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Seroprevalence and Determinants of Toxoplasmosis in Pregnant Women Attending Antenatal Clinic at the University Teaching Hospital, Lusaka, Zambia: A Cross-Sectional Study

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Abstract: Background: Toxoplasmosis is a neglected zoonotic disease which is prevalent among pregnant women especially in Africa. This study aimed to determine the seroprevalence and determinants of the disease among pregnant women attending the antenatal clinic at the University Teaching Hospital (UTH). Method: A cross-sectional study was employed where 411 pregnant women attending the antenatal clinic at UTH were interviewed using closed-ended questionnaires. Their blood was also tested for Toxoplasma gondii IgG and IgM antibodies using the OnSite Toxo IgG/IgM Combo Rapid Test cassettes by CTK Biotech, Inc. USA. Result: The overall seroprevalence of the infection (IgG) was 5.87%. There was no seropositive IgM result. Contact with cats showed 7.81 times the risk of contracting the infection in the pregnant women and being a farmer/being involved in construction work showed 15.5 times likelihood of contracting the infection. Socio-economic status of the pregnant women also presented an inverse relationship (showed association) with the infection graphically. However, though there were indications of the association between contact with cats, employment type as well as the socioeconomic status of the pregnant women with the infection, there was not enough evidence to suggest these factors as significant determining factors of Toxoplasma gondii infection in our study population. Conclusion: There is a low prevalence of Toxoplasma gondii infection among pregnant women in Lusaka, Zambia. Screening for the infection among pregnant women can be done once or twice during pregnancy to help protect both mother and child from the disease. Health promotion among women of child bearing age on the subject is of immense importance in order to help curb the situation. Further studies especially that of case-control and cohort studies should be carried out in the country in order to better ascertain the extent of the condition nationwide.

Keywords: determinants, pregnant women, seroprevalence, toxoplasmosis, University Teaching Hospital (UTH), Zambia

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