

# FACTORS ASSOCIATED WITH LATE HUMAN IMMUNODEFICIENCY VIRUS (HIV) DIAGNOSIS AMONG PEOPLE LIVING WITH IT, NORTHWEST ETHIOPIA: HOSPITAL BASED UNMATCHED CASE-CONTROL STUDY

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**Background:** Early HIV diagnosis and access to treatment is one of the most effective ways to prevent its further spread and to protect the health of those living with the virus. However, delay in diagnosis is the major risk factor for uptake of and response to antiretroviral therapy (ART).

**Methods:** Institution-based unmatched case-control study design was used in this study. The study was conducted in Debre-Markos and Finote-Selam Hospitals, Northwest Ethiopia. Cases were people living with HIV who had CD4 count <350cells/mm<sup>3</sup> or WHO clinical stage III and IV regardless of the CD4 count at first presentation and controls were those who had CD4 count ≥350cells/mm<sup>3</sup> or WHO clinical stage I and II. If both criteria were available, the CD4 count was used in the study as World Health Organization recommended. A total of 392 respondents (196 cases and 196 controls) were recruited and selected systematically. The data were collected by trained nurses using chart review and interviewer administered structured questionnaire. Binary logistic regression model was used to identify the factors associated with late HIV diagnosis.

**Results:** About 95.9% of study participants provided complete response. Having no understanding, compared to having understanding, about HIV/AIDS (AOR=1.7, 95% CI: 1.08-2.79) and ART (AOR=2.1, 95% CI: 1.25-3.72), being tested as a result of symptoms/ illness, compared to being tested for risk exposure (inverted AOR =2.5, 95% CI: 1.64-4.76), and acquiring HIV through sexual contact, compared to acquiring it through other modes (AOR=2.5, 95% CI: 1.52-4.76) were positively and independently associated with late HIV diagnosis.

**Conclusions:** Unlike perceived HIV stigma, having no understanding about HIV and ART, being tested for presence of symptoms/ illness, and acquiring HIV through sexual contact were independent and significant factors for late HIV diagnosis.

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