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Medication Adherence and Quality of Life among People Living with HIV/AIDS (PLWHA) Who Joined and Did Not Join a Peer Support Group

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ABSTRACT

ARV medication adherence and the quality of life in PLWHA are still low and most PLWHA have not joined a peer support group. This study aims to provide a comparative study of medication adherence and quality of life among people with HIV/AIDS (PLWHA) who joined and did not join a peer support group. The data of 39 PLWHA were collected from hospital in Madura, Indonesia. The independent variables measured include PLWHA who joined and did not join a peer support group, and the dependent variables included adherence to taking ARV drugs and quality of life for PLWHA. The medication adherence level and quality of life PLWA who joined a peer support group were better than who didn't. Further studies are recommended to understand expected about other factors such as differences in medication adherence and quality of life in PLWHA with Drug Drinking Companions (PMO) or with family support.

Keywords: *PLWH, Quality of Life, Medication adherence, Peer support group*

Introduction

The number of people living with HIV who stopped ARV therapy increased from 23.25% in 2016 to 24.39% in 2017. Factors that cause PLHIV to stop ARV therapy are their own desire and failure of follow-up by health workers.[1] The impact of stopping ARV therapy can increase the number of viruses, so that viral load will increase and CD4 cell count decrease. Therefore, there is a possibility of opportunistic infection. If PLWHA have ever received ARV therapy then stop it, CD4 decline becomes faster than PLWHA who have never received ARV therapy.[2]

The number of PLWHAs who don't continue ARV therapy leads the death rate of PLWHA to increase. Treatment and self-care of PLWHA can be affected by psychological problems that have an impact on the quality of life.[3] Psychological problems experienced by PLWHA are more severe, but the treatment is still more focused on social problems, such as stigma.[4]

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According to WHO and UNAIDS estimates until the end of 2016, 36.7 million people were living with HIV, 1.8 million people had just been infected with HIV and the number of people who died of HIV reached 1 million people. PLWHA who received ART in mid-2016 were more than 18 million people (WHO, 2017). Based on reports of HIV-AIDS in Indonesia, the number of people living with HIV who had started ARV therapy increased to 158,224 PLWHA, but only 50.46% of PLWHA were still continuing ARV therapy.[1]

Some of the factors that are the main obstacles to non-adherence with ARV therapy a stigma, ARV side effects and forgetfulness, and facilitators that also influence include caregiver support, peer support groups and knowledge about HIV. Irregularity in taking medication or a bad adherence in ARV therapy can cause treatment failure.[5]

Social support is needed to increase PLWHA's life expectancy. In addition, emotional support from families, health workers, and other fellow PLWHA is also needed.[6]their social support needs may increase. Five focus groups were conducted in Washington, DC with 23 HIV-positive African American women aged 52-65 to explore women's perceptions about how

aging and HIV chronicity affects their social support needs. Participants were recruited from the longitudinal Women's Interagency HIV Study (WIHS

Seeing the phenomena and supported by existing data and based on Green's theory of health behaviors where there are peer motivating factors that are badly needed by PLWHA, the researchers wanted to compare the level of adherence to taking Antiretroviral (ARV) drugs and the quality of life of PLWHA who joined and did not join the PSG. Therefore, this research will be very useful to increase the level of adherence to taking antiretroviral drugs and the quality of life of PLWHA.

Method

Study Design, Setting, and Sampling: The research design used is quantitative research with comparative descriptive methods. The population used in the study was all PLWHA who were receiving ARV therapy at the VCT Polyclinic at RSUD Dr. H. Slamet Martodirdjo Pamekasan. Samples were obtained using total sampling technique with the following inclusion criteria: 1) PLWHA who were more than 20 years old, and 2) PLWHA who can read and write, while the exclusion criteria set by the researchers are 1) PLWHA who have mental disorders, and 2) PLWHA with decreased awareness. The number of samples in this study were 39 respondents, consisting of 23 PLWHA who participated in the Malatèh Setaman peer support group and 16 PLHIV who did not join the PSG. The data collection process was carried out from June to July 2018.

Study Variables: Data for the independent variables are PLWHA who joined a peer group and those who did not, while the data dependent variable was obtained from filling out a questionnaire about adherence to taking ARV drugs using MMAS-8 and the quality of PLHIV using the WHOQOL-HIV BREF.

Data Analysis: Descriptive statistics method was employed to analyze the demographic data to generate the study results. The difference of quality of life and medication from the two groups were analyzed using Mann-Whitney U Test with a significance level $\alpha \leq 0.05$.

Result

Demographics characteristics data of these 39 respondents describe the types of respondents in VCT Polyclinic Dr. H. Slamet Martodirdjo Pamekasan, which includes age, gender, last education, employment, income, marital status, and number of children.

Table 1: Demographic characteristics of respondents

Characteristics	Joined in PSG		Not in a PSG	
	F	%	F	%
Age				
20-50 years old	23	59	15	38.5
> 50 years old	0	0	1	2.6
Gender				
Male	9	23	6	15.4
Female	14	35.9	10	25.6
Education				
Never Attended School	0	0	1	2,6
Primary School	1	2.6	2	5.1
Junior High School	5	12.8	6	15.4
Senior High School	10	25.6	3	7.7
High Education	7	17.9	4	10.3
Employment status				
Have a Job	14	36	6	15.4
Don't Have a Job	9	23	10	25.6
Income				
0,-	9	23	10	25.6
< Rp 1,000,000	9	23	4	20.5
Rp 1,000,000 - Rp 3.000.000	4	10.3	2	5.1
> Rp 3,000,000	1	2.6	0	0
Marital Status				
Unmarried	2	5.1	4	10.3
Married	14	36	8	20.5
Divorced	7	13	4	7,7
Number of Children				
0	10	25.6	7	17.9
1	6	15.4	6	15.4
2	7	17.9	3	7.7
Health coverage				
National insurance	14	36	8	20.5
By self Duration HIV infected	9	23	8	20.5
1 years	6	15.4	5	12.8
2-5 years	13	33.3	9	23
6-10 years	4	10.2	2	5.1

The majority of PLWHA who joined PSG mostly had high levels of adherence to taking ARV drugs, that is 11 respondents (28.2%), while PLWHA who did not join PSG mostly had low levels of ARV adherence, that is only 10 respondents (25.6%).

Table 2: Differences in the level of adherence to taking ARV drugs and quality of life

Classification	Joined in PSG		Not in a PSG		Σ	%	P
	F	%	F	%			
Medication Adherence							
High	11	28.2	1	2,6	12	30.8	0.001
Moderate	6	15.4	5	12.8	11	28.2	
Low	6	15.4	10	25.6	16	41	
Quality of life							
Good	16	41	2	5.1	18	46.2	0.001
Moderate	7	17.9	12	30.8	19	48.7	
Low	0	0	2	5.1	2	5.1	

Discussion

Most respondents often forget to take medication on time, feel disturbed because they have to take medication every day and often feel the side effects from drugs taken. The results of this study are in line with the research of Ammon et al. (2018) which shows that the main obstacle of non-adherence to ARV treatment is the side effects of ARV drugs, forgetfulness and lack of support from other parties, such as peer support.[5]

PLWHA who did not join KDS had stopped taking medication when their condition worsened. When they feel healthy, PLWHA think they do not to need the medicine anymore. Basically, to undergo ARV therapy, the support of various parties is greatly needed, including the health professional team, family and peer support teams, so that when things happen that can make PLWHA want to stop taking ARV drugs, they motivate them to continue taking medication according to dosage.[7]

For PLWHA who still cannot accept the condition of their illness, peer support groups and case managers are supporting factors because, generally, PLWHA who join peer support groups get a lot of knowledge from the group and have the opportunity to share knowledge and remind each other, including in terms of taking medicine.[8]

Accidentally not taking medicine is often carried out by PLWHA who do not join PSG. Feeling bored and desperate about their illness is the reason for PLWHA to do this. Even though they routinely take medicine every month, they do not always drink all of the medicines. The motivating factor in improving the health behavior of PLWHA in adherence to taking ARV drugs can be obtained from peers with PLWHA and people who care about HIV.[9] So, if the role of peers here operates properly, then PLWHA may not do things that harm themselves, like deliberately not taking the medicine.

The low information that mothers have of HIV and the lack of sufficient support from peer support groups to comply with taking antiretroviral drugs causes low compliance with taking ARV drugs.[10] Social support is recognized as important in treatment because it always provides support to PLWHA so that they do not feel ashamed to bring their medication while doing activities with their friends.[11]

The results of this study were also supported by the results of Xu's research, which found that social and emotional support and counselling from peer groups were strong compliance factors.[12] Judging from the existing peer support groups, such as regular meetings, studying together, supervision of taking medication and capacity building for PSG, members can improve the obedience of PLWHA in taking ARV drugs because, besides getting knowledge, PLWHA can also understand the importance of taking the drugs.

Having to take medicine every day is uncomfortable because there will be demands and they will feel burdened. So, often there will be a feeling of boredom

with the routine. When this boredom arises, the role of the closest people who can strengthen PLWHA is needed. Motivation, support and even just the presence of others will be very meaningful. Therefore, the presence of peers in the PLWHA's lives will greatly influence each of them to motivate fellow PLWHAs to continue taking ARV drugs.

Most of the respondents who joined peer support groups received more support from their environment because the health of PLWHA and the environment in which PLWHAs live also directly affected the quality of life of PLWHA. The results of this study are in line with the research of Novrianda et al., which showed that PLWHA must feel safe while in their neighborhood, so that there will be an increase in quality of life by the way the families receive PLWHA, as in do not avoid, do not reject and do not isolate them[3]. In addition to the family environment, the external environment can also be influential because humans are social beings who need other people in their lives.

Financial resources are also an important factor in the environmental domain. Research conducted by Hultman and Hemlin in 2006 showed that respondents who do not have a job have worse quality of life than those who do. Likewise, the lack of economic needs and insufficient influences greatly on the quality of life.[13] Misunderstanding in the community about HIV makes people tend to isolate PLWHA. so that they make PLWHA increasingly withdrawn from social life.[3]

The majority of the two comparison groups both have enough energy in carrying out their daily activities and are satisfied with their sleep, but also many PLWHA who do not join PSG have less energy in carrying out activities. The results of this study are in accordance with Carter's (2012) study (cited in Novrianda et al.,2015) who suggested that peer support influences the quality of life of PLWHA, such as energy/fatigue, sleep, cognitive function, physical activity, and their daily activities.[3]

The majority of the two comparison groups alike rarely have negative feelings, such as loneliness, despair, anxiety and depression. The psychological problems experienced by PLWHA are actually more severe, but the treatments that have existed so far are still more focused on social problems, such as stigma.[4]

Most PLWHA who did not join the PSG were not satisfied with their ability/capacity to work, while PLWHA who joined the PSG were very satisfied with their ability/capacity to work. This result is in line with the research by Van Tam who found that improved quality of life was related to the level of freedom of PLWHA.[14]

Most people living with HIV/AIDS who do not join a peer support group feel very afraid of the future and are very worried about death, while PLWHA who join a peer support group are not. Increased quality of life is related to the spiritual level, such as perceptions about the future and worrying about death. [14] Higher spiritual needs are found in PLWHA with stage IV HIV.[15]

This research results related to this quality of life are supported by Sesaria's research which showed that the role of peer support groups is very good for the quality of life of PLWHA.[16]

Quality of life is an important factor and needs to be considered, especially for the mental health of PLWHA, and can contribute to the happiness and self-satisfaction of PLWHA and provide benefits to the family and community.[17] Activities commonly carried out by peer support groups, such as meetings, studying together, peer assistance, supervision of taking medication, Community Counseling, Information and Education and fundraising, can also be done to improve the quality of life of PLWHA directly.[9]

Conclusions

PLWHA who joined a peer support group had a higher level of adherence to taking antiretroviral (ARV) drugs and better quality of life than PLWHA who did not join. It is recommended for VCT Polyclinic Nurse of Dr. H Slamet Martodirdjo Pamekasan hospital to involve PLWHA who have joined a PSG to meet and invite new PLWHA or who have not joined to do so. For Malatèh Setaman peer support groups, it is recommended to make online discussion at least twice a week, especially inviting PLWHA who have not joined a PSG to join in the online discussion. Further research is expected about other factors, such as differences in medication adherence and quality of life in PLWHA with Drug Drinking Companions (PMO) or with family support.

Ethical Clearance: The research was approved by the Health Research Ethics Committee of the Faculty of Nursing, Universitas Airlangga, in 2018.

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