophages, B lymphocytes and cytotoxic T lymphocytes), all of which help malignant cells and foreign organisms. HIV infection causes the destruction of helper T lymphocytes, resulting in weakness of the body system in protecting itself against infection and cancer (Ratna, 2010). In her book Ratna (2010), a person infected with HIV will lose helper T lymphocytes through three stages over several months or years:

- A healthy person has *Cluster of Differentiation 4⁺* (CD4⁺) of 800-1300 cells / mL of blood. In the first few months after being infected with HIV the number decreased by 40-50% during this period of the month people usually transmit HIV to other people because there are many virus particles in the blood, even though the body tries to fight the virus, the body is unable to relieve infection.
- After six months the number of viral particles in the blood reaches a stable level, which varies from person to person. CD4⁺ cell damage and disease transmission to other people continues. High levels of viral particles and low CD4⁺ levels help determine who is at risk of developing AIDS.

- One to two out n before going on AIDS, the number of lymphocytes CD4⁺ usually dropped dramatically. If the level reaches 200 cells / mL of blood, then the patient is susceptible to infection.
- HIV infection also causes disturbances in the function of B lymphocytes (lymphocytes that produce anti body) and often lead to the production of antibodies excessive. Antibody is primarily intended for the fight against HIV and infections experienced by patients, but anti-body is not much help in the fight against various opportunist infections.
- At the same time, the destruction of CD4⁺ lymphocytes by the virus reduces the immune system's ability to recognize the organisms and targets that should be attacked.

HIV transmission occurs through contact with body fluids that contain infected cells or viral particles. The meaning of body fluids here is blood, semen, vaginal fluids, cerebrospinal fluid and breast milk. At smaller concentrations, the virus is also present in tears, urine and saliva. Possibility of being infected by HIV increases if the skin or mucous membrane is torn or broken, as is common in the relationship sexually abusive, either through the vagina or anus. Research shows the possibility of transmitting HIV to sexual partners who have herpes, syphilis or other infectious diseases is very high, resulting in damage to the skin surface. Transmission also can be occurred in oral sex, although less frequently. The virus in pregnant women can be transmitted to the fetus at the beginning of pregnancy (through the placenta) or during delivery (through the birth canal). Some children get the virus through sexual abuse. HIV is not transmitted through casual contact or close contact that is not sexual in nature at work, school or at home. There have never been reported cases of HIV transmission through coughs or sneezes of sufferers or through mosquito bites. The risk of transmitting HIV through the influence of sex is lower than that of other sexually transmitted diseases. However, the presence of diseases that are transmitted through sexual influence, especially sexual diseases with wounds such as chancroid, are likely to trigger HIV transmission. The main determinant of transmission through sexual influence is the pattern and prevalence of people with "sexual risk behavior" such as having unprotected sexual influence with multiple sex partners. No evidence of epidemiological or laboratory stating that gigitan insects can transmit HIV infection, the risk of transmission through seksoral not easily

observed, but it is assumed to be very low (Ministry of Health, 2011).

Some sufferers develop symptoms that resemble *infectious mononucleosis* within a few weeks of infection. Symptoms include fever, rash, swollen lymph nodes and feeling unwell which lasts 3-14 days. Most of the symptoms will disappear, even though the lymph nodes persist in enlarging. Within a few months of being infected, the sufferer may experience repeated mild symptoms that do not actually indicate AIDS. Sufferers can show symptoms of HIV infection in the years before the onset of the infection or tumor typical of AIDS. Symptoms can include swollen lymph nodes, weight loss, intermittent fever, feeling unwell, tired, recurrent diarrhea, anemia and *thush* (Ratna, 2010). By definition, AIDS begins with a low CD4⁺ lymphocyte count of less than 300 cells / mL blood or opportunistic infections (infections by organisms that in people with good immune systems do not cause disease). Cancer can also occur, such as *Kaposi's sarcoma* and *lymphomanon-hodgkin* (Ratna, 2010). The symptoms of AIDS come from HIV infection itself, as well as opportunistic infections and cancer. But only a few people with AIDS die from the direct effects of HIV infection. Usually death occurs because of the cumulative effect of various opportunistic infections or tumors. Organisms and diseases that under normal conditions only have a small effect on healthy people, in people with AIDS they can immediately cause death, especially if the CD4⁺ lymphocyte count reaches 50 cells / mL of blood (Ratna, 2010). A relatively simple and accurate test is a blood test called the Enzyme-Linked Immunosorbent Assay (ELISA) test. With this examination can detect the presence of antibody against HIV, routine test results are reinforced by stronger tests. There is a period (several weeks or more after HIV infection) in which the anti body is not positive. During this period, a very sensitive examination is carried out to detect the virus, namely the P24 antigen. The P24 antigen has recently been used to filter donated blood for transfusion. If the ELISA test results show HIV infection, then on the same blood sample, another ELISA test is performed to confirm it. If the second test result is also positive, the next step is to strengthen the diagnosis with a more accurate blood test, namely the Western apusa test. This test can also determine the presence of anti-bodies against HIV, but is more specific than ELISA. If the Western test results are positive, it is certain that the person is infected with HIV (Ratna, 2010).

Exposure to HIV does not always lead to transmission, some people who have been exposed to HIV for years may not become infected. On the other hand, a person who is infected may have no symptoms for more than 10 years. Without treatment, HIV infection has a 1-2% risk of developing AIDS in the first few years. This risk increases 10-11 years after HIV infection reaches 50%. Before the latest drugs are found, in the end all cases will become AIDS (Ratna, 2010). Techniques for calculating the amount of HIV virus (plasma RNA) in the blood such as Polymerase Chainreaction (PCR) and Branched Deoxyribo Nucleid Acid (BDNA) tests help to monitor the effect of treatment and aid in assessing the prognosis of sufferers. The levels of this virus will vary from a few hundred to more than a million RNA viruses' / mL plasma. At the beginning of the discovery of the virus, sufferers immediately experienced a decrease in their quality of life after being hospitalized. Almost all sufferers will die after 2 years of suffering from AIDS. With the development of the latest viral drugs and methods of treatment and prevention of infections opportunistik which continues diperbaharu, patients can maintain their physical and mental until many years after exposure to AIDS. So that at this time it can be said that AIDS can be treated even though it cannot be cured (Ratna, 2010). Various vaccines have been tried to prevent and slow the progression of the disease, but none have been successful so far. Hospitals usually do not isolate HIV sufferers unless the patient has an infectious disease such as tuberculosis. HIV-contaminated surfaces can easily be cleaned and washed because the virus is damaged by heat and disinfectants that can be used, such as hydrogen peroxide and alcohol (Ratna, 2010). HIV prevention programs / AIDS according to the Communicable Disease eradication can only be effective if done with the public commitment dan a high political commitment to prevent and or reduce high-risk behavior for HIV transmission (P2M, 2013), prevention efforts include:

- Providing health education in schools and in the community must emphasize that having multiple sex partners and the use of injecting drugs can increase the risk of getting HIV infection. Students should also be equipped with knowledge on how to avoid or reduce habits that pose a risk of getting HIV infection. Programs for school children must be developed in a way that suits their mental development and needs, as well as for those who are not in school. The needs of minority groups, people with different languages and for blind and deaf people must also be considered.
- Increasing the number of treatment facilities for drug addicts will reduce HIV transmission. Likewise, the "Harm reduction" program which encourages needle stick users to use a decontamination method and stop sharing needles has proven effective.
- Providing HIV counseling facilities where the identity of the patient is anonymous or carried out anonymously as well as providing places for blood tests. These facilities are currently available in all states of the United States of America. Counseling, voluntary HIV testing and medical referrals are recommended routinely in family planning and maternity clinics, clinics for homosexuals and in communities where HIV seroprevalence is high. People with high sexual activity are advised to seek appropriate treatment if they have sexually transmitted diseases (STDs).
- Every pregnant woman should be advised to do HIV testing as a routine part of standard pregnancy care. HIV positive women should be evaluated to estimate their need for *zidovudine* (ZDV) therapy to prevent uterine and perinatal transmission of HIV.
- Various regulations and policies have been made, to prevent HIV contamination of blood plasma. All donor blood must be tested for HIV anti-body.

More than half of young people know that AIDS cannot be transmitted through multiple foods and 2/3 answered correctly that anyone who looks healthy can become infected with HIV. In another 2011 study, only 22% of Grade 2 and Senior High School students had comprehensive knowledge of HIV transmission, and 64% still had misconceptions about HIV. Fear, stigma and discrimination against PLWHA (people living with HIV / AIDS) are still the main obstacles. Families and children living with HIV / AIDS are vulnerable to stigma and discrimination, which can be seen from reduced access to services, loss of dignity and increased poverty and deprivation. In Tanah Papua, only 20.2% of people who go to school and 15% of young people who do not attend school have an accepting attitude towards people living with HIV. Fear leads to resistance to HIV testing, shame to start treatment and in some cases reluctance to receive HIV education. All of this complicates epidemic control. Even though the high-risk group knows better about HIV, they still engage in risky behavior. In 2011, 1/3 of female sex workers reported not using condoms with their last client. There are <1/2 of injecting drug users (41%) who consistently use condoms with non-permanent partners. Approximately 39% of male clients of female sex workers did not use condoms in their

last commercial sexual influence. About 40% of men of childbearing age who have sex with more than one partner reported not using a condom during their last sexual influence. Although voluntary and confidential testing (VCT) services have increased throughout Indonesia, there is limited knowledge of their existence, particularly in Papua and West Papua. In 2010, only 6% of the population over 15 years of age knew about VCT services. This proportion, which is the same for women and men, is only 4 percent in rural areas. Groups with higher economic levels have better information about VCT services and HIV control. In December 2011, the Ministry of Health reported 500 active VCT sites in 33 provinces, up from 156 in 27 provinces in 2009. Issues of secrecy and fear of stigma and discrimination still hinder efforts to increase coverage and understanding of HIV / AIDS testing. Thus, the number of pregnant women testing and the proportion of HIV-positive women receiving antiretroviral drugs differed widely from year to year. less than 1% of pregnant women were tested for HIV in 2008. In 2011, only 15.7% of pregnant women living with AIDS received ARVs for reduction. The knowledge and understanding of young people in Tanah Papua about VCT is still low. In 2006, less than 20% of youth aged 15-24 years in Tanah Papua knew about HIV testing sites. The percentage of young people who claim to have taken an HIV test is also low (2-3%). The proportion of youth who have taken an HIV test and know the results is even lower.

3. RESEARCH METHODS

The village in research is a strategy to achieve the objectives that have been established and serves as a guide or guiding researchers throughout the research process (Wiratna, 2014). This type of research used a *quasi-experimental pre test post test* without a control group and was followed by leaflet giving and HIV-AIDS education methods. This design was not included in the *control* group (comparison), but in this design the subject was carried out with the initial measurement (*pretest*) after which it was

subjected to treatment then the final measurement (*posttest*) was carried out. The results were analyzed, whether there were differences or changes (Imron, 2010). The research was conducted in VCT Marthen Indey Hospital in February up to March. Population is the whole of the object or population studied (Notoatmodjo, 2012). The population in this study were all HIV reactive patients who were registered and receiving treatment at VCT at Marthen Indey Hospital, Jayapura City, totaling 75 people. The sample is part of the total population used for research (Suyanto, 2014). The sampling technique used in this study was a *non-probability sample* with a total sample of 43 patients. The sampling method was carried out by consecutive sampling, meaning that every patient who came, treated or took medicine at the VCT at Marthen Indey Hospital would be taken as a sample until it met the predetermined amount.

In the initial stage, an introduction was carried out by explaining the plans and objectives of this study, after which each sample who agreed to participate in this study would fill out a letter of approval that they would voluntarily comply with all applicable provisions during this research. Before the study began, all samples will take a knowledge test which aims to determine the extent of the sample's knowledge of the ins and outs of HIV, after that for 1 month the sample will be given education by dividing into 3 groups. The group first will receive education on an individual basis, to group two will receive eduka the group and group basis to three did not receive education. During four weeks they will give education once a week, and after that all the samples would be tested come back to see the development of knowledge, both k ontrol, individual and per group. The research results will be recorded and analyzed further to answer the goals to be achieved. The instrument used in this study was a questionnaire used to measure the level of knowledge of HIV sufferers and several other teaching aids such as pamphlets and *food models*. After the data is edited, coded and tabulated, the analysis is carried out in several ways.

4. RESEARCH RESULTS AND DISCUSSION

Table 4 .1 Distribution of Respondents by Age at the VCT clinic at Marthen Indey Hospital, Jayapura

Age	f	%
<19 Years	7	16.3
19-20 Years	24	55.8
> 20 Years	12	27.9
Total	43	100

In Table 4.1 demonstrated by the age of 43 respondents, the majority of respondents aged 19-20 years as many as 24 people (55.8 %) and a small percentage of respondents with age <19 years

of 7 people (16. 3%).Table 4.2 Distribution of Respondents based on Education in VCT Kindergarten Hospitals.

Education	f	%
Junior High	9	20.9
High school	23	53.5
SMK	11	25.6
Total	43	100

In Table 4.2 shows the education level of 43 respondents, mostly high school-educated respondents as many as 23 people (53.5%) and a small proportion of respondents who were 9 people

junior high school education (20. 9%).Table 4.3 Distribution of Respondents by Occupation in VCT Kindergarten Hospitals.

Profession	f	%
Private	23	53.5
Gob	1	2,3
Not yet working	17	39.5
Student	2	4,7
Total	43	100

In table 4.3 shows that based on the occupation of 43 respondents, most of the respondents work in private as many as 23 people (53.5%) and a small proportion of respondent's work

as sailors as many as 1 person (2. 3%).Table 4.4Distribution of Respondents Based on ethnicity in VCT Kindergarten Hospitals.

Tribes	f	%
Papua	12	27.9
Non Papuan	31	72.1
Total	43	100

In table 4.4 shows that based on the ethnicity of the 43 respondents, most of the respondents were ethnic groups outside of Papua, namely Java, Bugis, Makassar, Toraja, Batak, Maluku, Timor, Bima, Fermanggaw, Ketengban, Ternate as many as 31

people (72.1%) and a small proportion 12 respondents who are ethnic Papuan (27. 9%).Table 4.5Distribution of Respondents Based on Knowledge before (Pre) education in VCT Kindergarten Hospitals.

Knowledge before the Test	f	%
Well	11	25.6
Enough	24	55.8
Less	8	18.6
Total	43	100

In table 4.5 shows of the 43 respondents, based on knowledge before education, j otal most is the patient with knowledge quite as many as 24 people (55.8 %) and the least with the knowledge that

is lacking as many as eight people (18.6 %). Table 4.6 Distribution of respondents by P: What Knowledge se has (Post) VCT Hospital TK.

Knowledge after the Test	f	%
Well	30	69.8
Enough	13	30.2
Less	0	0
Total	43	100

In table 4. 6 shows that out of 43 respondents, the number based on knowledge after the test was carried out, most were patients with good knowledge as many as 30 respondents (69.8 %) and there were no respondents with less knowledge. In Table 4. 8 shows that the results of *paired t test* values obtained *significancy* 0,001 ($p < 0.05$), then H_0 is rejected and H_a accepted means there are differences in the increase of knowledge before and after (pre and *post*) education on HIV reactive patients Hospital marthen indey and there is no Influence Ed ukasi HIV - AIDS on The Level Knowledge Reactive Patients with HIV at VCT Hospital TK. II Marthen Indey Jayapura.

Discussion

In Table 4.1 demonstrated by the age of 43 respondents, the majority of respondents aged 19-20 years as many as 24 people (55.8 %) and a small percentage of respondents with age <19 years of 7 people (16.3%). According to Notoatmodjo (2012), an increasing person's age can make changes in the physical, psychological and psychological aspects. In the psychological aspect, the level of thinking of a person is more mature and mature. . As you get older, your catching power and mindset will also develop so that the knowledge you get will be better (Dwi, 2017). The higher a person's age, the more one's experience will be. Experience is an event that someone has experienced in interacting with their environment. People tend to try to forget about bad experiences. Conversely, if the experience is pleasant, it is psychologically capable of making a very deep and lasting impression on someone's emotions. This good experience can eventually form a positive attitude in his life. S ne ever experienced someone would increase knowledge about the nature of non-formal (Mubarak, 2011). In Table 4.2 shows the education level of 43 respondents, mostly high school-educated respondents as many as 23 people (53.5%) and smallest junior high school educated respondents were 9 people (20.9%). Education is a process of changing the attitude and behavior of a person or group and also an effort to mature humans through teaching and training efforts (Rahayu, 2010). This is in line with the opinion of Notoatmodjo (2012) that the higher a person's level of knowledge, the easier it will be to receive information about objects or those related to knowledge because the level of education also determines whether a person is easy to absorb and understand the knowledge they acquire, in general the more the higher a person's education, the better his knowledge (Notoatmodjo, 2012). In

table 4. 3 shows that based on the occupation of 43 respondents, most of the respondents work in private as many as 23 people (53.5%) and a small proportion of respondents work as sailors as many as 1 person (2.3%). Work is an activity or activity carried out to earn income to meet their daily needs. Jobs can be magnified o leh of formal and informal employment. Formal jobs such as jobs in government or private agencies or institutions (PNS, BUMD Employees, TNI / POLRI), while non-formal jobs that have no connection with institutions or in other words are self-employed such as farmers, laborers and others. Meanwhile, activities or activities that do not generate income are not referred to as jobs such as housewives (Notoatmodjo, 2012). The work environment can make a person gain experience and knowledge, both directly and indirectly (Mubarak, 2011).

In table 4. 4 shows that based on the ethnicity of 43 respondents, most of the respondents were ethnic groups outside of Papua, namely Java, Bugis, Makassar, Toraja, Batak, Maluku, Timor, Bima, Fermanggaw, Ketengban, Ternate as many as 31 people (72.1%) and a small proportion respondent who are Papuan are 12 people (27, 9). T four live or the environment is very influential in the formation of one's personal attitude or demeanor. The cultural environment in which a person lives and grows has a major influence on knowledge and attitude formation. If an area has an attitude of maintaining environmental cleanliness, it is very possible that the surrounding community has an attitude of always maintaining cleanliness (Dewi, 2010). In table 4. 5 shows of the 43 respondents, based on knowledge before education, j otal most is the patient with knowledge quite as many as 24 people (55.8 %) and the least that patients with knowledge about as many as eight people (18.6 %). According to Wawan (2010), knowledge is the result of "*knowing*" and this occurs after a person senses a certain object. In Caecilia's research (2016), providing information can increase knowledge so that it raises awareness and can be done by providing health promotion. Where knowledge is the result of knowing from humans which consists of a number of factors and theories that allow someone to be able to solve the problems they face. Knowledge is obtained both from direct experience and from the experiences of others. In table 4. 6 shows that out of 43 respondents, the number based on knowledge after the test was carried out, most were mothers with good knowledge as many as 30 respondents (69.8 %) and there were no respondents with less

knowledge. In line with research conducted by Veronika (2015), after counseling was carried out there was an increase where the results showed the level of knowledge of respondents in the good category, namely 31 people (51.7%). Education is an effort of persuasion or learning to society so that people want to take actions (practice) to maintain (overcome problems) and improve their health. Changes or actions to maintain and improve health generated by health education based on knowledge and awareness through the learning process. So that this behavior is expected to last a long time and remain, because it is based on awareness (Notoatmodjo, 2010). Based on the results of research found at Sentani Public Health Center, it shows that there is a change in the knowledge of the mother after being given health promotion where most can answer with a correct answer score of 25-32 questions (> 76-100%). Table 4.7 shows that there is a significant increase and difference in knowledge with the mean value, namely pre-education 13.88 and post-education 16.23. These results prove that in this study, after education about HIV / AIDS was carried out, the higher the respondents' average knowledge of HIV / AIDS would increase. This illustrates that with counseling, there is an increase in knowledge about HIV / AIDS. In Table 4.8, using *the paired t test*, the *significant* value is 0.001 ($p < 0.05$), then H_0 is rejected and H_a is accepted, meaning that there is an effect of increasing knowledge before and after (pre and *post*) education in HIV reactive patients at Marthen Indey Hospital.

This is in line with research conducted by Kusnan Adius, et al. (2020) concerning the Effect of HIV / AIDS Education on Increasing Knowledge and Attitudes of School Students. The research method used was the design of one group pre test and post test, purposive sampling method with a total of 54 respondents, the form of primary data through filling out a questionnaire of knowledge and attitudes. The level of pre-test knowledge with the highest level of knowledge was less (87.0%) and after receiving HIV / AIDS post-test education was at a good level of knowledge (74.0%). The attitude characteristics at the pre-test showed the most lack of attitudes (79.6%) and after receiving HIV / AIDS post-test counseling showed a better attitude (68.5%). The results showed that respondents with the most pre-test knowledge level had a low level of knowledge (87.0%) and after receiving HIV / AIDS post-test education was at a good level of knowledge (74.0%). The attitude characteristics at the pre-test showed the most lack of attitudes (79.6%) and after receiving HIV / AIDS post-test counseling showed

a better attitude (68.5%). The conclusion of the extension program influenced students' knowledge and attitudes about HIV / AIDS by (P value = 0.000). Suggestions are expected that students as a whole will be more proactive in seeking information from various existing media, so that they have high insight and understanding of the prevention of HIV / AIDS transmission. Factors other than information media such as counseling that can affect knowledge include age, occupation, education, environment, which can be proven by the value of the questionnaire which is not tied to any of the factors above, but a combination of these factors. This is in accordance with the research of Ichsan et al. (2013) where there is an effect of health education on reproductive health knowledge in adolescents in SMA PGRI 03 Purwakarta. There is an increase in the knowledge of the pre and posttest carried out. This is also in line with research conducted by Sumirat (2015) which states that there is an effect of conducting health education on attitudes in Senior High School. Negeri Yogyakarta II regarding Drugs, before the health education was given, adolescent girls were given a pretest consisting of 25 questions and 10 statements. This is done to determine the level of knowledge of young women before being given health education. After providing health education, young women were again given a *posttest* with the same questions as the pretest. This is done to determine the level of knowledge and attitudes of young women after counseling and as an indicator of the success of health education.

5. CONCLUSION

Based on the results of the study, it is concluded as follows:

- Based of 43 respondents, the majority of respondents aged 19-20 years as many as 24 people (55.8 %) and a small percentage of respondents with age <19 years of 7 people (16.3%).
- Education of 43 respondents, mostly high school-educated respondents as many as 23 people (53.5%) and a small proportion of respondents who were 9 people junior high school education (20.9%).
- Works most respondents private work as many as 23 people (53.5%) and a small proportion of respondents worked as a gob by 1 person (2.3%).
- The nation's most ethnic groups are non-Papuan 31 (72%) and Papuans as much as 12 (27.9%)
- The influence their education on HIV-AIDS in VCT Hospital Tk. II marthen indey Jayapura diperole h 1,938 0.295 with a standard error.

In order to deepen and increase the number of references in order to broaden knowledge about HIV / AIDS, especially the importance of knowing the influence of Health Education on HIV - AIDS transmission in Tk Hospital. II Marthen Indey Jayapura. In order to add research variables in order to add insight in the context of applying the knowledge gained in conducting further research.

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