

OP/05 Assess hepatitis B surface antibody titer and its influencing factors, among Hepatitis B vaccinated nursing staff in Teaching hospital Jaffna

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INTRODUCTION: Though the protective vaccine is available for Hepatitis B infection, it fails to mount adequate immunity in some population.

OBJECTIVES: The aim of this study is to describe Hepatitis B surface antibody titre and its influencing factors, among hepatitis B vaccinated nursing staff in teaching hospital Jaffna.

METHODS: It is a descriptive cross sectional study which covers the analysis of antibody titre of hepatitis B vaccinated nursing staff, and assesses the influence of host related, vaccination related and socio behavioral factors. Study population were selected by simple random sampling. Collected blood samples from the study population were tested for anti HBs titre using a qualitative ELISA. Data regarding factors known to influence on antibody titre were obtained by using a self-administered questionnaire.

RESULTS: Out of 152 respondents 55.9% were in the age group of 20-29. Among the participants 57.9% were female. In participants those who were vaccinated 3 doses of Hepatitis B 7.73% failed to develop protective immunity. Meanwhile, two doses received population and one dose received population 10.63% and 20% failed to mount protective antibody respectively. 3 doses with booster dose received population had 100% protective immunity after hepatitis B vaccination. Co-morbidity (Diabetes mellitus, Hypertension, Bronchial asthma) had no significant association with hepatitis B protective immunity. Participants who were treated for chickenpox infection had 75% failures to develop protective immunity.(p=0.02). Pregnancy statistically significantly impair the protective immunity (p=0.03) among two doses vaccinated individuals. Smoking and alcoholism significantly influence in hepatitis B antibody titre of 3 and 2 doses received participants with regular and occasional behavior.

CONCLUSION: Health care workers should be ensured for their protective immunity level. Avoidance of smoking and alcoholism helps to develop adequate immunity after vaccination. Pregnancy impairs the protective immunity in two doses participants.