

Abstract

NMA/AGSM/2022/OBGYN/005 - Sero-Prevalence and Risk Factors for Rubella Infection in Pregnancy in Port Harcourt, Nigeria

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Abstract

Background: Rubella infection in pregnancy is of major public health significance because of its teratogenic effects and adverse pregnancy outcomes. Infection during pregnancy can lead to miscarriage, prematurity, intrauterine growth restriction, low birth weight, intrauterine foetal death, and the birth of infants with Congenital Rubella Syndrome (CRS).

Methodology: The study was a longitudinal survey of 450 antenatal attendees at the University of Port-Harcourt Teaching Hospital (UPTH), who were followed up till delivery to assess neonatal IgM prevalence and perinatal/neonatal outcomes. Plasma samples from the participants were tested for anti-rubella IgM and IgG antibodies using the Accu Diag™ Rubella IgM and IgG ELISA kits at the UPTH Medical Microbiology laboratory. A proforma was used to obtain socio-demographic information and the presence of risk factors.

Results: The prevalence of the maternal anti-Rubella IgG and IgM antibodies were 93.5% and 0.5% respectively. The prevalence of neonatal IgM antibodies was zero. There were no statistically significant risk factors for Rubella infection identified in this study. There was no significant association between perinatal and neonatal outcomes with maternal rubella status.

Conclusion: The findings of this study showed that the prevalence of anti-Rubella IgG in our women was high and that of anti-Rubella IgM was low. Hence the natural immunity level against Rubella among our women is high. Nonetheless, this study has also shown that there is still a cohort of women who do not have this natural immunity and are at risk of Rubella infection in pregnancy and congenital Rubella syndrome and its sequel.

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How to cite this article: Amadi SC, Oboro IL, Bassey G, Enyindah CE, Olobuah AC, Okpani AOU. Sero-Prevalence and Risk Factors for Rubella Infection in Pregnancy in Port Harcourt, Nigeria. Niger Med J 2023;64(1):143.

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