

LOST TO FOLLOW UP BEHAVIOUR WITH COMPLIANCE BEHAVIOR IN HIV/AIDS PATIENTS IN THE SPECIAL REGION OF YOGYAKARTA

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ABSTRACT

The implementation of ARV therapy is one of the keys to the success of HIV/AIDS treatment programs aimed at preventing the spread of HIV infection and improving the quality of life of People Living With HIV/AIDS (PLWHA). Knowing the relationship between lost to follow up and adherence to ARV therapy in HIV/AIDS patients in the Special Region of Yogyakarta. This type of quantitative research with a cross-sectional research design. This research was carried out at the Victory Plus Yogyakarta Foundation from April to August 2024. The respondents in this study were PLWHA aged 17-50 years infected with HIV in 2023 with the assistance of the Victory Plus Yogyakarta Foundation totaling 124 people. The research instruments used were the Health Belief Model lost to follow up and MMAS-8 (Morisky Medication Adherence Scale). Analysis uses the gamma correlation test. The majority of respondents had less lost to follow up behavior, 66 respondents (52.8%). 100 respondents (80.0%) had ARV therapy adherence among respondents who were non-compliant with ARV therapy. The statistical test results showed that the p value was <0.000, which was smaller than 0.05, so there was a relationship between lost to follow up behavior and adherence to ARV therapy in HIV/AIDS patients in D.I Yogyakarta. Based on this research, lost to follow up plays an important role in adherence to ARV consumption.

Keywords: lost to follow up, behavior, ARV therapy, HIV/AIDS

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INTRODUCTION

Non-compliance with ARV treatment will make PLWHA resistant therapy and a high risk of transmitting the virus to others. Non-compliance can be caused by personal/private factors or factors system level. Personal factors include several things such as forgetting, reluctance suffering from side effects, lack of knowledge, large number of pills, lack of social support and reluctance to make lifestyle changes required by the treatment regimen (Bashir et al., 2019).

According to the World Health Organization (WHO), there are 39,000,000 people infected with HIV and 630,000 of them died, while 1,500,000 some of them have reached the stage of AIDS. Southeast Asia topped the rankings second as the region with the highest infection rate in the world (WHO,2022). In Indonesia based on data (Ministry

of Health of the Republic of Indonesia) until September 2023 in total. There are 338,760 people living with HIV, while the cumulative number of cases AIDS reported up to June 2022 was 140,024. Meanwhile, the province of Yogyakarta Special Region is ranked 12th nationally. From 2000-2019 there were 5,134 HIV cases in Yogyakarta Special Region Province and the highest prevalence was in Yogyakarta City with 1,472 HIV cases and 6 of these cases had reached the AIDS stage (Dinkes DIY, 2020). Based on the results of a preliminary study conducted at the Victory Plus Yogyakarta Foundation from 10 November 2023 to 1 December 2023, data on the number of PLWHA in the Special Region of Yogyakarta Province from 2000-2021 showed that there were 3,893 cases. Meanwhile, the number of newly detected PLWHA (Patient Living With

HIV/AIDS) from January 2023 to June 2023 was 374 cases.

Missing follow-up on ARV therapy can increase ARV resistance, increase the risk of transmitting HIV to others, and increase the risk of death (Artati, 2022). High adherence to ARV therapy is necessary to achieve a reduction in viral load, reduce morbidity, mortality and improve quality of life. Compliance is also necessary to prevent drug resistance, reduce transmission and ultimately lead to longer and healthier lives (Suryana dkk.,2020).

The implementation of ARV therapy is one of the keys to the success of an HIV/AIDS treatment program. This functions to inhibit the spread of HIV infection in the body and improve the quality of life, patient survival, and reduce the risk of transmitting HIV to other people (Risti Anggraeni et al., 2020a). Several things that influence accuracy and compliance in carrying out ARV therapy include accuracy in time, quantity, dose, visit schedule, and the individual's way of consuming the drug (Faiqatul Hikmah et al., 2020). Based on research in Jepara, it was concluded that PLWHA decided to drop out of ARV therapy due to lack of knowledge, side effects and loss of support from the closest environment who knew the status of their disease (Kurniawan et al., 2022). Clinical research shows that sufferers who follow the rules of ARV treatment and have regular health checks, the drugs generally work well (Srinatania et al., 2020). Failure of therapy can result in patients being resistant to the ARVs given, some of the virus levels in the blood increase significantly resulting in decreased CD4+ counts (Devianti & Waluyo, 2022).

One of the efforts to prevent lost to follow up is attempted through various methods such as the establishment of Voluntary Counseling and Testing (VCT). This is also regulated in the Decree of the Minister of Health of the Republic of Indonesia concerning Guidelines for voluntary HIV/AIDS counseling and testing services (Voluntary Counseling and Testing). Which is a place and a medium HIV counseling and testing is voluntary and confidential so that it is hoped that HIV/AIDS sufferers will voluntarily come to obtain information. Efforts to collaborate with social foundations that

form Peer Support Groups (Naimah & Soyanita, 2020). From the above background, researchers are interested in examining the relationship between lost to follow up with ARV therapy adherence in HIV/AIDS patients in the Special Region of Yogyakarta.

METHOD

The type of research used is quantitative research. The research design used was cross sectional, namely a type of research that emphasizes measuring only once at a time so there is no follow-up (Nursalam, 2020). Cross sectional is an observational research design carried out to determine the relationship between the independent variable and the dependent variable. The measurement is carried out at one time or is carried out once (Indra, 2019).

This research was carried out at the Victory Plus Foundation Yogyakarta from April to August 2024. The participants used in this research were People Living With HIV/AIDS (PLWHA) aged 17-50 years who were only diagnosed as suffering from HIV in 2023 under the accompaniment of the Victory Plus Yogyakarta Foundation, namely 124 people. Determination of the sample size was carried out using a formula with a precision level set at 5%. The sample size determination was carried out using the Yamane formula.

The inclusion criteria for participants in this study are as follows: willing to be respondents, male and female, PLWHA aged 17 – 50 years, under the accompaniment of the Victory Plus Yogyakarta Foundation, have been undergoing ARV treatment for 1 year, Lost to follow up ARV treatment for more than 3 months. This research uses the Health Belief Model lost to follow up instrument developed by Lilik Manowati (2019) and the Instrument for measuring adherence to ARV therapy is MMAS-8 (Morisky Medication Adherence Scale).

The data collection techniques that researchers have carried out include conducting a preliminary study at the Victory Plus Yogyakarta Foundation on May 20 2024. This research has received Ethical Clearance approval from KEPK STIKES Guna Bangsa Yogyakarta on May 13 2024 with number: 028/KEPK/VI/ 2024. Research

was conducted at the Victory Plus Foundation from July 1 2024.

The researcher conducted research in accordance with the Standard Operating Procedure (SOP) from the Victory Plus Foundation, then a perception equation was carried out with 2 research assistants from the Victory Plus Foundation, the researcher explained the respondent criteria, informed consent and research procedures. Collecting research data by distributing questionnaires assisted by research assistants. After the respondent filled out the questionnaire, the researcher and research assistant checked the completeness of the completed questionnaire again. The questionnaire had been filled in completely, the researcher processed the data using SPSS computer software.

In this study, univariate analysis explains the characteristics of respondents. These include gender, age, occupation and education. Analysis bivariate analysis is carried out after univariate analysis, which aims to test hypothesis of two variables that are thought to be related. Bivariate analysis. This is done to see whether there is an influence between the independent variables with the dependent variable being statistically significant or just occurring coincidentally. The variable in this research is lost to follow up behavior and adherence to ARV therapy. The purpose of hypothesis testing is to see the relationship between the two variables. Analysis uses a correlation test gamma. Based on the results of the analysis, it was found that there was a relationship between two variables if the p value <0.05 (Dahlan, 2022).

RESULTS

1. Data on respondent characteristics

Based on data processing, the distribution of characteristics can be identified respondents as follows: Most of the respondents are in development stage of early adulthood, namely 20 to 40 years, namely 75 respondents (60%), and respondents with developmental stage Middle adult age, namely between 41 to 60 years, was 50 respondents (40%). The majority of respondents work in the private sector with

the number of 25 respondents (20.0%). Most of the respondents had at least a high school education, totaling 43 respondents (34.4%). The majority of respondents were not married with 66 respondents (52.8%). Most of the respondents in this study had been diagnosed with HIV/AIDS for 1 to 5 years totaling 89 respondents (71.2%), and a small portion had been diagnosed with HIV/AIDS for 6 to 14 years totaling 36 respondents (28.8%).

2. Lost to follow up

Table 1. Description of lost to follow up behavior in HIV/AIDS patients in the Special Region of Yogyakarta

Lost to follow up behavior	Frequency (f)	Percentage (%)
Fair	66	52.8
Quete	57	45.6
Good	2	1.6
Total	125	100.0

Source: Primary Data, 2024

The grouping of lost to follow up behavior is divided into three categories, namely poor, sufficient and good. Based on the research results in table 4.3, the majority of respondents had less lost to follow up behavior, 66 respondents (52.8%).

3. ARV compliance

Table 2. Description of adherence to ARV therapy in HIV/AIDS patients in the Special Region of Yogyakarta

ARV therapy compliance	Frequency (f)	Percentage (%)
Disobedient	100	80.0
Obedient	25	20.0
Total	125	100.0

Source: Primary Data, 2024

Grouping of adherence to ARV therapy is divided into two categories namely obedience and disobedience. Based on the research results in Table 2, it is known that the majority of respondents' adherence to ARV therapy was non-compliant with ARV therapy as many as 100 respondents (80.0%).

4. Relationship between lost to follow up behavior and adherence to ARV therapy

Table 3 Relationship between lost to follow up behavior and adherence to ARV therapy in HIV/AIDS patients in the Special Region of Yogyakarta

Lost to follow up behavior	ARV Adherence Status				Total	Percentage	P-value
	Adhered	%	Did not Adhere	%			
Fail	34	50.8%	3	2.3%	37	53.1%	0.000
Comply	27	40.0%	40	32.7%	67	46.9%	
Total	61	80.8%	43	35.0%	104	70.0%	

Source: Primary Data, 2024

Based on table 3, it shows that respondents with behavior the majority of those who lost to follow-up did not comply with ARV therapy were 63 respondents (50.4%). The statistical test results showed that the p value was <0.000, which was smaller than 0.05, so there was a relationship between lost to follow up behavior and adherence to ARV therapy for HIV/AIDS patients in the Special Region of Yogyakarta.

DISCUSSION

The implementation of ARV therapy is one of the keys to the success of an HIV/AIDS treatment program. This functions to inhibit the spread of HIV infection in the body and improve the quality of life, patient survival, and reduce the risk of transmitting HIV to other people (Risti Anggraeni et al., 2020a). Several things that influence accuracy and compliance in carrying out ARV therapy include accuracy in time, quantity, dose, visit schedule, and the way individuals consume medication (Faiqatul Hikmahet al., 2020). Based on research in Jepara, it was concluded that PLWHA decided to drop out of ARV therapy due to lack of knowledge, side effects, and loss of support from the closest environment who knows the status of the disease (Kurniawan et al., 2022). Clinical research shows that sufferers who follow ARV treatment rules and have regular health checks, generally the drugs will work well (Srinatania et al., 2020). Failure of therapy can result in patients being resistant to the ARVs given, some of the virus numbers in the blood increase significantly resulting in decreased CD4+ counts (Devianti & Waluyo, 2022).

Patient compliance with treatment is very necessary in order to reduce the risk of drug

resistance, reduce viral replication, reduce transmission, as well as improve clinical and immunological conditions, so that when confirmed positive for HIV the protocol decides that the patient will be given post-diagnosis counseling (Sri Ari Isnaini, 2023). A number of factors such as gender, age, educational level, length of therapy, occupation, attitude, knowledge, social support and health services are classified as something that has a relationship with PLWHA's compliance when taking ARV therapy, non-compliance with taking ARV medication can trigger a resistance effect in this way. the function of the drug has failed and will not work (Aila Karyus, 2023)

PLWHA who experience loss of ARV follow-up and do not continue ARV treatment and therapy will be at great risk to their health condition and the mortality rate in this condition will even increase. Other impacts that can be caused do not stop here, this condition will be very risky for PLWHA infecting other people (Kurniawan et al., 2022). Based on the results of research conducted (Martoni, 2020), it is stated that the patient's level of knowledge is the main factor that can influence compliance. Meanwhile, other research has found that age factors can also influence the level of patient compliance in undergoing ARV therapy (Caulbeck, et al. 2019).

One of the efforts to prevent lost to follow up is attempted through various methods such as the establishment of Voluntary Counseling and Testing (VCT). This is also regulated in the Decree of the Minister of Health of the Republic of Indonesia Number 1507/MENKES/SK/X/2005 concerning Guidelines for HIV counseling and testing services. /AIDS voluntarily (Voluntary Counseling and Testing) which is a place and medium for voluntary and confidential HIV counseling and testing so that it is hoped that HIV/AIDS sufferers will voluntarily come to obtain information. Efforts to collaborate with social foundations that form Peer Support Groups (KDS) (Naimah & Soyanita, 2020). Health education is one of the most effective efforts carried out by health agencies or officials to improve people's knowledge, attitudes and behavior to become healthier and more productive (Harianti Fajar, 2021). Antiretroviral treatment begins in a hospital that is at least class C and can

be continued at a community health center or other health service facility that has antiretroviral treatment capabilities (Permenkes, 2023).

Nursing implications in research related to the relationship between lost to follow up with ARV therapy adherence in People with HIV / AIDS in the Special Region of Yogyakarta can be used as input to help improve health professional services for nurses and caregivers of PLWHA to focus more on aspects of lost to follow up on ARV therapy and pay more attention to holding mentoring activities for lost to follow up on ARV therapy adherence so that it is expected that with a good level of follow-up in HIV / AIDS patients and increasing adherence in taking ARVs so that the quality of life of HIV / AIDS patients increases and apply healthy living behavior so as not to transmit HIV to others.

As for the limitations of this study, the first, this study only examines the relationship between lost to follow up with ARV therapy adherence using a cross sectional study approach so that in the results of this study respondents only answered closed questions according to the answers provided in the questionnaire so that researchers could not analyze the factors that influence lost to follow up and ARV therapy adherence in more detail. the second Sampling in this study with accidental sampling conducted by research assistants so that research respondents are less representative because it is only based on who is willing to be met and is cooperative with the course of research.

CONCLUSION

The majority of lost to follow-up behavior among HIV/AIDS patients in the Special Region of Yogyakarta is in the poor category. ARV therapy adherence among HIV/AIDS patients in the Special Region of Yogyakarta is mostly in the non-compliant category. There is a positive relationship between lost to follow up behavior and ARV therapy adherence among HIV/AIDS patients in Yogyakarta Special Region.

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