

Full Length Research Paper

## ***Toxoplasma gondii* infection among HAART-naive HIV-positive patients and HIV-negatives in Lagos State, Nigeria**

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People with advanced HIV infection are vulnerable to opportunistic infections. Human toxoplasmosis affects immunologically impaired subjects. The burden has not been established in our setting hence the need for the study. A cross-sectional study was conducted among 840 participants (420 HIV positive and 420 HIV negative) that presented for HIV Counselling and Testing at the HCT clinic, NIMR Lagos. The samples were analysed for *Toxoplasma gondii* using specific immunoglobulin G (IgG) and Immunoglobulin M (IgM) antibody ELISA kit. Information on socio-demography and risk factors were also obtained. The relationships between *Toxoplasma* seropositivity and sociobiologic were assessed using SPSS version 20. Overall, IgG and IgM *Toxoplasma* seroprevalence was 33.8% and 10.6% respectively. IgG seroprevalence was higher in HIV positives (54.6%) than in HIV negatives (45.4%) (P=0.067). IgM seroprevalence was also higher in HIV positives (78.7%) than HIV negatives (10.6%) (P=0.00). Age (P= 0.003, OR= 0.76, CI% 0.63-0.90) was a significant predictor of *T. gondii* IgG antibody in HIV/AIDS, while HIV status (P= 0.000, OR= 0.24, CI% 0.14-0.41) was a predictor for *T. gondii* IgM antibody. High WBC is commoner in HIV positives for both IgG (P= 0.00) and IgM (P= 0.02) seropositives. Normal PCV was higher in IgM seronegatives only (P=0.00). CD4 count level of < 200 cells/ $\mu$ l was a significant predictor of Toxo. IgM seropositivity (P= 0.17, OR= 1.89, CI% 1.12- 3.18). In conclusion, active *T. gondii* infection exists among HIV positives which could form a basis for primary prophylaxis in order to prevent congenital transmission among pregnant women. Health education and primary prophylaxis is therefore recommended.

**Key words:** Toxoplasmosis, *Toxoplasma gondii*, CD4 count, HIV positives, HIV negatives.