

# PREVALENCE AND RISK FACTORS FOR TOXOPLASMA GONDII INFECTION IN PREGNANT WOMEN FROM SINNAR STATE, SUDAN

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**T**his study accomplished during Aug' 2013 to Jul' 2014 to investigate the seroprevalence of *Toxoplasma gondii* among pregnant women at Sinnar state in Sudan. Serum samples were collected from 314 pregnant women and pretested questionnaire including risk factors administered to each patient. The serum samples were screened for anti-*T. gondii* specific IgG and IgM antibodies, using commercial detection kit. Out of 314 pregnant women, 145 (46.2%) [95% CI: 40.69-51.7] and 152 (48.4%) [95% CI: 146.47-157.53] were positive for IgG and IgM respectively, and the overall seropositivity was 222 (70.7%). There was very poor agreement between anti-*T. gondii* IgG and IgM results ( $\kappa=0.531$ ). Higher prevalence was observed in 21-30 years old group than other age groups, but there were no significant difference between age groups and IgG positivity. While significant association observed among IgM positivity and age group ( $P=0.048$ ). IgM positivity was significantly associated with cat ownership ( $P\text{-value}=0.006$ ) and also with history of eating unwashed vegetables ( $P=0.021$ ). The reactivity to IgG was in putative association with history of abortion ( $p=0.04$ ). The majority of pregnant women were secondary educated 113 (35.99%), educational level was significant  $p\text{-value}=0.000$ , 0.018 with both IgM and IgG respectively. The residence, trimester of pregnancy, eating raw meat, drinking unboiled milk, working as a peasant and dog ownership, these risk factors showed no statistically meaningful results  $p\text{-value}>0.05$ .

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