Seroprevalence of Cytomegalovirus antibodies in pregnant women, Benue state, Nigeria

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Cytomegalovirus (CMV), a member of the herpes family, belongs to a group of viruses referred to as the TORCH complex comprising (Toxoplasmosis, Rubella, Cytomegalovirus and Herpes Simplex). Known to be frequently transmitted to developing fetus, it remains one of the leading causes of congenital viral infections. Although the infection has been detected in Nigerian neonates, its awareness is limited particularly in a growing metropolitan city like Makurdi, Nigeria. In this study, the prevalence of CMV antibodies and their association with some socio-demographic factors in pregnant women was evaluated. Pregnant women (N=375; age range = 15 to 50 years) attending ante-natal clinic in different hospitals in Makurdi were screened for the infection. Five-ml venous blood was collected from each participant for serological studies, and structured questionnaire was used to obtain socio-demographic data. Serum samples were assayed using ELISA technique. The overall prevalence of anti-CMV IgG-antibodies was 93.3% (n=350) and was 3.5% (n=13) for anti-CMV IgM-antibodies. Prevalence of the anti-CMV antibodies was significantly associated with gravidy and marital status (P<0.05): the seroprevalence of CMV antibodies was higher in women who have had more than one pregnancy. The prevalence of anti-CMV IgG antibodies was highest (100%) in older pregnant women aged 41-50 years, but was lowest (85.0%) in younger ones aged 15-20 years. Risk factors for the disease such as history of blood transfusion, scarification, and multiple sexual partners were important, even though not statistically significant (P>0.05). Women of child-bearing age in the growing metropolitan city of Makurdi, Nigeria need to be educated on precautionary measures that will prevent cytomegalovirus infection.

Biography
Ebele U Umeh got his Ph.D. from the University of Nigeria, Nsukka. Presently she is a Professor of Microbiology and lectures at the University of Agriculture, Makurdi, Nigeria. She is a member of the University Senate and University Senate Business Committee. She has headed a Department in her University. She supervises Masters and Doctoral research studies in her University, and is an external examiner and visiting lecturer to a number of universities. Some of the courses she teaches include bacteriology, medical microbiology, food microbiology, industrial microbiology, microbial genetics, etc. She has published articles in peer reviewed local and international journals.

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