

### Investigation of varcella zoster virus seroprevalancation in our region (Turkey/ Gaziantep)

Merve Sakkal, PhD student and Tekin Karsilgil, Prof.Dr  
Gaziantep university, Turkey

**Statement of the Problem:** Varicella (chickenpox) is a common disease that can be prevented by vaccination, caused by a virus of the herpesvirus family, varicella zoster virus (VZV) which is double stranded DNA virus. Varicella is highly contagious, and infection is almost universal especially in the pre-vaccine era. Varicella is a mild disease that occur in early childhood, but complications can occur sometimes. The risk of complications can increase with age. After primary infection, varicella becomes latent in dorsal root and cranial nerve ganglia. Reactivation of the latent virus due to immunity problems leads to herpes zoster (shingles), a disease which affects dermatomes corresponding to the site of viral reactivation.

**Methodology & Theoretical Orientation:** Gaziantep research hospital central laboratory was chosen as the study area. Before starting this study, T.C. Permission was obtained from Gaziantep University Faculty of Medicine Ethics Committee with the decision dated 30.04.2021 and numbered 2021/92. There were 96 Turkish and foreign nationals living in Gaziantep and Kilis provinces that included in the study. Volunteers ages around 18-70 were included in the study. Varicella-Zoster ELISA IgG/IgM (Vircell Microbiologists) kit was used in the study. In our study, the data were computerized using SPSS (Statistical package for the social science) 21.0 program. in the results, the Chi-square test was used to compare the rates of two independent groups. Statistical  $p < 0.05$  was considered significant.

**Findings:** In this study, There were 47 (49%) were female and 49 (51%) were male. Of the volunteers included in the study, 92(95.8%) were VZV IgG positive, 4 (4.2%) VZV IgG negative, 1 (1.0%) VZV IgM positive, and 95 (99.0%) VZV IgG negative. It was observed that VZV IgG positivity was higher in women than men, but the difference between the groups was not statically significant. There was no significant difference in terms of VZV IgG positivity according to age. There was no significant difference in terms of VZV IgG positivity according to the presence of chronic disease or not. Although VZV IgG positivity was higher in Kilis residents (foreign nationals), but there was no significant difference between those residing in Gaziantep (Turkish people) and VZV IgG positivity.

**Conclusion & Significance:** VZV IgG positivity was found to be significantly higher in those who stated that they had chickenpox previously or were vaccinated ( $p = .001$ ). It was observed that there was a significant difference ( $p = .030$ ) in terms of VZV IgG results between those who had no siblings and those who had 1-3 siblings and 4 or more siblings. As a result of the analysis, a significant difference was found between those with 1-3 siblings and those with 4 or more siblings in terms of VZV IgM results.