Seroprevalence of Cytomegalovirus Infection among Pregnant Women Accessing Antenatal Care in Federal Medical Centre, Keffi, Nigeria

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Abstract

Cytomegalovirus infection in an immunocompromised state like pregnancy is of public health significance. It is the leading cause of congenital infections leading to disabilities in children that include severe sequel like hearing loss, blindness, mental retardation and even fetal death. This study was therefore aimed at determining the seroprevalence of CMV infection among pregnant women accessing antenatal care in Federal Medical Centre, Keffi. The sera from consenting participants were screened for anti-CMV IgG antibodies using Enzyme Linked Immunosorbent Assay (ELISA) (Cortez Diagnosis, Inc. USA) according to the manufacturer’s instructions. Their socio-demographic information was obtained. Pearson’s Chi-Square test was used for assessing the association of risk factors with the infection. Of the 200 participants, 56.6% were anti-CMV IgG positive. Among those with a history of blood transfusion, 66.6% were positive while it was 55.7% among those that had never been transfused. The prevalence of infection when stratified by participants’ level of education was highest among those with primary education (65.0%) and lowest among those that had secondary education (51.5%). There was higher prevalence among married women (58.1%) than divorced women (40.0%). In relation to age, the highest prevalence was recorded among those aged less than 20 years (63.1%) while the least was among those aged more than 41 years. Women in their first trimester had the highest prevalence of infection (66.7%) while the lowest was (54.9%) among those in their third trimester. Prevalence with respect to parity was higher among nulliparous women (78.9%) than women that had more than 5 children (35.0%). Also urban women had a lower prevalence (55.3%) than rural women (85.0%). There was no statistically significant association between CMV infection and socio-demographic factors studied. This study reported a very high burden of CMV infection among pregnant women. This implies the virus is highly endemic in the study area. There is therefore an urgent need for intervention that can reduce the substantial burden of this often overlooked infection. It is advocated that all women should be screened at the point of registration for antenatal care. And women of child bearing age should be educated on transmission prevention and control strategies of CMV infection.

Presenter Information

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