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ANALYSIS OF FACTORS INFLUENCING ADHERENCE TO ANTIRETRO VIRAL MEDICATION (ARV) IN HIV/AIDS PATIENTS BASED ON INFORMATION, MOTIVATION, BEHAVIORAL SKILLS AT CUT MEUTIA GENERAL HOSPITAL

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Abstract

This type of research uses descriptive research methods while based on the time dimension the research uses a cross sectional design. The research was conducted at Cut Meutia General Hospital. This research was conducted from 2018-2019. The sampling technique in this study used the total sampling method. The population in this study were all HIV/AIDS patients who were treated at the VCT and CST clinics at Cut Meutia Hospital, North Aceh District, which were recorded until 2018-2019, totaling 62 people. The results of this study found that respondents at Cut Meutia Hospital had low information of 90.0% regarding adherence to ARV drug use. Respondents at Cut Meutia Hospital had low motivation of 96.7% for adherence to ARV drug use. Respondents at Cut Meutia Hospital had low behavioral skills of 96.7% for compliance with the use of ARV drugs. The population in this study were all HIV/AIDS patients who were treated at the VCT and CST clinics at Cut Meutia Hospital, North Aceh District, which were recorded until 2018-2019, totaling 62 people. The results of this study found that respondents at Cut Meutia Hospital had low information of 90.0% regarding adherence to ARV drug use. The population in this study were all HIV/AIDS patients who were treated at the VCT and CST clinics at Cut Meutia Hospital, North Aceh District, which were recorded until 2018-2019, totaling 62 people. The results of this study found that respondents at Cut Meutia Hospital had low information of 90.0% regarding adherence to ARV drug use. Respondents at Cut Meutia Hospital had low motivation of 96.7% for adherence to ARV drug use. Respondents at Cut Meutia Hospital had low behavioral skills of 96.7% for compliance with the use of ARV drugs. The population in this study were all HIV/AIDS patients who were treated at the VCT and CST clinics at Cut Meutia Hospital, North Aceh District, which were recorded until 2018-2019, totaling 62 people. The results of this study found that respondents at Cut Meutia Hospital had low information of 90.0% regarding adherence to ARV drug use. Respondents at Cut Meutia Hospital had low motivation of 96.7% for adherence to ARV drug use. Respondents at Cut Meutia Hospital had low behavioral skills of 96.7% for compliance with the use of ARV drugs.

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Keywords:AIDS, ARV, HIV, medicine, VCT, virus.

INTRODUCTION

HIV (Human Immunodeficiency Virus), included in the Retroviridae family, is a virus that causes AIDS (Acquired Immunodeficiency Syndrome), a syndrome caused by a decrease in the immune system so that sufferers are very sensitive and easily attacked by opportunistic microorganisms and neoplastic diseases such as Kaposi's sarcoma and lymphoma [1]. HIV/AIDS sufferers need

treatment with antiretrovirals (ARVs) to reduce the amount of HIV virus in the body so that it does not enter the AIDS stage and to prevent opportunistic infections and their complications [2]. According to reports from the Indonesian government, 31% of patients diagnosed with HIV have received antiretroviral therapy [3]. Patients receiving treatment must comply with taking ARV drugs for life, on time and with discipline.

Compliance with taking medication on HIV/AIDS clients includes accuracy in time, amount, dosage, and how individuals take their personal medication. Non-adherence in implementing therapy will reduce the effectiveness of ARV drugs and even increase viral resistance in the body [4]. Adherence is something that is absolutely owned and carried out by ARV recipients as a form of behavior to prevent resistance and as an effort to maximize the benefits of therapy and reduce treatment failure. Antiretroviral treatment (ARV) requires PLWHA to comply and take their medication regularly. Violations in taking medication can be fatal, can even cause failure in the treatment process. A study on ARV use found that even one missed dose within 28 days was associated with treatment failure [5]. Non-adherence in the implementation of therapy will reduce the effectiveness of ARV drugs and even increase viral resistance in the body [4]

LITERATURE REVIEWS

Based on the theory of Information Motivation Behavioral Skills (IMB) Model of ART Adherence to information, motivation and ability to behave are fundamental determinants of behavior [8] Results of research by Horvath, Smolenski, & Amico in 2014 who conducted an online survey using Life Windows IMB-ART-Adherence Questionnaire in Milwaukee Wisconsin on 312 PLWHA showed that information (knowledge) and motivation affect the level of compliance of PLWHA through the ability to behave [6]. The IMB Model of ART Adherence is a behavioral model that specifically addresses adherence to taking ARV medication in HIV patients [7]. According to Amico, the IMB Model of ART Adherence has contributed greatly to encouraging efforts to extend and improve the quality of life of HIV patients on ART through behavior change interventions [6].

METHODS

This type of research uses descriptive research methods while based on the time dimension the research uses a cross sectional design. The research was conducted at Cut Meutia General Hospital. This research was conducted from 2018-2019. The sampling technique in this study used the total sampling method, which is a sampling technique where the number of samples is equal to the total population. The population in this study were all HIV/AIDS patients who were treated at the VCT and CST clinics at Cut Meutia Hospital, North Aceh District, which were recorded until 2018-2019, totaling 62 people. Univariate analysis in this study was carried out on research subjects consisting of analysis of information factors, motivation, behavior skills using ARVs at Cut Meutia General Hospital.

RESULTS AND DISCUSSION

This research was conducted at the Voluntary Counseling and Testing (VCT) and Care, Support & Treatment (CST) Polyclinic at Cut Meutia General Hospital, North Aceh District, located on Jalan Banda Aceh-Medan km 6 Buket Rata, Lhokseumawe.

1.1 Univariate analysis

A. Description of Respondent Characteristics

The frequency distribution of the characteristics of PLHIV at Cut Meutia General Hospital in 2018 is in table 1

Characteristics	Amount	Percentage (%)
Gender		
Man	21	70.0
Woman	9	30.0
Age		
20-29 years	12	40.0
30-39 years	17	56,7
≥40 years	1	3,3
Last education		
SD	2	6,7
JUNIOR HIGH SCHOOL	13	43,3
College	15	50.0
Work		
Student	2	6,7
Self-employed	6	20.0
Farmer	4	13,3
civil servant	1	3,3
IRT	6	20.0
Doesn't work	11	36,7
Marital State		
Not married yet	16	53,3
Marry	8	26,7
Widow widower	6	20.0
HIV status		
Not Symptomatic	9	30.0
Symptomatic	12	40.0
AIDS	9	30.0
Transmission		
Heterosexual	13	43,3
Homosexual	4	13,3
Blood transfusion	1	3,3
Injection	5	16,7
Other	7	23,3
Length of Therapy		
≤2 years	21	70.0
>2 years	9	30.0

Table 1 shows that the majority of respondents were male, namely 21 people (70%), while there were 9 women (30%). The most age category of respondents was 30-39 years, namely 17 people (56.7%). Based on the level of education, the number of respondents with tertiary education was more than other education, namely 15 people (50%). For the respondent's occupation, 11 people (36.7%) did not have a job, followed by 6 people (20%) working as entrepreneurs and also IRT. As for the marital status of the respondents, the majority were unmarried as many as 16 people (53.3%). Based on the respondent's HIV status, 12 people (40%) claimed to be symptomatic. Mode of transmission is mostly heterosexual.

A. Description of Respondent Information

The results of the research from 30 respondents to Cut Meutia Hospital for information obtained data as shown in table 2.

Table 2 Frequency Distribution of Respondents Based on Information for Compliance with ARV Use

	Amount	Percentage
Low	27	90.0
Currently	3	10.0
Tall	0	0.0
Total	30	100.0

Table 2 shows that respondents at Cut Meutia Hospital who had low information were 90.0% and those who were moderate were 10.0%. None of the respondents had high information about ARV drugs.

B. Description of Respondents' Motivation

Research results from30 respondents at Cut Meutia Hospital on the motivation of the respondents obtained data as shown in table 3.

Table 3 Frequency Distribution of Respondents Based on Motivation for Compliance with ARV Use

	Amount	Percentage
Low	29	96.7
Currently	1	3,3
Tall	0	0.0

Table 3 shows that 96.7% of respondents are low motivated and 3.3% are moderately motivated and there are no highly motivated respondents.

C. Description of Respondents' Behavioral Skills

Table 4 Frequency Distribution of Respondents based on Behavioral Skills for Compliance with ARV Use

	Amount	Percentage
Low	29	96.7
Currently	1	3,3
Tall	0	0.0
Total	30	100.0

Table 4 shows that respondents based on skills have low behavior as much as 96.7% compared to those with moderate behavior as much as 3.3%. There are no respondents based on high skills.

2. Discussion

1. Description of Respondent Characteristics

The majority of PLWHA consisted of productive age patients, namely at the age of 30-39 years, 17 people (56.7%), followed by 12 people aged 20-29 years. The results of this study are in accordance with the data and information center of the Ministry of Health of the Republic of Indonesia in 2016 which stated that HIV infection mostly consisted of the productive age group, namely the age group of 25-49 years. As for the most cases of AIDS in the age group 20-29 years, followed by the age group 30-39 years and 40-49 years [8]. From this study, it was found that the highest level of education for PLHIV was tertiary education, namely 15 people (50%). Marital status among PLWHA was found to be mostly unmarried, namely 16 people (53.3%), followed by married as many as 8 people (26.7%) and widows/widowers as many as 6 people (20%). Most of the sources of transmission of HIV infection in PLWHA were heterosexual, namely 13 people (43.3%). The results of this study are in accordance with the results of a study conducted by Costa and Oliveira in 2013 where it was found that the highest source of transmission was through sexual intercourse (97%), and for sexual orientation, most patients admitted to being heterosexual (78.6%) and homosexual (21.4%) [9].

As for the length of therapy, most of the patients had only been on therapy for ≤2 years. The results of this study are also in accordance with Simboh's study in 2015 where it was found that most PLHIV had just received ARV therapy for ≤2 years. This is because the use of ARVs at Cut Meutia Hospital has only been maximized for the last 2 years, where previously the use of ARVs was only specifically for patients who met the criteria for ARV use. But now, the government has made it mandatory for the use of ARVs for every HIV positive patient.

2. Overview of Information for ARV Compliance

The results showed that the majority of patients had low information about methods and complete theories regarding adherence and only a few patients had moderate levels of information about regimens, correct and adequate use of ARVs, methods and complete theories regarding adherence. The results of the study also showed that none of the patients had high information regarding ARV adherence. Sithole in 2013 in his research results stated that compliance factors are complex and unique. The social context of each patient plays a role in determining whether patients adhere to their regimen or not [10]. The results of this study are at odds with Fisher's theory, namely the IMB Model of ART Adherence where the level of information influences medication adherence in patients with HIV, either directly or indirectly. This information includes about regimens, correct use of ARVs, adequate adherence, about side effects and drug reactions, about methods and the full theory of ART regimens in terms of how and when doses should be taken, potential side effects, and decisions about appropriate adherence. may be inaccurate (eg, believing that a medication can be skipped if one is feeling well) or accurate (eg, understanding that low adherence rates can inhibit viral suppression) [11].

The results of this study are in conflict with the results of Amico's 2006 study in Mississippi, on 150 people living with HIV. The results of Amico's research show that information has an indirect but significant effect on medication adherence in patients with HIV. Amico explained in his research that getting sufficient information about ARV therapy did not have a major effect on the high adherence to taking medication in PLWHA, but had an effect on the behavior skills of the PLWHA, where behavioral skills directly affected the level of adherence to treatment in PLWHA [9]. The results of Hovarth's research also show that in order to make patients comply with taking ARV medication, PLWHA must have relevant information, good behavioral skills and sufficient motivation [12]. Judging from the results of studies that have been conducted on patients with low information, they still need to increase information on adherence to ARV drug use.

3. Description of Motivation for Adherence to ARV

The results showed that the largest percentage of respondents had low motivation as much as 96.7% and moderately motivated as much as 3.3% and there were no highly motivated respondents. Similar to information, this could also be due to the lack of sufficient support from the PMO or support group. good peer support (KDS) for patients to adhere to taking ARV medication and this can also be caused by the low level of information and behavior skills. His research found that external motivation has a role in increasing adherence to taking ARV medication, for example family support, NGOs and health workers. The results of this study support Fisher's theory, namely the IMB Model of ART Adherence in 2006. Where motivation influences the level of adherence to taking medication in PLHIV both directly and indirectly [11]. Motivation includes attitudes/beliefs about the impact of compliance and non-compliance behavior and evaluation of the results of these behaviors as well as perceived support from others to comply with taking medication and motivation to meet the expectations of others. Motivation is very necessary in carrying out adherence to ARV therapy, without motivation ARV therapy cannot be continued [14].

The results of this study are in line with the research of Anesta et al. in 2010 at Dr. Hasan Sadikin in 40 people living with HIV, the results of his research showed that motivation affects medication adherence in patients with HIV. Anesta said that the lower the motivation of PLWHA to take medication, the lower the adherence to taking medication for PLWHA [15]. Kalichman in 2001, in his research results showed that women who have low motivation will have low adherence in taking ARV drugs [13]. Seeing from the results of research that has been carried out at the UPIPI Poly at Dr. Soetomo Surabaya in mothers with HIV, low motivation has an impact on low adherence to taking ARV medication, so mothers with HIV need counseling about the importance of adherence to taking medication or motivation from those closest to them to increase their level of adherence in taking ARV medication.

These results were reinforced by Sulasmi and Tambing's research which stated that there was a relationship between client motivation and treatment programs. Meanwhile, Senewe's research in the scientific journal UNAIR showed that there was a relationship between motivation and adherence to treatment for pulmonary TB patients at the Depok health center [16]. According to Muzaham in 1995 stated that people will not seek medical help if they have minimal knowledge and motivation relevant to health, if they perceive the situation is not dangerous enough, if they are unsure of the success of a medical intervention and if they see some difficulties. in carrying out the recommended health behavior [15]. This is in line with According to Azwar in 2001, motivation is the drive to do positive things for himself and others. Motivation is driving behavior toward a goal based on the existence of a need that can arise from within the individual, or can be obtained from outside and other people/family [15]. Aspects of motivation include having a positive attitude, oriented towards achieving a goal and the strength that drives the patient. Motivation is very necessary in carrying out adherence to ARV therapy, without motivation ARV therapy cannot be continued [12].

4. Description of Behavioral Skills for ARV Compliance

Based on the results of the study, it was found that 96.7% had low behavioral skills compared to 3.3% moderate behavior and there were no respondents based on high skills on adherence to taking ARV medication at Cut Meutia General Hospital. This can be caused by insufficient behavioral skills which include low confidence in being able to live like other people, and feelings of being different from those around them have an impact on the low level of adherence to taking ARV medication. The results of this study are at odds with Fisher's theory, namely the IMB Model of ART Adherence, because according to Fisher, behavioral skills influence the level of adherence to taking medication in PLWHA, both directly and indirectly. These behavioral skills include skills for obtaining and self-administering ARV therapy, for minimizing side effects, for renewing adherence to ARV therapy as needed, for obtaining social

and instrumental support to support adherence and as self-reinforcement for adherence over time [11].

The results of this study are not in line with research conducted by Horvath et al in 2014 on 312 PLHIV. The results of this study indicate that behavioral skills directly affect adherence to taking ARV medication in PLWHA. Horvath explained that PLWHA who have good behavior skills have relevant information and sufficient motivation to make them adhere to taking ARV medication and vice versa [13]. Amico in his research results also stated that a person's behavior skills directly influence patient adherence to taking ARV medication [14]. Judging from the results of research conducted at Cut Meutia Hospital, HIV/AIDS patients need counseling on behavioral skills to obtain and manage ARV therapy themselves, to minimize side effects, this can help to increase their level of adherence in taking ARV medication.

CLOSING

Conclusion

Characteristics of PLWHA at RSU Cut Meutia mostly consisted of 21 men, aged 30-39 years 17 people, 15 people with higher education level, 11 people did not work, 16 people with marital status were not married, 12 people had symptomatic HIV status, and heterosexual transmission 13 people. Respondents at Cut Meutia Hospital had low information of 90.0% for adherence to ARV drug use. Respondents at Cut Meutia Hospital had low motivation of 96.7% for adherence to ARV drug use. Respondents at Cut Meutia Hospital had low behavioral skills of 96.7% for compliance with the use of ARV drugs.

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