

Investigating the Application of the Principles of Standard Precautions to Prevent HBV Infection

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How to use standard precautions by health care workers is important. This study has been conducted to assess the use of standard precautions to prevent HBV infection before, during and after exposure to risky job.

The study was descriptive and 135 healthcare workers participated in it. Two-Step clustering method was used. Data was collected with the checklist containing 60 questions in 3 areas of subtle observation of infection control standards before, during and after operating risky occupation, with which performances of the people were recorded through subtle observation in 7 factors (the decontamination of surfaces and instruments, injection of vaccination, hygiene practices, standard precautions components, injection safety observance, immediate report of the incident to authorities and emergency first aid) and their scores were evaluated as good, relatively good and inappropriate and χ^2 , correlation and Friedman tests and SPSS-11 were used for data analysis.

The results indicated that the highest percent of target group was female (78.5%), 43% were aged 30-39 years, 87.11% were university graduates, 24.40% had 11-15 years of experience. All of 45.20% and 49.60% had been trained in standard precautions before and after start of work, respectively. Employees were in good condition to apply the principles of standard precautions in 3 areas before, during and after exposure to the job (41.03%, 38.65% and 35.19%, respectively). In observation turns, there was significant difference between the mean scores of preventive behaviors in 3 domains and distribution of the performance of employees had significant correlation with their job ($p < 0.05$). Generally, the lowest performance (factor 1, domain 1) associated with the decontamination

(factor 2, domain 1), respectively and the highest level associated with the hepatitis B vaccine.

Applying standard precautions to 38% of the staff was good. But since more than half of the employees had relatively good and inappropriate performance, these principles are expected to be 100% after a programmed training. In this study and other similar studies, there is need for standard precautions [1-3].

It can be concluded that despite improvements in the health care system, there is also the risk of infection with hepatitis B virus due to lack of knowledge and desirable performance. The study specified that correct knowledge, continuation of safe behavior and adherence to standard precautions by those dealing with the health centers will not be possible but with the continuous training according to the new guidelines.

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