

Awareness of HBV among undergraduate students and their vaccination status at Pakistani medical university

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INTRODUCTION

Hepatitis B virus (HBV) is a potentially life-threatening infection and a well-recognized occupational hazard for health-care workers including medical students.

OBJECTIVES

The objective is to assess the knowledge and awareness about hepatitis B infection, the status of hepatitis B vaccination, and the reasons for not getting vaccinated among the first and final year medical students.

MATERIALS AND METHODS

A cross-sectional study was conducted at civil hospital Karachi in 2009. The total number of students enrolled at the time of the study in their first medical school year was 120 students and 80 students in their final medical school year. The invitation to complete the survey was sent to all the first-year medical students. The overall response was 64 students from the first year students. Afterward, a proportionate stratified sampling was taken from the final year medical students. Therefore, the overall response from both the first and final year medical students was 128.

All students were interviewed using a structured self-completed questionnaire consisting of 20 questions. The questionnaire consisted of five sections: (1) demographic and academic characteristics; (2) HBV knowledge; (3) HBV prevention; (4) HBV-related personal health history; (5) perception of HBV vaccine and vaccination status.

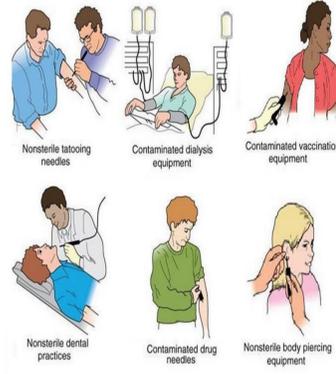
The language of instruction was English. All the subjects were interviewed, questions were explained and translated for all the students included in the study; and anonymity was assured. Before the distribution of the questionnaire, the objectives of the study were explained to participants, and they were informed that their participation was voluntary.

The study method and data collection procedures were explained in Urdu (national language) as well and then their consent was taken. Data was coded, entered, and analyzed using the Statistical Package for Social Science (SPSS) version 20.0. Ethical approval of this study was received from the ethical review committee of the hospital in May 2009.

ACKNOWLEDGEMENTS

I thank all the faculty members and students of Dow university and Civil Hospital Karachi

Mode of Transmission of HBV



Images source: www.google.com

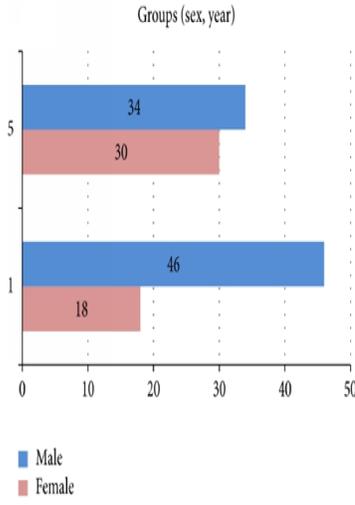


Figure 1. Age groups of the study sample in the first- and fifth-year medicine students.

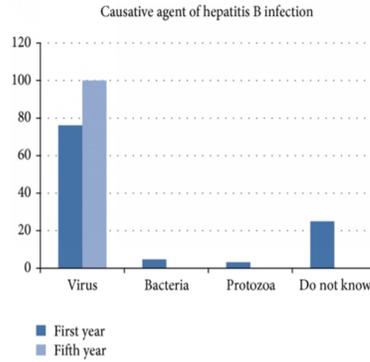


Figure 2. Student's knowledge about the causative agent of hepatitis B infection.

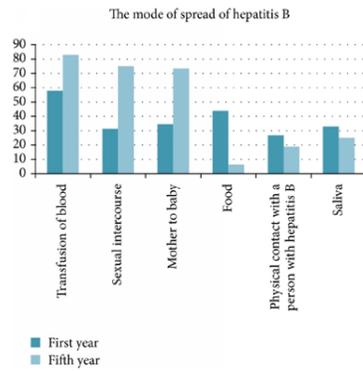


Figure 3. Student's knowledge about the risk factors of hepatitis B infection.

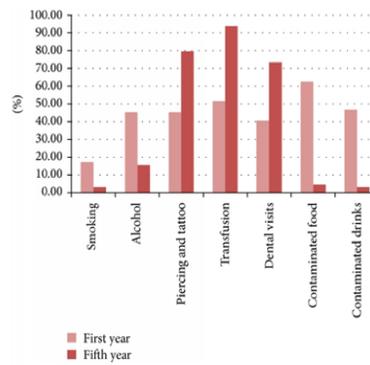


Figure 4. Student's knowledge about routes of transmission of hepatitis B virus.



RESULTS

A total of 128 students responded to the questionnaire, 80 (62.5%) males and 48 (37.5%) females. The age of the participants ranged from 17 to 25 years (mean: 21.4).

The study revealed that, out of 128 participants who completed the survey, around 92% of subjects are aware of hepatitis B infection, yet unaware of the symptoms, which is significantly associated with the academic level of the students.

The symptoms were well understood by only 37 (57.81%) and 52 (81.25%) of the first and final year medical students, respectively. Their knowledge about the mode of transmission was also lacking with 52 (40.62%) students unaware of all modes of HBV transmission.

Furthermore, out of the 128 subjects, only 43.75% of the students had taken the hepatitis B vaccine and 26.56% do not know their vaccination status. Only 16.4% of all the students have gone through the test of HBV infection. Moreover, 12.5% of the individuals did not know that receiving the hepatitis B vaccine and avoiding the reuse of needles are two of the most efficient ways to prevent HBV transmission.

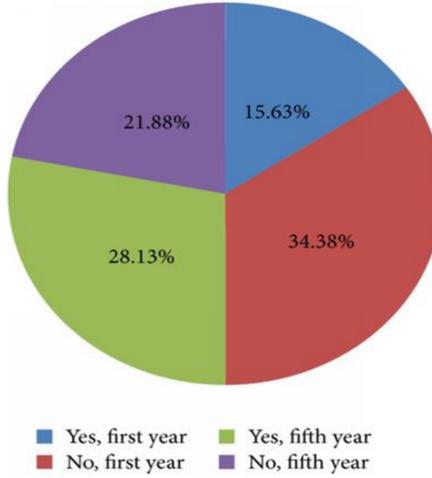


Figure 5. Number of students who received the hepatitis B vaccine.

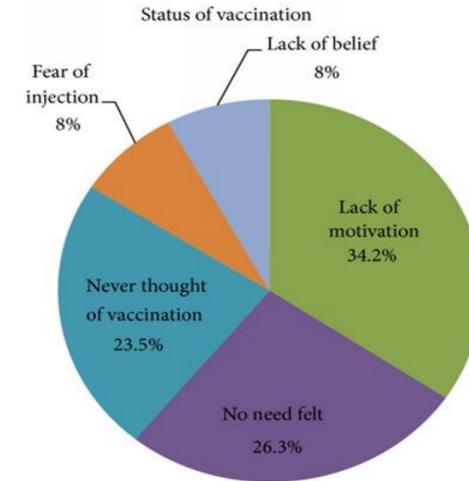


Figure 6. The reason behind not being vaccinated against hepatitis B virus.

CONCLUSION

This study showed that the first year medical students have poor knowledge and lack of awareness about hepatitis B, its routes of transmission, risk factors, and modes of preventions compared to the final year medical students. Similarly, most of the first year students 63 (98.44%) were not vaccinated against hepatitis B, which makes them vulnerable to the disease. Interestingly, the main reason for not being vaccinated is the lack of motivation (34.2%). However, the survey also shows that most of the students (92%) were aware of hepatitis.

One important realization from this study is that health education is the foundation of safe medical practice.

Another suggestion for a new initiative could be providing free HBV vaccines to all the non vaccinated students upon their entry. Future studies may be directed at measuring the hepatitis B antibody titers and evaluating the response to the hepatitis B vaccine among the undergraduate medical students.

Conflict of Interests

I, Dr. Jaffer declare that there is no conflict of interests regarding the publication of this paper.