

TITLE: SEROPREVALENCE OF *VARICELLA ZOSTER* VIRUS AMONG UNIVERSITY STUDENTS IN THE AGRESTE REGION OF PERNAMBUCANO

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ABSTRACT:

Varicella, popularly known as chickenpox, is an infectious-contagious disease that is transmitted through the respiratory tract. Adults infected with the *Varicella zoster* virus (VZV) may represent a greater burden, reflecting a high number of hospitalizations, secondary complications, and death. This study aimed to determine the seroprevalence of VZV amongst Biomedical Sciences undergraduates in the Agreste region of Pernambuco. A descriptive cross-sectional study was carried out from August 2017 to February 2018. Biomedical Sciences students from Ascens-Unita completed a questionnaire regarding biological and infectious information. Afterward, 3ml of serum was collected and tested for IgG and VZV using a Serion Elisa classic kit. Data were stored and evaluated in Microsoft Excel®, and the simple percentage analysis was performed. A total of 92 subjects were evaluated. The mean age was 22,06 years old; the minimum age was 18 and the maximum was 43 years old. Most students were female; ages between 19 and 25 years old; claimed to have already had chickenpox; attested not knowing if they have been vaccinated and have never done serology for VZV. The seroprevalence of VZV was 85.87%, but it was observed that 10.87% of the students did not present antibodies to the virus. There is a lack of data regarding the seroprevalence of VZV among university students. The seroprevalence herein found was slightly lower than the one specified in another study (94.18%) conducted with individuals from Rio de Janeiro, Manaus, Fortaleza and Porto Alegre within an age group between 16 and 40 years old. In this age group, the disease is more serious in relation to clinical manifestations and serology is not usually performed in daily practice, therefore, individuals do not know their immune status. This corroborates with the findings in the present study, in which 81.53% of the surveyed students had not undergone previous immunodiagnostic procedures. Seroprevalence of VZV was high, being in accordance with most studies. This information reflects that a great part of the evaluated students did not know about their immunological status. According to the results, it was possible to verify the need for some of the researched students to take the vaccine as a prophylactic measure.

Keywords: *Varicella zoster*; Students; Elisa; Antibody.