Summary & conclusion

The clinical and epidemiological importance of rubella relates to its teratogenic effects . When this disease occurs in children , adolescents and adults , it is usually benign . On the the other hand , these age groups are source of disease transmission to pregnant women (Tapia **et al,** 1992) .

The chance of foetal infection causing congenital effects is 50 % in the frist month of gestation , 25 % in the second month and 10 % in the third month . The risk is reduced to approximately 5 % in the second and thrid trimesters (Peckham , 1972) .

Effects of congenital rubella include congenital heart disease , cataract or chorio retinitis , deafness , hepatosplenomegaly and thromhocytopenic purpura (Cooper **et al.** 1965) .

In the present study , a serologic survey was conducted for the detection of antirubella IgG and IgM in girls 10 - 14 years old from Kalyubia Governorate . One hundred and seventy five serum specimens were tested by enzyme-linked immunosorbent assay (ELISA) technique . Quantitative and qualitative determination of IgG antibodies and qualitative determination of IgM antibodies to rubella virus , were performed . It was found that the percentage of seropositivity for IgG antibodies was 64 % regarding the cut off control 10 IU/ml .

The absence of IgM antibodies in serum samples containing IgG antibodies suggests a past exposure to the virus.

Seronegative children constitute a susceptible group who can contribute to the spread of rubella in the community . The measles , mumps and rubella (MMR) vaccination programme can reduce the chance of infection , but increased efforts must be made to vaccinate susceptible females before marriage or pregnancy in order to prevent rubella embryopathy.

We concluded that mandatory screening of all girls for rubella antibodies prior to marriage should be practised and the need of rubella vaccination for protection of seronegative susceptibles is emphasized . Egyptian health authorities should evaluate the policy of integration of rubella vaccine into the expanded programme of immunization . The cost of primary prevention would be little compared with expense and effort of caring for patients with congenital rubella syndrome .