

Original Research**Determinant Factors of Compliance Antiretroviral Consumption in People Living with HIV AIDS (PLWHA)****Mutmainah Mutmainah¹, Supriyadi Supriyadi^{2*}, Fondha Herawati³, Umdah Mufida⁴**^{1,2,3,4} Department of Nursing RSUP Surakarta, Indonesia**ABSTRACT**

Background: *The Human Immunodeficiency/Acquired Immune Deficiency Syndrome (HIV AIDS) is one of the most deadly diseases. Obedience to drink ARV drugs becomes a deciding factor in the quality of life of PLWHA patients. Determinant factors of compliance not taking ARVs yet found in a certain way. Objectives from the study This is to describe determinant factors of compliance with ARV consumption for people living with HIV AIDS (PLWHA) at home in Sick Surakarta Central General.*

Methods: *Type study This is a descriptive-analytic approach designed to be cross-sectional. The population is all HIV AIDS patients undergoing ARV therapy maintained at Jalan RSUP Surakarta, with as many as 49 patients. Data collection techniques use total sampling. Data collection is done using a questionnaire for ART compliance (Life Windows Information-Motivation-Behaviorak Skill). Data analysis techniques include univariate and bivariate analysis with the Chi-Square test.*

Results: *Research results show (1) Chi-Square test result information ($p = 3.027$). (2) Results of the Chi-Square test of motivation ($p = 0.776$) (3) Chi-Square test results: skills and behavior ($p = 2.982$). No There is a significant influence between information, motivation, and skills associated with obedience to drug ARVs. (1) Odd Ratio Test Results Information ($p = 0.244$), Odd Ratio Test Results Motivation ($p = 0.420$), Nagelkerke's R Square ($p = 0.185$), or 18.5%.*

Conclusion: *Support family is very influential in influencing obedience to drug ARVs, so officer health must involve families and always give support to patients who receive ARV therapy.*

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INTRODUCTION

Human Immunodeficiency Virus-Acquired Immune Deficiency Syndrome (HIV AIDS) is currently a health problem that threatens Indonesia and many countries around the world. HIV is a virus that infects cells in the immune system and destroys or

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damages its function. HIV infection damages the progressive system, which causes AIDS (WHO, 2015).

The number of HIV AIDS sufferers has continued to increase since 1990–2022. The latest data from the *United Nations Program on HIV AIDS (UNAIDS)* for 2021: record in the world reach ± 3 8.4 million people (33.9 million–43.8 million) living in the world with HIV AIDS (UNAIDS, 2021). Meanwhile, in Indonesia, according to June 2022 data from the Ministry of Health, the total number of HIV AIDS sufferers spread throughout the province reached 519,158 people.

Of health data amount The estimated number of PLWHA in September 2022 is 526,841 people. Take note that 79% of HIV-positive cases were recorded, or 429,215 people. A temporary, moderate number of PLWHA undergoes treatment for as many as 179,659 people (51%). More importantly, by September 2022, PLWHA will survive in ARVs only 51%; from those who didn't experience treatment, 54% were lost to follow-up and 6% stopped ARVs, while 40% experienced death (Indonesian Ministry of Health, 2022).

HIV AIDS sufferers need treatment with antiretrovirals (ARVs) to lower the amount of HIV virus in the body so that it doesn't enter the AIDS stage, as well as to prevent infection opportunism and its complications (Ministry of Health, 2014). Patients with ARV treatment must be obedient in consuming the drug alive, at the right time, and with discipline (Ministry of Health, 2011).

Based on the theory of *Information Motivation Behavioral Skill (IMB) in the ART model*, adherence to information, motivation, and skills is the fundamental determinant of behavior (Fisher, 2006). The results of research conducted (Horvath, Smolenski, and Amico, 2014). An online survey using the *Life Windows IMB-ART-Adherence Questionnaire in Milwaukee, Wisconsin*, in 312 PLWHA showed that information (knowledge) and motivation influence the level of PLWHA compliance through the ability to behave. *The IMB model of ART adherence* is a model of behavior that is consistent, especially when discussing obedience to ARV drugs in HIV patients (Fisher, 2006).

MATERIALS AND METHODS

The study was carried out at home at Sick Central General Hospital (RSUP) in Surakarta in September–December 2022. The design used in the study This is a quantitative analysis with a cross-sectional approach *to the population*. In this study, all HIV AIDS patients undergoing treatment with ARV therapy—49 people—went to RSUP Surakarta for 4 weeks. Sample research used is total sampling, i.e., all HIV AIDS patients undergoing ARV therapy at Jalan RSUP Surakarta, with as many as 49 respondents.

Instruments used in the study this uses existing questionnaire standards. *The Life Windows Information Motivation Behavioral Skills ART Adherence Questionnaire (LW-IMB-AAQ)*. The questionnaire consists of 33 questions: 9 questions about information and methods to consume medicine; 10 questions about motivation covering the influence of HIV status and medication on life; and 14 questions about skills in doing medication and drinking drugs. Whereas research data processing uses analysis univariate.

RESULTS

Analysis Statistics

Univariate Analysis

Table 1. Distribution respondents based on age , type gender , education , occupation and time consume at PITC Polyclinic RSUP Surakarta in 2022 (n=49)

Variable	Category	f	%
Age	Mature young (18-40 years old)	34	59.4
	Mature middle (40-64 years)	15	30.6
Gender	Man	37	75.5
	Woman	12	24.5
Education	Elementary school	9	18.4
	Junior High School	8	16.3
	Senior High School	20	40.8
	College	12	24.5
Work	No Work	7	14.3
	Private	31	63.3
	Entrepreneur	6	12.2
	Other	5	10.2
ARV consumption time	> 1 year	34	69.4
	< 1 year	15	30.6
Family remind control	Yes	49	100
	No	0	0
Family remind drink drug	Yes	49	100
	No	0	0

Based on table 1.1 above, it shows that respondents are part of their age, which is as many as 34 respondents (59.4%). There were a lot of respondents with type-sex men—as many as 37 respondents (75.5%). The majority of respondents—20 respondents (40.8%)—had a high school education.

Part-time big-work employee, private sector: 31 respondents (63.3%). The majority of respondents took ARVs for >1 year—as many as 34 respondents (69.4%). All respondents get support from family. Where family reminds For control, as many as 49 respondents (100%) and their families remind respondents of drinking drugs, as many as 49 respondents (100%).

Table 2. Distribution frequency , information , motivation , skills behavior and compliance of PLWHA at the PITC Polyclinic RSUP Surakarta in 2022 (n=49)

Variable	Category	f	%
Information	Low	38	77.6
	Currently	9	18.4
	Tall	2	4.1
Motivation	Low	45	91.8
	Currently	4	8.2
	Tall	0	0
Skills Behave	Low	45	91.8
	Currently	1	2.0
	Tall	3	6.1
PLWHA Compliance	Low	4	8.2

Variable	Category	f	%
	Currently	7	14.3
	Tall	38	77.6

Based on table 1.2 above show distribution frequency respondents part big own information low as many as 38 respondents (77.6%). Part big own motivation low as many as 45 respondents (91.8%). Part big respondents own obedience drink ARV drugs were 38 respondents (77.6%).

Table 3. Regression test logistics

	Pseudo R-Square
Cox and Snell	0.181
Nagelkerke	0.244
McFadden	0.147

The researcher measured coefficient R², which can be seen in the *Nagelkerke table*, namely 0.244, meaning the variability variable is *dependent* (compliance of PLWHA with ARV therapy), which can be explained by the variability variable *independent* (information, motivation, and skills behavior), at 24.4%, or about the remaining 75.6%, explained by other factors outside the model, which means No can be explained by the model. In the study, even though univariate level information, motivation, and skills behaved poorly, PLWHA's drinking compliance was high with ARV medication. This matter As can be seen from Table 1.1, other PLWHA's adherence to taking ARVs is high. Because there is support from PLWHA families, where family reminds respondents of control and family reminds respondents of drinking drugs.

Multivariate Analysis

From the results of the regression test logistics obtained, a level *chi-square* test results in information $p = 3.027$ ($\alpha > 0.05$), level motivation $p = 0.776$ ($\alpha > 0.05$), and level skills behavior $p = 2.982$ ($\alpha > 0.05$), which means all the independent variables are not influential on a dependent variable. This matter shows no significant influence between information, motivation, and skills to have to obey and drink ARV drugs in PLWHA. Based on the results, *chi square* $p < 0.05$, there is no fulfilled condition for the multivariate analysis.

DISCUSSION

Research results show that part big show age in the group mature young. Age own a close relationship with maturity think someone, where age will influence the behavior somebody in do something. According to the Ministry of Health, based on SIHA data on the number of HIV infections in the 2010–2019 group aged 25–49 years, the most productive age is the age of the sufferer with the most HIV infections every year (Ministry of Health, 2020).

Research result show majoriyas respondents type sex man. Based on data from the Directorate General of P2P in 2019, it states HIV cases in 2019 were 64.5% men, while 68.60% of AIDS cases are also male. This matter is in line with results-based HIV report type sex since 2008–2019, where the percentage of sufferers is always taller than women (Ministry of Health of the Republic of Indonesia, 2020).

Research results show that the majority of respondents have high school education. According to Sudrajat in Anisa (2013), education is very important in yardstick measuring to determine socioeconomic status. Besides that, education dressed up in action will do something, including the prevention of HIV AIDS. This matter is in line with research by Annisa (2014), whose research is level education. Where the number of respondents level education medium (SMA/SMK/MA) is the highest compared to level education low and high, there are as many as 48 respondents (59.5%).

Research result show part big own worker as private. According to Meiliyana (2014), sources of income from wages include employees, worker bebs, work in salons or parlors, money-pocketed students, and selling sex capable. These sources of income are low compared to other work like scavengers, handymen, massagers, entrepreneurs, buskers, and others. This matter is in line with research conducted (Annisa, 2014).

The results of the study show that 74 respondents (90.2%) have work or are employed. Research results show the majority consume ARV drugs for >1 year. Use of ARV drugs for HIV sufferers is an effort to extend the hope life of HIV sufferers. ARV drugs slow down virus replication so that the virus inside the circulation decreases. Then, they increase CD4+ and system immune responses.

The statistical test results using the *chi square* test obtained a p value of 3.027, which means a higher α (0.05). So the hypothesis study stated, No accepted. No, there is influence between information and obedience to ARV drugs. According to Ubra, (2012) lack of HIV patients know treatment often No know rule treatment provided by staff health and therefore That level obedience treatment more low. Research result this is in line with Dessy (2016), stated level information No There is influence to obedience drink ARV drugs for HIV mothers at the UPIPI Polyclinic, Dr. Soetomo Surabaya. This matter shows that more than half of HIV mothers with moderate information no influential to no obeyed their mothers to drink ARV drugs in HIV mothers.

Statistical test results using the *chi square* test obtained a p value of 0.776, which means a higher value of α (0.05). Hence, the hypothesis research stated no accepted. No, there is influence motivation with obedience to drink ARV drugs. Study This is in line with Yuniar (2012), who stated that motivation is external and plays a role in increasing obedience to ARV drugs, for example, by supporting family, NGOs, and personnel health. The research result is not in line with Anesta et al., (2010) at Dr. Hospital. According to Hasan Sadikin on 40 ODHS people, the results of the study show that motivation influences obedience to drink medication in HIV patients. Anesta mentions that the lower PLWHA's motivation to drink drugs, the lower their compliance with drink medication.

Statistical test results using the *chi square* test obtained a p value of 2.982, which means a higher α (0.05). With thereby so hypothesis study stated No accepted . It means no. There is influence. Skills: behave with obedience, drink ARV drugs. Research result: This is in line with research conducted by Horvath et al. (2015) on 312 PLWHA. The results of the study show that skills behave influentially in a way that is directly related to obedience to drink ARV drugs in PLWHA. Horvath explained that PLWHA have the skills to behave well, have relevant information, and have sufficient motivation to make them obedient to drink ARV drugs and vice versa.

CONCLUSION

From the results of the study, there is influence on information, motivation, and skills to behave with obedience when taking ARVs for PLWHA at PITC Polyclinic

RSUP Surakarta in 2022. The officer must involve family members to provide support for PLWHA during ARV therapy.

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