Prevalence of Rubella-specific IgG Antibody in Non-immunized Pregnant Women in Maiduguri, North eastern Nigeria

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SUMMARY

The prevalence of IgG antibody specific to the rubella virus was assessed in 207 consenting pregnant women. The women were in the age range of 14 to 40 years (mean 25.8 years) and parity range of 0 to 8 (mean para 4), in their first and second trimesters of pregnancy. All attended the antenatal clinic of a tertiary health facility (University of Maiduguri Teaching Hospital) in northeastern Nigeria.

Of the 207 serum samples tested, 112 (54.1 %) were positive for rubella IgG antibody. In this area therefore, the proportion of susceptible pregnant women to rubella virus is up to 46 %.

The results from this study also indicated that with increased maternal age the percentage of immune women increased significantly (P=0.04382) from 23.8 % in the 14 to 19 years age group to 74.4 % in the age group of 30 to 40 years.

There was again a gradual increase in rubella seroprevalence from 43 % amongst primigravidae to 59 % and 78 % in multiparous and grandmultiparous women respectively.

The pregnancy outcome was normal in 27 % of the women studied, with miscarriage occurring in 24.6 % and 24.2 % each had a premature delivery and stillbirth. There were 30 (58.8 %) miscarriages, 27 (54 %) premature deliveries and 30 (60 %) stillbirths, with no clinically detectable malformations in 25 (44.6 %) of all the deliveries from the immune women. There is therefore, an increase in the number of rubella immune women with each of the pregnancy outcomes compared to the non-iminune ones. Hence, the need to protect children of these susceptible women from contracting congenital rubella and its sequelae by including routine rubella vaccination of all women of childbearing age in the current programme on immunization.

Key words: rubella, IgG antibody, pregnancy, northeastern Nigeria

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