

Original Research Article

Factors related quality of life among people living with HIV and AIDS in Bulukumba

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ABSTRACT

Background: Good quality of life is a condition that must be achieved and maintained by PLHIVs. This study aims to identify factors related to the quality of life among people living with HIV (PLHIV) in the Bulukumba district.

Methods: Cross sectional study was conducted among 42 PLHIV. The samples were selected by using purposive sampling technique which was conducted for 30 days. Data was collected by using WHOQOL-HIV BREF and analyzed by logistic regression to identified factors related quality of life.

Results: Most (52.4%) of PLHIV have not good quality of life. Bivariate analysis showed that behavior ($p=0.0293$), ARV access ($p=0.0197$) and adherence ($p=0.0088$) were factors that increased quality of life among PLHIV. Adherence variable was the greatest influence to the quality of life with OR 11.06 with CI 95% 1.22-100.38.

Conclusions: Behavior, ARV access easily, and treatment adherence were factors that influence quality of life among PLHIV. Improving behavior, access ARV, and adherence are recommended to maintain quality of life.

Keywords: Quality of life, Behavior, ARV Access, Adherence, PLHIV

INTRODUCTION

Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) are most serious health problems and challenges in the world. There were 36.9 million of PLHIV in the world and 17.1 million are unaware about their HIV status. 22 million of PLHIV are not getting access to antiretroviral Therapy (ART) access including 1.8 million children.¹⁻³ Mathers and Loncar (2006) predict that deaths due to HIV and AIDS will be continue to increase until 2030.⁴

Sub-Saharan Africa is the largest contributor number of people with HIV (71%) following Asia Pacific Country (14%). In Indonesian, HIV infection reached 0.5/1000 of

population among people who aged 15-49 years, it is higher compared to others countries i.e. Myanmar, Malaysia and Vietnam which only reached 0.3 / 1000 population.^{3,5}

South Sulawesi is the second largest province of HIV Epidemic after Papua in eastern Indonesia.⁶ Bulukumba District is the third ranks of high HIV/AIDS prevalence in South Sulawesi. Number of HIV/AIDS in Bulukumba district were 188 people. Highest number of HIV cases was in Ujungbulu sub-district (51%) and the lowest was in Herlang sub-district (2%). Percentage of HIV case is highest among men (60.6%) than woman (37%) and transgender (2.4%). Risk factors of transmission are

heterosexual (58.7%), IDU's (37.1%) and pregnancy/breast milk (4.19%).

Currently, HIV patients who were treated at Bulukumba hospital only 6.7% of all HIV patients. The importance of knowledge related to ARV therapy is indispensable for HIV patients. Most of them are wrong in their treatment decision because lack of knowledge about ARV therapy.^{7,8} Many PLWHA experienced a decline in their physical health and psychological stress because fear of AIDS, stigma and discrimination. In overcoming that, WHO and UNAIDS proposed that improving quality of life was one of the main goals in providing care and support for PLHIV.^{9,10}

Factors that influenced quality of life among PLHIV such as gender, education level, occupation, knowledge, attitude, and behavior.¹¹⁻¹³ Access to ARV treatment and Adherence are still a polemic for some developing countries. The difficulty of accessing ARV treatment indirectly can decrease quality of life among PLHA.¹⁴⁻¹⁶

Previous studies reported that quality of life among PLHIV can increase after initiated ARV therapy and adherence is an important component of treatment successful among HIV patients. But in development countries, ARV access of PLWHA is still a polemic.^{17,18} The study aim was to identify risk factors related to the quality of life among HIV patients in Bulukumba District.

METHODS

Cross sectional design was conducted to analyze variables related to the quality of life among PLWHA in Bulukumba District. This study was conducted on January-February of 2018. Data was collected by using

WHOQOL-HIV BREF for quality of life. Demographic and ARV access data were collected using questionnaires which was made by the researcher and the adherence data was used by Morisky Scale questionnaire. Populations were all PLHIVs living in Bulukumba Regency were 183 people. Sample was selected using purposive sampling technique and 42 PLHIV were collected for 30 days.

Data was univariate presented in the form of frequency distribution table. Bivariate analysis by using Logistic regression to identify factors related quality of life among HIV patients and multivariate analysis to identify the variable which give the biggest contribution to the quality among PLHIV. Analysis data was conducted by using SPSS 22.00.

Ethical approval

This study was obtained by Hasanuddin University ethics committee with number: 547 / H4.8.4.5.31 / PP36-KOMETIK / 2017.

RESULTS

Univariate analysis

Table 1 shown that most (52.4%) of HIV patients have not good quality of life. Majority (66.7%) of HIV patients are male and over half (76.2%) of HIV patients were low education level. Over three quarters (85.7%) of HIV patients have jobs and most (57.1%) of them were unmarried. Over half (52.4%) of HIV patients have low knowledgeable level and majority (54.8%) of patients had negative attitudes. Most (69.9%) of HIV patients did not have risk behavior of HIV transmission and most (81.0%) of HIV patients had good ARV access. Most (78.6%) of HIV patients adhere in treatment.

Table 1: Distribution and frequency of characteristic among HIV patients at Bulukumba district.

Variable	n	F	Variable	n	F
Sex			Attitude		
Male	28	66.7	Positive	19	45.2
Female	14	33.3	Negative	23	54.8
Education level			Behavior		
High	10	23.8	Not risk	29	69.9
Low	32	76.2	Risk	13	30.1
Occupational			ARV Access		
Work	36	85.7	Good	34	81.0
Not work	6	14.3	Not Good	8	19.0
Marital status			Adherence		
Married	18	42.9	Adhere	33	78.6
Not married/divorce	24	57.1	Not adhere	9	21.4
Knowledge of HIV and AIDS			Quality of life		
High	20	47.6	Good	20	47.6
Low	22	52.4	Not good	22	52.4

F=Frequency; n=Number.

Table 2: Bivariate analysis, factors related with quality of life among HIV patients at Bulukumba district.

Variable		Quality of Life		P value
		Good	Not Good	
Knowledge of HIV and AIDS	High	11	9	0.3604
	Low	9	13	
Attitude	Positive	12	7	0.0652
	Negative	8	15	
Behavior	Not risk	17	12	0.0293*
	Risk	3	10	
ARV Access	Easy	19	15	0.0197*
	Not Easy	1	7	
Adherence	Adhere	19	14	0.0088*
	Not adhere	1	8	

*: Significant

Table 3: Multivariate factors related with quality of life among PLWHA in Bulukumba district in 2016.

Variable	OR	P value	CI 95%	
			Lower	Upper
Attitude	3.02	0.0920	0.83	10.89
Behavior	4.52	0.0480*	1.01	20.19
ARV Access	8.55	0.0570	0.94	77.97
Adherence	11.06	0.0330*	1.22	100.38

*Significant

Bivariate analysis

In logistic regression analysis (Table 2) shown that factors related quality of life among PLHIV were behavior ($p=0.0293$), access to ARV ($p=0.0197$) and adherence ($p=0.0088$).

Multivariate analysis

In multivariate analysis identified that adherence was the biggest contribution to decrease quality of life among PLHIV. Patients who adhere to treat have quality of life were twelve times higher than patients who not adhere to treat (OR=11.06, CI 95% 1.22-100.38; $p=0.0330$). Patients with not risk behavior have quality of life was four times higher than those who have risk behavior (OR=4.452, CI 95% 1.01-20.19; $p=0.0480$).

DISCUSSION

In bivariate analysis, we identified that behavior ($p=0.0293$), ARV access ($p=0.0197$), and adherence (0.0088) were factors that increased quality of life among PLHIV. Patients with not risk behavior had quality of life was four times higher than whom with risk behavior (OR 4.72; CI95% 1.07-20.89). Patients with easy ARV access have quality of life was eight times higher than those with not easy ARV access (OR 8.87; CI95% 0.98-80.18). Patients who adhere to treat have quality of life were ten times higher than patients who not adhere to treat (OR 10.86; CI95% 1.21-97.06).

All variable which $p<0.25$ include in multivariate analysis. We used stepwise regression with backward elimination to identify the last model. In multivariate analysis, we identified behavior (OR=4.452, CI 95% 1.01-20.19; $p=0.0480$) and adherence (OR=11.06, CI 95% 1.22-100.38; $p=0.0330$) were factors that influence quality of life PLHIV.

Patients with not risk behavior have quality of life was four times higher than those who have risk behavior. Previous study identified that risk behavior decreased quality of life among PLHIV.¹⁹ Behavior interventions shown alteration of knowledge and sexual practices which related with quality of life among PLHIV.²⁰ Similar result study in America shown that there was a positive relationship between behavior and quality of health.²¹

In bivariate analysis shown that patients who are easy ARV access have quality of life was higher than those with not easy ARV access (OR 8.87; CI95% 0.98-80.18). Studies were conducted in some countries reveals that quality of life among PLHIV can be increased after ARV therapy. But, ARV is still a polemic in developing countries.¹⁷ While, ARV access is a determinants related adherence among PLHIV.¹⁵ Patients who were easily access ARV services have 2 times chance of adherence to ARV treatment than they who were difficulty to access ARV.²²

Adhere to ARV treatment contributes to the improvement of HIV clinical outcomes which increase quality of life.

Moreover, quality of life also influence the adherence. People who with good quality of life have greater willingness to adhere their ARV treatment. Previous study shown that adherence and quality of life are associated with HIV viral load count, WHO clinical stage, and symptoms. Patients with low adherence are a risk of high viral load, whereas high adherence are a risk of low viral load.

Most PLHIV having behavior seeking health services when they unhealthy and it is a very harmful behavior for them. It is therefore necessary to have a clear understanding of ARV therapy benefits and side effects. ARV therapy was identified that it decreased HIV/AIDS morbidity and mortality, improved quality of life, and increased life expectancy of PLHIV.²³ Although ARV therapy not cure the illness, but ARV therapy reduced new HIV cases and prevent HIV progress to AIDS stages such as experience in developing countries in South Africa, Nepal, Cambodia and others countries.⁹

CONCLUSION

In our study, we identified that behavior, access to ARVs and adherence were factors that influence quality of life among PLHIV in Bulukumba district.

Recommendations

Reducing risk behavior, easy ARV access and adhere to treatment are recommended to increase quality of life among PLHIV in Bulukumba district.

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