

Detection Of Ns1 Antigen and Antibody against Dengue Virus Infection by Rapid Immuno Chromatographic Test at a Tertiary Care

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Abstract—Hepatitis B (HB) is a serious infection that affects liver and caused by Hepatitis B Virus (HBV). It is easy to be transmitted from one infected individual to another by blood to blood contact, mother to child and unprotected sexual intercourse. Health care personnel especially medical student represent high risk population for HBV infection. Objectives: To compare knowledge, practice about transmissions and prevention of HB infection between paraclinical and clinical Medical Students. Materials and Methods: The study was conducted at SNMC, Bagalkot from December 2014 to January 2015. A cross sectional study was conducted among 300 medical students a self structured questionnaire of 15 different statements concerning basic knowledge of HBV, its transmission, risk behaviors, diagnosis, treatment and prevention, were distributed. Results: Good knowledge score in clinical students (93.33%) followed by 90.0 % in paraclinical students. Few students had acceptable knowledge score (6-11), 10.0% in paraclinical and 6.67% in clinical students. The vaccination rate was highest among clinical students (54.67%) as compared to paraclinical students (46.67%). More over vaccination rate was highest among those who had good knowledge score. Conclusion: This study indicates that lack of awareness about HB, its route of transmission and modes of prevention among the medical students entering into the profession.

Keywords: Hepatitis B Virus, Transmission, Prevention and Vaccination.

INTRODUCTION

Hepatitis B virus (HBV) is one of the most common viruses in the modern world; about 360 million people are chronically infected with HBV. These chronically infected persons are at higher risk of death from HBV-related liver cancer or cirrhosis by approximately 25%.^[1]

HBV is a well-known occupational hazard of health care workers and they are considered to be at substantial risk for acquiring or transmitting the virus because of the occupational contact with blood, blood products

and other body fluids.^[2] Knowledge regarding HBV and safety precautions is needed to minimize the health care settings acquired infections among health personnel.^[3] Health care personnel should have complete knowledge of HBV infections, importance of vaccinations and practice of simple hygienic measures apart from that of specific protective measures. Medical students being part of the health care delivery system are exposed to the same risk as other health care workers when they come in contact with patients .They are the first level of contact between patients and medical care.^[3,4] Therefore this study was conducted to assess the knowledge of medical students regarding hepatitis B infection and its transmission and prevention.

MATERIALS AND METHODS

A cross sectional study was conducted among undergraduate Paraclinical and Clinical Medical Students of S Nijilingappa Medical College, Bagalkot from December 2014 to January 2015. A total of 300 randomly selected students, from paraclinical and clinical medical students, were invited to participate in the study. A specially designed questionnaire was used for data collection. The students were asked to answer each question with Yes or No. Each correct answer was given a score of 1 while a wrong answer was given a score of 0. Students knowledge was classified to three levels according to the total score obtained; a total score of 0-5 was regarded as poor knowledge, 6- 11 as acceptable knowledge and 12 and above as good knowledge.

RESULTS

Good knowledge score more in clinical students (93.33%) followed by 90.0 % in paraclinical students. Few students had acceptable knowledge score (6-11), paraclinical (10.0%) and 6.67% in clinical students [Table No: 1]. The vaccination rate was highest among clinical students (54.67%) as compared to paraclinical (46.67%)

[Table No: 2]. Majority of the students were not fully vaccinated against HB (49.33%), which makes them

vulnerable to the disease and also vaccination rate was highest among those who had good knowledge score.

Table: 1 Distribution of knowledge score between Paraclinical and Clinical Medical Students (n=300).

Study Group	Knowledge Scores					
	Poor (1-5)		Acceptable (6-11)		Good (≥ 12)	
	No.	%	No.	%	No.	%
Paraclinical students	Nil	Nil	15	10.0	135	90.0
Clinical students	Nil	Nil	10	6.67	140	93.33

DISCUSSION

Health care providers especially physicians and medical students are always in direct contact with patients, during blood transfusion and surgical operations in their practices, so they are vulnerable to the acquisition of infection.^[5] Assessing people knowledge is a useful step to assess the extent to which an individual adopting good practice.^[1] Only a low proportion of study participants (14%) had good knowledge about HBV.^[1] In contrary, two other studies reported a high proportion of medical students and health care workers having good knowledge about HBV, 86.7% and 49.3% respectively.^[6,7] Vaccination against HBV infection can prevent the disease and low proportion of the students (50.67%) had received HBV vaccine in our study as observed in another study (45%).^[1] The present study HBV vaccination rate significantly higher among clinical students (54.67%) as compared to paraclinical medical students (46.67%). In one study HBV vaccination rate was significantly higher among clinical students (68%) than paraclinical students (22%).^[6] This finding was in disagreement with another study where 84 % of the medical students in the paraclinical students were completely vaccinated for HBV as compared to 60% of the clinical students.^[8]

This study indicates that lack of awareness about Hepatitis B virus infection, transmission and its prevention among the medical students entering into the medical profession.

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