Hepatitis B vaccination coverage rate and its barriers among nursing students as high risk group to percutaneous injuries Khartoum, Sudan 2016

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**Background:** Hepatitis B is a global health problem which can cause lifelong infection, cirrhosis, liver cancer, liver failure, and death. According to WHO there is more than 350 million suffering from hepatitis B chronic infection worldwide. Sudan is a country with high HBV endemicity, according to CDC the prevalence of HBV chronic infection was reported to be (5% to 6%) in the general population, and 26% in the hospital outpatient. Hepatitis B is an important occupational hazard for health care personnel; however, it can be prevented by the safe and effective vaccine with success rate of 95%. This study aimed to evaluate the hepatitis B vaccination coverage, barriers of complete vaccination, and immunization status after the vaccination among nursing students in Khartoum locality, as a high risk group to percutaneous injuries.

**Methods:** Cross sectional institutional based study conducted among nursing students in three nursing schools in Khartoum locality with sample size of 261 using stratified random sampling. Data collection was carried out using pretested self-administered questionnaire.

**Results:** 80% of respondents were females and 12% were males with mean age of 22 years. More than 80% knew that percutaneous injuries carry the risk of HBV transmission, about 23% of the participant suffered a needle stick injuries, however Only 41% of the students were fully vaccinated and only 10% of them checked the anti-HBs Ag titer after vaccination. The major reasons reported by the participants were being busy and unavailability of the vaccine in a nearby facility where they searched.

**Conclusion & Recommendations:** The vaccination rate was found to be low, the awareness of importance of hepatitis B vaccination should be raised, complete hepatitis B vaccination should be provided to all nursing students, and good response to the vaccine should be evaluated before starting clinical training.

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