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## USAGE OF PROTECTION METHODS FROM HEPATITIS B VIRUS INFECTION IN HEALTHCARE WORKERS IN POŽEGA –SLAVONIA COUNTY

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### Abstract

**Introduction:** The infections who are transmitted by blood are public healthcare problem in the world but also in Croatia according the number of patients and mortality, the costs of treating the disease, the long absence from work, and the chronic consequences of the disease. During contact with blood of infected person healthcare professionals are at risk of infection so it is necessary to use protective equipment and follow the work protocols.

**Objective:** To examine whether demographic variables such as age, gender, education level and workplace are associated with the implementation of measures to prevent hepatitis B virus infection. To examine the association of variables related to individual risk perception with the implementation of measures to prevent hepatitis B virus infections.

To identify which group of variables related to protective measures most contributes to the prediction of hepatitis B virus infection.

**Methods:** In the survey there was 540 health professionals of different occupational profiles who participate in health care delivery in the Požega-Slavonia County. The survey was conducted in the period from 1.1.2018. to 15.6.2018 at the General County Hospital Požega, the General County Hospital Pakrac, Specialized Hospital for Medical Rehabilitation Lipik, The Nursing Home Požega, Health Center of Požega-Slavonia County and High School Pakrac. We used descriptive data such as number and percentages for categorical and arithmetic means, standard deviation and range for continuous variables. Chi-square test, Pearson's correlation, Point-biserial correlations were used from statistical tests.

**Results:** It was found that there was a low but significant negative correlation between the age of the subjects and the use of the mask ( $p = 0.005$ ), age and use of glasses during interventions in which is possible contact with the patient's blood and body fluids ( $p = 0.008$ ), age and perception of individual risk of hepatitis B virus infection ( $p = 0.006$ ). Secondary medical students rarely wear a mask or only when they know that a patient is infected ( $p < 0.001$ ) also they rarely wear it in a hospital or nursing home. Health professionals at Specialized Hospital for Medical Rehabilitation Lipik never wear a mask for interventions at risk of hepatitis ( $p < 0.001$ ) as statistically significantly.

**Conclusion:** Regardless of the existence of work protocols, it has been established that health professionals do not fully adhere to them. Rarely wearing protective masks and glasses by healthcare professionals are significant predictors of potential hepatitis B virus infections. Health care professionals need to be more aware of the importance of strictly following safety protocols.

**Key words:** Hepatitis B virus, protection measures, healthcare workers