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Original Research

Relationship between Financial Factors and Access to Health Care and Quality of Life for HIV / AIDS Patients

Laila Salma Ikmala, Nursalam Nursalam* and Ni Ketut Alit Armini

Faculty of Nursing, Universitas Airlangga, Surabaya, East Java, Indonesia

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CORRESPONDING AUTHOR

Nursalam Nursalam
nursalam@fkp.unair.ac.id
Faculty of Nursing, Universitas Airlangga, Surabaya,East Java, Indonesia

ABSTRACT

Introduction: Patients with HIV-AIDS experience various problems, one of which is related to financial factors and access to health services, this will also affect the patient's quality of life. The purpose of this study was to analyze the relationship between financial factors and access to health services.

Method: This was a cross-sectional study with a sample size of 101 respondents who were selected using simple random sampling technique. The independent variable in this study is income and access to services, while the dependent variable in this study is quality of life. The instrument used was a demographic questionnaire and Health-Related Quality of Life, the data were analyzed using chi square with a significance level of $p < 0.05$.

Results: The results showed that there was a significant relationship between income ($p = 0.044$) and the availability of infrastructure ($p = 0.003$) with the quality of life of HIV-AIDS patients.

Conclusion: The financial and access to healthcare factors are related to the quality of life of clients with HIV-AIDS, so that patients with good quality of life will show that the level of fulfillment of needs and access to health services is also good.

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1. INTRODUCTION

HIV-AIDS patients experience various problems, be it physical, psychological, and social (Degroote & Vogelaers, 2014). Quality of life is demonstrated through the need for physical, mental, emotional and social functioning (Miners *et al.*, 2014). The quality of life of clients with HIV-AIDS must receive attention and be improved so that the patient's immunity remains good. One of the things related to quality of life is patient compliance in undergoing treatment, including financial needs and access to health facilities. The service is to evaluate treatments and provide new interventions, to improve the healthcare of patients infected with HIV-AIDS in assessments needed to measure quality of life (Wu, Hanson, & Harding, 2013). Factors related to finance and access to health facilities in terms of quality of life need further research.

HIV-AIDS is still a trend in the world and in Indonesia because sufferers are still increasing every year; currently, more than 36.9 million people worldwide suffer from HIV (UNAIDS, 2018). One of the Asian countries, Indonesia has an infection rate of Human Immunodeficiency Virus (HIV) which is growing rapidly according to the age group of 25-49 years, namely 33,448 patients confirmed positive (Ministry of Health, 2017). The number of cases of HIV-AIDS infection in East Java is in the first position of 8,204 people, most of which are in the island of Java (Kemenkes, 2017). Especially in Surabaya, the HIV prevalence was 918 people (Statistik Jatim, 2017). The prevalence in Tulungangung increases every

year, in 2017 there were cases of 303 people infected with HIV-AIDS (Statistik Jatim, 2017).

Well-being is currently a measure to assess a person's quality of life (CDC, 2000), Lack of knowledge and understanding of the community causes patients with HIV-AIDS to be avoided and shunned (Rozi & Widodo, 2016). Research (Campsmith *et al*., 2003) states that the low quality of life is mostly experienced by HIV-AIDS clients and is supported by data of a low CD4 cell count. Low quality of life problems can affect the immune system's response and make health worse (Miners *et al* 2014) and causes susceptibility to infections such as pulmonary tuberculosis, herpes simplex, pneumonia, chronic diarrhea, lipoma, hepatitis C and neurological disorders (Katili *et al.,* 2012). The low quality of life of a person diagnosed with a chronic disease also affects psychological problems, such as various feelings and stress reactions, including frustration, hardship, recovery, denial, shame, grieving and struggling to adapt to the disease (Nursalam *et al*., 2018). Health services provided to HIV-AIDS patients are of importance in early detection of HIV-AIDS to facilitate, accelerate diagnosis, and determine management and analyze a problem and formulate effective planning (Pratiwi, 2018). While this study discusses factors that are related to the quality of life of HIV-AIDS patients, the researchers will, however, examine respondents with different factors to determine which factor is more dominant. The aim of this study was to analyze the relationship between financial factors and access to health services with the quality of life of patients infected with HIV / AIDS.

2. METHODS

2.1 Research Design

This study used a quantitative research design with a cross-sectional approach and was conducted in September - December 2020. Researchers measured the quality of life at one time, without any follow-up after measuring data on clients with HIV-AIDS in Surabaya and Tulungagung.

2.2 Population, Sample, and Sampling

The study population of this study were clients with HIV-AIDS in Surabaya and Tulungagung who were registered in the AIDS Eradication Commission in December 2020. The sample size of this study was 101 respondents with the following criteria: 1) Clients who are currently undergoing ARV treatment; 2) The client is able to communicate well both verbally and in writing; 3) Clients with HIV-AIDS stage 3-4 (advanced stage); and 4) Not pregnant. The sample size was obtained using simple random sampling.

2.3 Research Variables

The independent variable of this study is the financial factor and access to health services, the dependent variable of this study is the quality of life.

2.4 Research Instrument

The instrument in this study used a questionnaire, on the variables of economic factors and access to health facilities with a sociodemographic questionnaire that was extracted from respondents in the form of age, gender, education, occupation, length of time being diagnosed with HIV-AIDS. The quality of life questionnaire uses the World Health Organization Quality of Life (WHOQOL, 1998) which contains 26 questions using a scale of research less = <39, good => 39 is fully experienced if it is an unfavorable statement, and vice versa if it is a favorable statement.

2.5 Research Procedures

The research procedure first took addressed research ethics and research permits, then the researcher created a questionnaire that was distributed to clients with HIV-AIDS. Respondents were first given an explanation and informed consent by being asked to give consent voluntarily. Respondents were then asked to fill out questionnaires on demographic data and quality of life. The data from filling out the questionnaire were then tabulated. After that the questionnaire data were processed and analyzed using the SPSS application. After the collected questionnaire data were processed by computerization. They were presented in cross-tabulation and the results expressed in percentage form.

2.6 Data Analysis

The data analysis process in this study used the chi square statistical test. Between the independent variables, the dependent variable is said to be significant if the significance value (p-value) is ≤ 0.05.

2.7 Ethical Clearance

This research has received an ethical feasibility test and a certificate of ethical acceptance from the Faculty of Nursing, Airlangga University with the code number 2134-KEPK.

3. RESULTS

Regarding characteristics of clients with HIV-AIDS based on sex, it is known that most of the respondents were male, as many as 52 respondents (51.5%). The age of clients with HIV-AIDS is known that most of the respondents are at the age of 30-39 years, as many as 39 respondents (38.6%). The last education as elementary school was 34 respondents (33.7%). The work carried out by respondents is private employees as many as 68 respondents (67.3%). Income ≤ UMR is 59 (58.4%), while ≥ UMR is 42 (41.6%). Duration of HIV diagnosis 1 year to 5 years was 45 (44.6%), and the length of time being diagnosed with HIV was at least 6 months to 1 year, namely 13 (12.9%) (Table 1).

Table 1. Characteristics of Respondents with HIV-AIDS

Respondent Characteristics	Category	n	%
Gender	Male	52	51.2
	Female	49	48.5
	Total	**101**	**100**
Age	20-29 years	20	19.8
	30-39 years	39	38.6
	40-49 years	33	32.7
	≥ 50 years	9	8.9
	Total	**101**	**100**
Educational Background	Elementary school	34	33.7
	Junior high school	16	15.8
	Senior high school	28	27.7
	Diploma	23	22.8
	Total	**101**	**100**
Occupation	Housewife	33	32.7
	Employee	68	67.3
	Total	**101**	**100**
Income	Under Minimum Regional	59	58.4
	Same as and above minimum regional	42	41.6
	Total	**101**	**100**
Duration of work	6 months to 1 year	13	12.9
	1 – 5 years	45	44.6
	>5 - 10 years	29	28.7
	>10 years	14	13.9
	Total	**101**	**100**

Table 2. The Characteristics of Variable

Variable	Category	n	%
availability of infrastructure	Less	14	13.9
	Moderate	71	70.3
	Good	16	15.8
	Total	**101**	**100**

The availability of health facilities in sufficient category was moderate, as many as 71 respondents (70.3%). while those in the less category were 14 respondents (13.9%) (Table 2). The quality of life of the respondents showed good, as many as 86 respondents (85.1%) while the poor category was 15 respondents (14.9%). The psychological aspect parameter shows that the category is less, namely 72 respondents (71.3%), the good category is 29 respondents (28.7%). The social aspect parameter is in the poor category, namely 101 respondents (100%). The physical aspect parameter shows that the category is less, namely 84 respondents (83%), the good category is 17 respondents (16.8). The environmental aspect parameter is in the poor category, namely 85 respondents (84.2%), the good category is 16 respondents (15.8%) (Table 3).

The results of statistical tests in Table 4 explain that quality of life has a significant relationship with income factor (0.044) and the availability of infrastructure (0.003).

4. DISCUSSION

4.1 Relationship of Respondents' Income Factors with Patient's Quality of Life

Clients with HIV-AIDS who have high incomes will have a psychological impact. In fact, in Tulungagung Regency, the income is still <UMR, so it requires assistance from various parties. HIV-AIDS clients expect economic empowerment, especially in providing venture capital to create jobs. The economic burden felt by clients is the cost of spending on health because of the emergence of opportunistic infections. This assistance is expected to meet the daily needs of clients with HIV-AIDS.

4.2 Effect of Infrastructure Availability and Quality of Life

Easy and fast service access makes it easy for clients to check their conditions. The availability of adequate health facilities and infrastructure can support the health of clients with HIV-AIDS. The results of this study are in line with the research Nursalam *et al.* (2020) show that there is a relationship between the availability of infrastructure and Health-Related Quality of Life among HIV-AIDS clients.

Table 3. *Health-Related Quality of Life* in Patient with HIV-AIDS

Health-Related Quality of Life	**Category**	**n**	**%**
Health-Related Quality of Life	Less	15	14.9
	Good	86	85.1
	Total	**101**	**100**
Psychological Aspects	Less	72	71.3
	Good	29	28.7
	Total	**101**	**100**
Social Aspects	Less	101	100
Physical Aspects	Less	84	83.2
	Good	17	16.8
	Total	**101**	**100**
Environmental Aspects	Less	85	84.2
	Good	16	15.8
	Total	**101**	**100**

Table 4. The relationship of Respondent Characteristics with availability of infrastructure and social support *Health-Related Quality of Life*

Variable	**Logistic Regression**						**Significancy**
	S.E	**Wald**	**Sig.**	**Exp(B)**	**95% Confidence Interval**		
					Lower	**Upper**	
Income	1.634	4.048	.044	26.764	1.089	657.928	Significant
Duration of Illness	-.129	.557	.054	.879	.295	2.619	No Significant
availability of infrastructure	1.223	8.914	.003	38,549	3.506	423.827	Significant
Social support	1.319	6.855	.009	31.575	2.382	418.571	Significant

The availability of infrastructure and easy access to health service facilities is needed because it will affect the success of the puskesmas in carrying out their functions (Wahyuni, 2011). Good health services for HIV-AIDS clients are needed because they make clients healthier, more qualified and productive (Cooper *et al.*, 2017). Facilities and infrastructure are necessary factors for the realization of an action or behavior; the affordability or accessibility of health facilities will determine the Health-Related Quality of Life of clients with HIV-AIDS (Notoadmojo, 2014).

The availability of infrastructure not only covers distance, but also relates to access, which has been facilitated by KPA. Access is an important indicator of the Health-Related Quality of Life of clients with HIV-AIDS, making it easy to buy drugs and conduct counseling regarding their current condition. HIV-AIDS clients greatly benefit from the availability of adequate infrastructure to control signs and symptoms caused by a decreased immune system. Signs and symptoms experienced by clients with HIV-AIDS are associated with the emergence of opportunistic infections, as well as controlling CD4 counts. During the study, researchers encountered several limitations of the study, including: respondents from research will be more general if added, so that the impact of the research carried out can be even wider and esearch will be better if, apart from conducting factor analysis, it also provides intervention to the selected respondents.

The stage factor for access to health facilities for HIV-AIDS patients is very useful, because it depends on the control of patients undergoing ARV treatment. This study can make clients expect to improve the quality of life related to health, especially in the psychological, physical, social, and environmental aspects. Service institutions need to provide access services related to Health-Related Quality of Life, and further in-depth research is needed on how to improve HRQoL, emphasizing the aspects of service that focus on the role, effectiveness, and confidentiality of HIV-AIDS clients.

5. CONCLUSION

Income factors and availability of access have a positive relationship with the quality of life of HIV-AIDS patients. Clients with HIV-AIDS with good income and availability of access will have a good quality of life.

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