Rubella seroprevalence in an unvaccinated pregnant population in Malatya, Turkey

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Background & Objectives: Controlling congenital rubella was, and still is, one of the prime targets of the World Health Organization. We wanted to define the rubella seroprevalence in pregnancy in Malatya, Turkey. This data would assist policy makers to decide when to implement rubella vaccination in fertile population.

Study design: A cross-sectional interview survey and blood sampling was conducted among pregnant women living in Malatya province in 6 months together with a follow-up visit.

Methods: Stratified probability proportional to size sampling methodology. A total of 824 pregnant women from 60 clusters were enrolled. After obtaining informed consent, participants' socio-demographic and fertility characteristics were collected by interview questionnaire. All the tested women had no history of rubella vaccination. Anti-rubella IgM and IgG titers were studied from blood samples by micro ELISA.

Results: Of the 803 samples tested for rubella antibodies, 753 cases (93.8%) had anti-rubella IgG positivity, indicating a past infection. Five of the pregnant women (0.6%) had both anti-rubella IgM and IgG positive results, suggesting a recent infection. The remaining 45 women (5.6%) were seronegative for both antibodies. Seroprevalence was not associated with age or urban/rural residency. All the five anti-rubella IgM positive women were in the second trimester of pregnancy.

Conclusions: As 5.6% of pregnant women were susceptible to rubella during pregnancy, and five of them had already had a recent infection, immunization efforts should be directed at earlier ages like infancy or adolescent period.

Biography

Metehan Özen was born in Istanbul in 1969. He graduated as pediatric infectious disease specialist in 2004 and became full Professor in 2012. He was the consultant of Ministry of Health for Avian Influenza outbreak. He is interested in vaccines and probiotics. He published more than 25 international and 50 national articles. He is the editor of "Probiotics and Prebiotics for Health: Untold Story" and the editor of the first Turkish journal (quarterly) "Probiotic-Prebiotic Chronicles". He performed numerous presentations on vaccines, probiotics, pediatrics, infectious diseases and ornithology in local/national/international meetings. He is still on advisory/editorial board of some pediatric, infectious and probiotic journals.

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