

Clinical Condition of HIV Patients with Opportunistic Infection in Clinic Voluntary Counseling and Testing

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Abstract: The number of HIV infected patients in Indonesia around 190,000 to 400,00 in 2016. Opportunistic infection usually attend in late stadium of HIV infected patients and in Indonesia, majority infection with Tuberculosis and the prevalence about 5%. The aim of study is to describe the clinical condition of HIV infection patient in clinic voluntary counselling and testing (VCT). This is the retrospective study. The Population is all HIV infected patients with opportunistic infection in clinic VCT in Medan. The sample is HIV patients with OI in clinic VCT with the period of 2016-2017. Data collection from medical records at clinic VCT. Analysis descriptive data was used and showed in table distribution and frequency. Total 59 respondents were studied. Mean age is 36.3 years (SD 9.7), Male (83.1%), Bataknese (62.7%), with more than 9 years attainment of respondent's education (79.7%). There are (68.8%) of respondent have employment (78%). They come to clinic with CD4 less than 350 u/dl (67.8%), body mass index less than 23 (81.4%), Haemoglobin less than 11 (64.4%), in stadium 4 (72.9%) and receiving antiretroviral therapy not routine (52.5%). The respondent who have opportunistic infection with Tuberculosis (54.2%) and 71.2% of patients still alive.

1 INTRODUCTION

The World Health Organization (WHO) reported that 36.7 million (30.8-42.9 million) people are HIV infected worldwide and 1.0 million (0,83-1,2 million) people died of HIV-related illnesses (WHO, 2017). The World Health Organization estimates that 8.7million new cases of TB were reported in 2011 and 13% of these being co-infected with HIV. Human immunodeficiency virus and tuberculosis co-infection is a major public health problem in the world. Tuberculosis is the leading cause of mortality and morbidity in HIV infected patients. These two infections interact on each other, worsening the prognosis and increasing mortality. Indonesia is the third ranking of HIV prevalence in Asia Pacific region, covering over 75% of new infections (UNAIDS, 2017)

Based on Indonesia Ministry of Health reported that HIV cases continue to increase and have spread in 386 districts / cities. The cumulative number of HIV patients from 1987-2016 was 232,323 people and the total cumulative AIDS sufferers were 86,725 (Kemenkes RI, 2017). HIV infection poses a threat to the development of human quality and productivity in Indonesia. This is indicated by the high rate of HIV

transmission that occurs. HIV-infected patients are generally transmitted from sexual transmission. The study reported that the highest risk of HIV transmission with tuberculosis infection is transmitted from close contact person (KPAN, 2010). Another study showed that incidence of opportunistic infection in HIV patients majority in less CD4 level because have relationship with human immunity (Lubis, 2013). Therefore, opportunistic infection in HIV patients very important to estimated the prognostic of the disease. The aim of study is to describe the clinical condition of HIV infection patient in clinic voluntary counselling and testing (VCT)

2 METHODS

This is a retrospective study in clinic voluntary counselling and testing in Medan. The Population is all HIV infected patients with opportunistic infection (OI) in clinic VCT in Medan. The sample is HIV patients with OI in clinic VCT with the period of 2016-2017. Data collection from medical records at

clinic VCT. Analysis descriptive data was used and showed in table distribution and frequency

3 RESULT AND DISCUSSION

3.1 Sociodemographic Characteristic

Totally 59 HIV infected patients with opportunistic infection included in this study Mean age about 36 years (SD 9.7), Male (83.1%), Bataknese (62.7%) with more than 9 years attainment of respondent's education (79.7%). There are (78.8%) of respondent have employment as non manual worker, such as government employees or private employees, come from out of Medan city (61%), for more details can be seen in Table 1. Similarity with this study in Africa reported that elevated incidence of opportunistic infection in HIV patients in productive aged (WHO,2011). Other study in Malaysia showed that majority of HIV patients were aged between 20 and 39 years (70.4%) and male (78.2%) (Lubis, 2013)

3.2 Clinical Condition

Regarding the clinical condition of respondent, majority come to clinic with the CD4 less than 350 u/dl (67.8%), Body mass index < 23 (81.4%), Haemoglobin level < 11 g% (64.4%), in stadium four (72.9%) and receiving antiretroviral therapy not routine (52.5%). The respondent who with Tuberculosis infection (54.2%) and with status still alive (71.2%). It can seen in Table 2. Similarity with this study reported that antiretroviral used for prevention of opportunistic infection and consumption antiretroviral must routine to decrease the viral load (Moore, 2015). Non-adherence consumption antiretroviral drug is associated with a poor short-term virological response and accelerates the development of drug-resistant HIV (Safira, 2018). Majority of patient with opportunistic infection come to clinic with anemia (Lienhardt, 2015) and in late stadium (Bonnet, 2016). HIV infected patients with low CD4 cells are easier to get opportunistic infections. There are various kinds of opportunistic infections, including oral candidiasis, PCP, tuberculosis, toxoplasmosis, cytomegalo virus, kaposi sarcoma and others. Tuberculosis infection with HIV patients is common in Indonesia because TB incidence is 2nd ranked in the world

Table 1. Sociodemographic characteristic of sample

Varibles	f (%)
Mean age (± SD)	36.3 (± 9.7)
Gender	
Male	49 (83.1)
Female	10 (16.9)
Ethnic	
Bataknese	37 (62.7%)
Others	22 (37.2%)
Education	
≥ 9 years attainment	47 (79.7%)
< 9 years attainment	12 (20.3%)
Occupotional type	
Not Employment	13 (22%)
Employment	46 (78%)
Address	
Medan city	23 (39%)
Others	36 (61%)

Table 2. Clinical condition of sample

Varibles	f (%)
CD4 (u/dl)	
≥ 350	19 (32.2%)
< 350	40 (67.8%)
BMI (kg/m²)	
≥ 23	11 (18.6%)
< 23	48 (81.4%)
Hb (g%)	
≥ 11	21 (35.6%)
< 11	38 (64.4%)
Stadium of HIV	
Three	16 (27.1%)
Four	43 (72.9%)
Antiretroviral therapy	
routine	28 (47.5%)
not routine	31 (52.5%)
Opportunistic infection	
TB	32 (54.2%)
Others	27 (45.8%)
Status	
Died	17 (28.8%)
Alive	42 (71.2%)

4 CONCLUSION

The Majority of HIV patients with opportunistic infection in mean age 36 years, male, Batakese, have more than 9 years attainment of education, have employment. They come to clinic in less CD4, anemia, less BMI, in stadium four, receiving antiretroviral therapy not routine. More than half with Tuberculosis infection and still alive

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