

# Analysis Of Family Support And Quality of Health Service FHE The Utilization of VCT Poly and Compliance of HIV/AIDS Patients in Under Going Antiretroviral Therapy (ARV) in RSUD Gambiran Kediri City

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## ABSTRACT

HIV / AIDS is a frightening disease for the people of Indonesia today, so people with HIV / AIDS often get excessive stigma and discrimination. The design of this study was an observational quantitative study with a cross section approach with the focus of the research directed to be to analyze family support and service quality for the utilization of VCT Poly and HIV / AIDS patient compliance in undergoing antiretroviral therapy (ARV) in Gambiran City Hospital in Kediri with a sample of 109 respondents taken by the Accidental Sampling technique. The result were found that the majority of respondents had sufficient family support as many as 56 respondents (51.4%). Most respondents rated that the quality of service in the category of 56 respondents was sufficient (51.4%). Most respondents had medium category utilization of 55 respondents (50.5%). Most respondents were not compliant to undergo antiretroviral therapy (ARV) as many as 65 respondents (59.6%). The results of the study using the Path Analysis Test showed that the p-value <0.05 then H0 was rejected and H1 was accepted so it was concluded that there was a significant influence of family support and service quality through the use of VCT Poly to the compliance of HIV / AIDS patients in undergoing antiretroviral therapy ( ARV) at Gambiran City Hospital in Kediri. The compliance of HIV / AIDS patients in undergoing antiretroviral (ARV) therapy is influenced by family support, quality of service and utilization in the VCT Poly itself. So that patients need to be given good support as well as improving the quality of services available in the VCT Poly.

## I. Introduction

HIV / AIDS is a frightening disease for the people of Indonesia today, so people with HIV / AIDS often get excessive stigma and discrimination. The stigma that is developing in society today about HIV / AIDS is that this disease is a punishment for immoral behavior committed by the sufferer. Whereas stigmatization and discrimination will be the main obstacles for HIV / AIDS prevention. Stigma can prevent a person from taking an HIV test. This also makes sufferers reluctant to inform others about their illnesses and not behave in order to reduce the risk of HIV transmission (Stuart, 2011).

According to WHO (2018), the global HIV epidemic has claimed fewer victims in 2018 than in any other year in the past two decades, and fewer new cases of HIV AIDS compared to previous years. This year, HIV AIDS sufferers in the world reached 36.7 million sufferers. Antiretroviral therapy (ART) development programs have reduced the number of



deaths from HIV AIDS to 1.1 million in 2018 (45% less than in 2008). Nevertheless, countries need to try to fulfill commitments to end the AIDS epidemic which is a public health threat with a target time of 2030.

Patient statistics reported by the Directorate General of PP and PL until December 2018, the number of HIV-AIDS sufferers in Indonesia was 16,110 cases or there were an additional 4,969 new cases during 2008, with a total of 3,362 deaths (MOH RI 2018). As of September 2009, the number of HIV-AIDS sufferers in Indonesia reached 18,442 cases, with 3,708 deaths. In September 2018, the number of HIV-AIDS sufferers in Indonesia increased again to 22,726 cases, with a total of 4249 deaths (MOH RI, 2018). The prevalence of HIV-AIDS cases in Indonesia is 9.85 per 100,000 population. While the cumulative number of HIV cases from January 2010 to December 2018 was 96,740 cases (MOH, 2018).

In East Java alone, the cumulative number of HIV AIDS cases from January 2010 to December 2017 was 12,230 cases (SIHA MOH, 2018). And this is a province with the highest number of PLWHA among the provinces. In a meeting between the East Java Provincial Health Office and the Kediri City Health Office and all health facilities related to the STI clinic and HIV AIDS in the city of Kediri, it was discussed that this high data does not mean the highest case of HIV AIDS in East Java, but because of the active health and counseling staff at East Java in looking for new cases compared to other provinces. The TIPK program (HIV Test for Initiation of Health Workers and Counseling) is also very helpful in finding new cases. In Gambiran City Hospital in Kediri itself, in April 2018 250 cases of PLWHA were found.

Based on a preliminary study conducted by researchers at the Gambiran City Viri Police VCT Hospital on April 29, 2019, 10 respondents were given data that 7 respondents said were strongly supported by families to undergo ARV treatment starting from drug supervision, control and so on, the family protects everything things that can make it possible to corner or exclude the respondent. On the quality of service 8 respondents said the quality of service was still lacking due to the secrecy which was still not completely safe where the room used as an inspection was not completely soundproof so that the communication voices of respondents and health workers inside could be heard from outside. In the use of respondents almost all utilize VCT Poly health facilities as consultations, routine visits, drug referrals and service referrals. Whereas in compliance, almost all respondents adhere to ARV therapy according to doctor's advice.

Poor adherence or adherence is the main reason for the failure of HIV patients to undergo ARV treatment. therefore compliance must be monitored and evaluated regularly and encouraged at every visit. To maintain treatment compliance is not easy, surveys show that one third of HIV patients forget to take medication within the three days of the survey, even though achieving virologic suppression requires a very high level of ART adherence. Research shows that to achieve optimal viral suppression at least 90 - 95% of all doses must not be forgotten. (Ministry of Health, 2017).

In the national guidelines for antiretroviral therapy by the Ministry of Health R.I, it is stated that the expected adherence to taking ARVs is 100% or Highly Active Antiretroviral Therapy (HAART), meaning that all ARV combinations must be taken in precise doses without missed, according to the right time. There are 3 (three) classifications regarding the level of adherence to ARV treatment, namely: adherence level tingkat 95% (good adherence), if less than 3 doses of antiretroviral drugs are not taken within a period of 30 days, 80-95% adherence level (moderate adherence), if 3 - 12 doses of antiretroviral drugs not taken in a period of 30 days, and a level of adherence <80% (low adherence is low or non-adherent, if more than 12 doses of antiretroviral drugs are not taken in a 30-day period (MOH, 2017).

The results of several studies have shown that ARV treatment can improve the quality of life of PLWHA, as stated by the international AIDS care and treatment center or the

International for AIDS Care and Treatment Programs (ICAP). From July 2004 to December 2006, 171, 259 HIV patients and 71,842 people had received ARV treatment. HIV patients reported to have died in treatment amounted to: 4% - 6%, patients lost to follow-up in treatment amounted to: 1-17%. while patients who continued treatment, consisting of: 98% of adult patients and 93% of pediatric patients, on average had a CD4 increase in 12 months after treatment from 116 / mm<sup>3</sup> to 149 / mm<sup>3</sup>. Cutsem reported, of 3,373 HIV patients treated between 2001-2005 and monitored in September 2006, 70% were still alive and receiving ART while 16.9% were reported dead. (Theo Smart, 2007).

High adherence to antiretroviral treatment is also a predictor of HIV infection and low survival and health care costs. This has been proven by researchers from John Hopkins Bloomberg School of Public Health. Research shows that the effect of high adherence to ARV treatment can improve the health status of PLWHA and can save \$ 85 in treatment costs per month per patient (Science Daily, 2010)

Tuft Medical Center in Boston approached counseling to improve adherence to 156 PLWHA who received ARV treatment and the result was that the role of service providers was very influential in increasing the level of medication adherence. The way to do this is: provide complete and comprehensive information, understand the patient's inability to use drugs, offer more effective counseling to ask patients to self-report adherence or belief in treatment and more time to dialogue with patients to help resolve the problem faced in medicine. (TMC, 2010). Patient compliance can be influenced by several factors, namely family support, service quality and utilization of health facilities.

According to Friedman (2014) family support is the attitude, actions and family acceptance of its members. Family members are seen as an inseparable part of the family environment. The family also functions as a support system for its members and family members view that people who are supportive, are always ready to provide assistance with assistance if needed.

Society as consumers would want quality service. Service quality is defined as the expected level of excellence and control over the level of excellence to meet customer desires (Tjiptono, 2008, in Dimas and Oktafani, 2014). Quality of service can be interpreted as an effort to meet the needs and desires of consumers as well as the accuracy of delivery in balancing consumer expectations (Oktafani, 2014).

## **II. Methods**

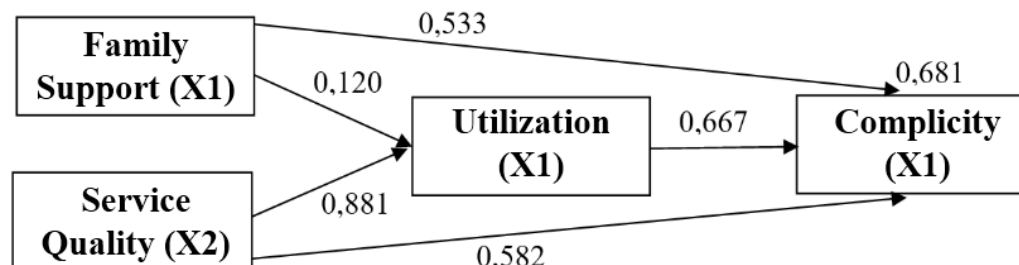
In this study, researchers used a quantitative analytic design with a cross sectional approach which is a study to study the dynamics of the correlation between risk factors and effects, by way of approach, observation or data collection at a time (point time approach), that is, each subject the study was only observed once and measurements were made on the character status or subject variables at the time of examination. This does not mean that all research subjects were observed at the same time (Soekidjo, 2002). This study will analyze family support and quality of service for the utilization of VCT Poly and HIV / AIDS patient compliance in undergoing Antiretroviral therapy (ARV) at Gambiran City Hospital in Kediri.

The number of samples of this study were 109 respondents with a sampling technique using accidental sampling. Data analysis uses Path Analysis test.

### III. Results and Discussion

#### Results

**Figure 1.** Results of analysis of family support and quality of service to the utilization of VCT Poly and HIV / AIDS patients' compliance in undergoing Antiretroviral (ARV) therapy at Gambiran City Hospital in Kediri



#### Discussion

##### 1. Family Support of HIV / AIDS Patients in Underlying Antiretroviral Therapy (ARV) at Gambiran City Hospital in Kediri

The results showed that the majority of respondents had sufficient category family support of 56 respondents (51.4%). In addition, a number of 29 respondents (26.6%) had good family category support. Whereas 24 respondents (22%) have less family support categories.

The family is someone who is very close and has a blood or marital status. The family is the main factor in influencing everything that someone will do. So that family support will be very important given to someone, especially to people who are at the stage of treatment or therapy in order to have motivation to recover. Based on the results of the study it was found that the majority of respondents had adequate family support categories which were more support given by the respondent's parents to be obedient to undergo Antiretroviral Therapy (ARV) in VCT Poly Gambiran City Hospital in Kediri. However, the study found that there were a small number of respondents who did not get family support which was because the respondents felt the family paid less attention if the respondent needed help and sometimes ignored the respondent's needs. In addition, families are also often angry at the respondent if the respondent forgets to take medicine but rarely reminds him to take medicine.

##### 2. Quality of HIV / AIDS Patient VCT Poly Service at Gambiran City Hospital in Kediri

The results showed that the majority of respondents rated service quality enough as many as 56 respondents (51.4%). In addition, 27 respondents (24.8%) rated the service quality as lacking. While a number of 26 respondents (23.9%) rated the service quality as good.

Good service in a health facility is highly desired by all patients ranging from children to the elderly and even near death. Where the quality of service will be highly considered by patients, especially patients with certain diseases. A good quality of service will affect the interest of the patient's use of available health facilities. Based on the results of the study, it was found that the majority of respondents said the quality of service in VCT Polytechnic of Gambiran City Hospital in Kediri was in the sufficient category, but there were some respondents who considered the quality of service in Gambiran Regional Hospital still lacking. The lack of quality is caused by the respondent considers the room used for consultation is not soundproof where it is because the room used is not well organized due to the relocation of a new hospital so the availability of facilities is still under development.

### **3. Utilization of HIV / AIDS Patient VCT Poly at the Gambiran City Hospital in Kediri**

The results showed that the majority of respondents had the use of the medium category of 55 respondents (50.5%). In addition, a number of 29 respondents (26.6%) had a low utilization category. Whereas 25 respondents (22.9%) had high category utilization.

Utilization of a health facility will be influenced by the quality of services available at the health facility. Where if the quality is lacking then the utilization will also be low, and vice versa if the quality is good, the utilization will be high which patients assume will not feel worried entrusting complaints of pain in the health facility. Based on the results of the study it was found that most said that they had utilization in the medium category but there was a small percentage who said that the utilization in Gambir Kota Kediri VCT polyclinic was in the low category which was due to the lack of quality service and also the patients considered the consultation in the hospital insufficient privacy and less comfortable so that respondents choose to use consultations in persons outside the hospital who are indeed engaged in the field of consultation and ARV therapy in collaboration with Gambiran City Hospital in Kediri.

### **4. HIV / AIDS Patient Compliance in Underlying Antiretroviral Therapy (ARV) at Gambiran City Hospital in Kediri**

The results showed that most respondents were not compliant to undergo antiretroviral therapy (ARV) as many as 65 respondents (59.6%). Whereas 44 respondents (40.4%) were compliant to undergo antiretroviral (ARV) therapy.

Patient compliance in conducting therapy is needed so that the therapy can run smoothly so that the disease can be cured or weakened. However, it is not uncommon for patients to become disobedient to consume drugs because they are bored and feel the motivation is gone because they think the patient cannot recover completely. Based on the results of the study I found that most respondents were not compliant to undergo antiretroviral therapy (ARV) that had been instructed by health workers to drink according to dosage and schedule. The disobedience is caused by often forgetting to take the medicine on time and also the patient often forgets to bring the medicine when traveling far away so the medication schedule is often paused.

### **5. The Influence of Family Support Against the Utilization of VCT Poly at Gambiran City Hospital in Kediri**

Based on the results of the Linear Regression analysis the family support variable for utilization shows that a p-value of  $0,000 < 0.05$  then  $H_0$  is rejected, so it is concluded that there is a direct influence of family support on the utilization of VCT Poly at the Gambiran City Hospital in Kediri.

Family support can influence the desires of HIV / AIDS patients in utilizing the Poly VCT Hospital Gambiran Kota Kediri. This is due to the inability of patients to push themselves to carry out examinations and treatment to a health facility. So if the family can support it well, then the patient's desire to use Poly VCT will increase because the respondent will assume that there is still someone who cares about his health so he will try to check his illness. Where this is in accordance with the results of research where there is a direct influence of family support for the utilization of VCT Poly at Gambiran City Hospital in Kediri.

### **6. Effect of Service Quality on the Use of VCT Poly at Gambiran City Hospital in Kediri**

Based on the results of the Linear Regression analysis of service quality variables on utilization shows that the p-value of  $0,000 < 0.05$  then  $H_0$  is rejected, so it is concluded that there is a direct influence on the quality of service on the utilization of VCT Poly at RSUD Gambiran Kota Kediri.

Assessment of the quality of services provided at a health facility will affect the patient's desire to utilize the health facility. If the quality of service is lacking, the patient will choose to use other health facilities where the quality of the service provided is better than in the previous health facility. Utilization itself is based on many things but what influences the quality of service where it is in accordance with the results of the study which there is a direct influence on the quality of service to the utilization of VCT Poly at Gambiran City Hospital in Kediri.

#### **7. The Effect of Family Support on the Compliance of HIV / AIDS Patients in Underlying Antiretroviral Therapy (ARV) at Gambiran City Hospital in Kediri**

Based on the analysis of Linear Regression, family support variables for adherence indicate that the p-value is  $0.004 < 0.05$ , so  $H_0$  is rejected, so it is concluded that there is a direct influence of family support on the compliance of HIV / AIDS patients in undergoing antiretroviral (ARV) treatment at Gambiran Kota Hospital Kediri.

Family support is an important role for families, especially parents, in caring for and educating children. In this case the family provides support for complying with antiretroviral therapy (ARV) at Gambiran City Hospital in Kediri which is to treat and suppress HIV / AIDS where the disease must be treated for a long time because there is no specific drug that can cure it in a specific way. complete the disease. So that antiretroviral therapy (ARV) itself is very important to prevent the spread of this disease to others. This is consistent with the results of research in which there is a direct influence of family support on the compliance of HIV / AIDS patients in undergoing Antiretroviral therapy (ARV) at Gambiran City Hospital in Kediri.

#### **8. The Effect of Service Quality on the Compliance of HIV / AIDS Patients in Underlying Antiretroviral Therapy (ARV) at Gambiran City Hospital in Kediri**

Based on the results of the Linear Regression analysis of service quality variables on adherence shows that the p-value of  $0.007 < 0.05$  then  $H_0$  is rejected so it is concluded that there is a direct effect on the quality of service on HIV / AIDS patient compliance in undergoing antiretroviral therapy (ARV) in Gambiran Kota Hospital Kediri.

Assessment of the quality of services provided at a health facility will affect the patient's desire to undergo antiretroviral therapy (ARV) at the health facility. If the quality of service is lacking, the patient will choose to use another health facility where the quality of the service provided is better than the previous health facility. Which is in accordance with the results of the study the direct influence of service quality on the compliance of HIV / AIDS patients in undergoing Antiretroviral (ARV) therapy at Gambiran City Hospital in Kediri. This is related to good quality will increase the compliance of HIV / AIDS patients undergoing antiretroviral therapy (ARV) where patients who think if the quality of the health facility is good, he will entrust all the therapies that must be carried out will be handled by professionals in their fields. Vice versa if the patient considers the quality of service is less then the patient will choose to use other health facilities that are more capable and can be trusted.

#### **9. The Effect of Utilization on the Compliance of HIV / AIDS Patients in Underlying Antiretroviral Therapy (ARV) at Gambiran City Hospital in Kediri**

Based on the results of the Linear Regression analysis, the utilization variable for adherence shows that the p-value is  $0.020 < 0.05$ , so  $H_0$  is rejected, so it is concluded that there is a direct influence on the utilization of HIV / AIDS patients' compliance in undergoing antiretroviral therapy (ARV) in Gambiran City Hospital, Kediri.

Utilization of a health facility will increase patient compliance in undergoing antiretroviral (ARV) therapy. Based on the results of the study it was found that there was a direct influence on the use of HIV / AIDS patients' compliance in undergoing Antiretroviral (ARV) therapy at Gambiran City Hospital in Kediri. That is because the more often he uses

Poly VCT, the more patients will get input and discussion related to the management of the disease and health workers will direct at the same time provide motivation to patients to routinely undergo antiretroviral therapy (ARV).

#### **10. The Influence of Family Support Through the Use of VCT Poly on Compliance with HIV / AIDS Patients in Underlying Antiretroviral Therapy (ARV) at Gambiran City Hospital in Kediri**

The direct effect of family support on adherence is known to be 0.533. While the indirect effect of family support through the use of compliance is  $0.120 \times 0.667 = 0.080$ . Then the effect of total family support through the use of adherence is  $0.533 + 0.080 = 0.613$ . Obtained a total influence value of 0.613 so it can be concluded that there is an influence of family support through the use of VCT Poly to the adherence of HIV / AIDS patients in undergoing antiretroviral therapy (ARV) at Gambiran City Hospital in Kediri.

Family support can influence the desires of HIV / AIDS patients in utilizing the Poly VCT Hospital Gambiran Kota Kediri. This is due to the inability of patients to push themselves to carry out examinations and treatment to a health facility. So if the family can support it well, then the patient's desire to use Poly VCT will increase because the respondent will assume that there is still someone who cares about his health so he will try to check his illness. In addition, family support is an important role for families, especially parents, in caring for and educating children. In this case, providing support for complying with antiretroviral (ARV) therapy at Gambiran City Hospital in Kediri which is to treat and suppress HIV / AIDS where the disease must be treated for a long time because there is no specific drug that can cure completely the disease. So that antiretroviral therapy (ARV) itself is very important to prevent the spread of this disease to others. This is consistent with the results of research in which the influence of family support through the use of Poly VCT on HIV / AIDS patients' compliance in undergoing antiretroviral therapy (ARV) at Gambiran City Hospital in Kediri.

#### **11. The Influence of Service Quality through the Use of VCT Poly on Compliance with HIV / AIDS Patients in Underlying Antiretroviral Therapy (ARV) at Gambiran City Hospital in Kediri**

It is known that the direct effect given by the quality of service on compliance is 0.582. While the indirect effect of service quality through utilization of compliance is  $0.881 \times 0.667 = 0.588$ . Then the effect of total service quality through utilization of compliance is  $0.582 + 0.588 = 1.170$ . Obtained a total influence value of 1.170 so it can be concluded that there is an effect on the quality of service through the use of VCT Poly to the compliance of HIV / AIDS patients in undergoing antiretroviral (ARV) therapy at Gambiran City Hospital in Kediri.

Assessment of the quality of services provided at a health facility will affect the patient's desire to utilize the health facility. If the quality of service is lacking, the patient will choose to use other health facilities where the quality of the service provided is better than in the previous health facility. Utilization itself is based on many things but what matters is the quality of service. In addition, the assessment of service quality will affect the desire of patients to undergo antiretroviral therapy (ARV) at the health facility. If the quality of service is lacking, the patient will choose to use another health facility where the quality of the service provided is better than the previous health facility. Which is in accordance with the results of research on the influence of service quality through the use of VCT Poly to the compliance of HIV / AIDS patients in undergoing antiretroviral therapy (ARV) at Gambiran City Hospital in Kediri.

#### IV. Conclusion

Most respondents had sufficient family support in the category of 56 respondents (51.4%). Most respondents rated that the quality of service in the category of 56 respondents was sufficient (51.4%). Most respondents had medium category utilization of 55 respondents (50.5%). Most respondents were not compliant to undergo antiretroviral therapy (ARV) as many as 65 respondents (59.6%). There is an influence of family support for the utilization of VCT Poly at Gambiran City Hospital in Kediri. There is an influence of service quality on the utilization of VCT Poly at Gambiran City Hospital in Kediri. There is an influence of family support for the compliance of HIV / AIDS patients in undergoing antiretroviral (ARV) therapy at Gambiran City Hospital in Kediri. There is an effect of service quality on HIV / AIDS patients' compliance in undergoing Antiretroviral (ARV) therapy at Gambiran City Hospital in Kediri. There is an effect of utilization on the compliance of HIV / AIDS patients in undergoing Antiretroviral (ARV) therapy at Gambiran City Hospital in Kediri. There is a significant influence of family support and service quality through the use of Poly VCT on the compliance of HIV / AIDS patients in undergoing antiretroviral therapy (ARV) at Gambiran City Hospital in Kediri.

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