ZIDOVUDINE CONSUMPTION AND ITS ASSOCIATION WITH ANEMIA IN PEOPLE LIVING WITH HIV/AIDS IN SEMARANG, CENTRAL JAVA

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ABSTRACT

Background: In 2017, Human Immunodeficiency Virus (HIV) cases in Central Java Province ranked 4th in Indonesia. Zidovudine (AZT) is the first-line drug recommended by the World Health Organization (WHO) since 1990 for the treatment of HIV infections, especially for developing countries. AZT has the adverse effect of suppressing hematopoiesis, causing anemia/ decreased hemoglobin (Hb) level. This study aimed to determine the effect of AZT on the risk of anemia in people living with HIV/AIDS (PLWHA) in Semarang, Central Java.

Subjects and Method: This was a cross-sectional study in Semarang, 2018. The study was carried out at 6 health service facilities, including Community Health, Dr. Kariadi General Hospital, Tugurejo General Hospital, Pantiwilasa Hospital, Sultan Agung Islamic Hospital, and Halmahera Community Health Center, for 6 months. A total of 213 adult PLWHA who received AZT therapy was selected for this study. The dependent variable was anemia. The independent variable was AZT consumption. HIV/AIDS and anemia data were obtained from medical record. The other data were collected by questionnaire. The duration of AZT was categorized as <1 year and ≥ 1 year. Hb level were categorized as anemia if Hb <12 g/dL in women and <13 g/dL in men. The data were analyzed by correlation.

Results: Out of 213 PLWHA, 138 (64.8%) were men and 75 (35.2%) women. The average age was 36.9 years. A total of 190 (89.2%) PLWHA had received AZT therapy ≥1 year and 23 (10.8%) received AZT therapy <1 year. 51 (23.9%) PLWHA had anemia and 162 (76.1%) did not have anemia. Duration of AZT consumption was correlated with anemia (r= 0.16; p= 0.02).

Conclusion: Duration of AZT consumption is correlated with anemia.

Keywords: Zidovudine, duration, anemia, HIV, PLWHA

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