

Practices among Patient's Attendants towards Hepatitis B Prevention at a Tertiary Care Hospital, Lahore

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ABSTRACT

Aim: To know about different practices opted by patient's attendants for the prevention of Hepatitis B at a Tertiary Care Hospital, Lahore

Study design: Descriptive cross-sectional study

Place study: Services Hospital, Lahore

Methods: 377 patient's attendants who accompanied patient for more than two days were included. Data was collected using a structured pretested questionnaire. Data was entered and analyzed in SPSS 17 statistical package. Data was presented in the form of tables.

Results: Among 377 participants, who responded to the questionnaire, majority were between the ages of 26-35 with male to female ratio of 3:1. Regarding practices, majority of participants were having poor practices for the prevention of Hepatitis B.

Conclusion: Patient's attendants who accompany patients in medical wards were having poor practices towards Hepatitis B prevention.

Keywords: Hepatitis B, patient's attendants.

INTRODUCTION

HBV is a major health problem worldwide and is one of the leading causes of morbidity and mortality. According to WHO, of the 2 billion people who have been infected with the hepatitis B virus (HBV), more than 350 million had chronic (lifelong) infections¹. Deaths due to Hepatitis b is reported to be 0.6 million annually in one study². The prevalence of HBV infection is different with rates ranging from 0.1% to 20% in different parts of the world³. Hepatitis B is very prevalent in Asia Pacific region and it has been estimated that about 10-15 million population is suffering from hepatitis B^{4,5}. Hepatitis B is also a serious health problem in Pakistan. Prevalence of Hepatitis B has been reported to be 10% in some areas of Pakistan⁶. 6.7% of Pakistani females are seropositive for HBV and seroprevalence of Hepatitis B is 1.3% among children in Pakistan⁷. Positivity of HbsAg was found to be 2.21 % in volunteer donors⁸.

Hepatitis B is a blood borne infection. Major routes of Hepatitis B transmission are transfusion of blood and its products, use of contaminated syringes for injections, hemodialysis, surgical and dental procedures, skin pricks, handling of blood infected with Hepatitis B, tattooing, ear piercing, acupuncture, sharing razor etc. It also occurs from mother to baby.

Diagnosis is made on Screening of HbsAg, ELISA and PCR. Important marker for the disease is

HbeAg which shows disease infectivity and ongoing liver injury.

Hepatitis B is preventable disease through extensive vaccination program in healthy individuals. Although the vaccine does not cure chronic hepatitis, it is 95% effective in prevention of chronic infections. In 1991, the World Health Organization called for all children to receive the hepatitis B vaccine, and 116 countries have added this vaccine to their routine immunization programs. The vaccine is given in three doses at 0, 1 and 6 months. An effective antibody response is attained after three doses in 95 percent of individuals.

The objective of the study was to know about practices of the patient's attendants towards hepatitis B prevention

MATERIALS AND METHODS

This was a descriptive cross sectional study. Study population was patient's attendants attending Services hospital Lahore. Sampling technique was non-probability convenient sampling. A questionnaire was formulated and translated into Urdu language. Data for study was collected at Services Hospital, Lahore.

Data was analyzed through SPSS 17. Data like demographic characteristics were coded into numbers and then registered in the SPSS-programs using descriptive statistics. Categorical data was measured in percentages while continuous variables measured as mean±standard deviation. A p-value less than or equal with 0.05 was considered as significant.

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RESULTS

Practices towards prevention of Hepatitis

Practices	Yes	No	Don't know
Have you got hepatitis B vaccination?	65(17.24%)	290(76.92%)	15(6.63%)
Have you get 3 injections of vaccine?	48(12.73%)	308(81.69%)	21(5.57%)
Do you avoid sharing razors, nail cutters of others?	67(17.77%)	291(77.18%)	19(5.03%)
Do you ask for Screening before blood transfusion?	71(18.88%)	287(76.12%)	19(5.03%)
Do you ask the dispensers/nurses to give you injection through new sterile syringe?	73(19.36%)	276(73.20%)	28(7.42%)

Comparison of demographic characteristics and mean Practice score

Description	No	Practice Score (Mean)	P value
Age			
21-25	35	2.43	0.540
26-30	114	1.95	
31-35	95	1.77	
36-40	35	1.61	
41-45	41	1.43	
46-50	41	1.09	
51-55	13	1.27	
56-60	3	0.61	
Gender			
Male	277	1.63	0.927
Female	100	1.41	
Educational Standard			
Under-Graduate	242	1.28	0.727
Graduate	92	1.32	
Post-Graduate	43	1.96	
Family Income			
<Rs.20,000Below Average	121	1.08	0.612
Rs. 20,000-60,000Average	208	1.36	
Rs.>60,000Above Average	48	2.12	

DISCUSSION

Majority of the participants (73.48%) were male. Among those, 55.42% were between the ages of 26-35 years. Male to female ratio in the study was 3:1. Regarding educational status of subjects, 64.19% were under-graduates, 24.40% were graduates and 11.40% were post-graduates.

Regarding practices for the prevention of Hepatitis B, most of the participants were having poor practices towards the Hepatitis B prevention. Only 17.24% participants were vaccinated against Hepatitis B. Furthermore, only 12.73% of patient's attendants got three injections of Hepatitis B vaccination. In other study conducted on healthy individuals of Quetta, 13.2% participants were vaccinated⁹. This vaccination status was more in a study conducted on high risk health care workers in Peshawar as compared to our study i.e., 18.9% participants were vaccinated against Hepatitis B¹⁰. Another study conducted in Karachi 52% nurses were vaccinated, 33.6% were not vaccinated while 14.4% were partially vaccinated. Only 27.6% of

spouses of health care workers were vaccinated against hepatitis B infection¹¹. A study from Rawalpindi revealed that 49% of health care workers received HBV vaccine¹². In a study on medical students, 77% were vaccinated and 66.4% of them got three doses of vaccine and 50% of them told that their siblings have been vaccinated against Hepatitis B. This fact is due to the understanding of importance of vaccination against Hepatitis B which is much higher in medical students than general population¹³. This difference is significant and is due to higher education level of doctors and HCW ($p < 0.05$).

About 17.77% participants told that they avoid sharing nail cutters and razors. In a study on students, 28% biology students told that they avoid sharing razors and belongings while 24.8% non-biology students told that they avoid sharing their belongings¹³. In our study, 19.36% told that they ask nurses to use new sterile syringe before injection and 18.88% told that they ask screening of blood before transfusion. In a study conducted on university students, 86.6% students use new syringes for

injections and 75.2% students get screening before blood transfusion¹⁴. This difference is significant ($p < 0.05$). While comparing different variables with practices, study results showed that participants between ages 21-25 were having better practices for hepatitis B prevention. Similarly, higher educated people were having better practices towards hepatitis B prevention.

CONCLUSION

Attendants of patients at Services Hospital were not having good practices for prevention of Hepatitis B infection.

REFERENCES

1. Hepatitis B. fact sheet No. 204. Geneva, World Health Organization, July 2013
2. Mahoney FJ, Kane M. Hepatitis B vaccine. In: Plotkin SA, Orenstein WA, editors. Vaccines. 3rd ed. Philadelphia: W.B. Saunders Company; 1999. pp. 158–82
3. Malik IA., Tariq WVZ, Viral hepatitis in Pakistan (Editorial). PJP 1993; 4 : 15-18
4. Tandon BN, Acharaya SK, Tandon A. Epidemiology of Hepatitis B virus infection in India ;Gut 1996;38(2) :56-59
5. Khan Ts, Rizvi F. Hepatitis B sero-positivity among chronic liver disease patients in Hazara Division Pakistan. J Pak Med Assoc. 1999 Dec; 49 (12): 301-5
6. Khokhar N, Gill M.L, and Malik GJ. General sero-prevalence of Hepatitis C and Hepatitis B virus infections in Population. JCPSP 2004, Vol. 14 (9): 534-536
7. Malik IA, Legters LG, Luqman M, Ahmad A, Qamar MA, Akhter KAK, et al. The serological markers of hepatitis A and B in healthy population in Northern Pakistan. JPMA 1988; 38: 69-72
8. Mujeeb SA, Aamir K, Mehmood K. seroprevalence of HBV, HCV and HIV infections among college going first time volunteer blood donors. J Pak Med assoc 2000; 50: 269-70
9. Noman ul Haq et al. A cross sectional assessment of knowledge attitude and practice toward hepatitis B among healthy population of Quetta, Pakistan. BMC Public Health 2012, 12:692
10. Zahoorullah, akhter T. HBV Vaccination in the high risk laboratory workers in three major hospitals of Peshawar. Pak J Med 2003, Vol. 42 No 2, 2003
11. Memon AR, Sheikh MA, Afsar S, Zubairi BF, Qadeer R, Baloch I, Hepatitis B Vaccination Status and Knowledge, Attitude, Practices of Health Care Workers (HCWs) Regarding Hepatitis B and C in a Tertiary Care Setting of Karachi. Infectious Diseases journal of Pakistan. Vol 16 issue 04 Oct-Dec. 2007 105-7
12. Nasir K,Khan KA, Kadri WM, Salim S, Tufail K, Sheikh HZ, et al .Hepatitis B vaccination among health. Care workers and students of a medical college. J Pak Med Assoc 2000; 50: 239-43
13. Nazeer khan et al. Effect of gender and age on knowledge, attitude and practice regarding Hepatitis B and C and vaccination status of Hepatitis B among medical students of Karachi, Pakistan. J Pak Med Assoc June 2010:Vol. 60, No. 6; 450-455
14. Amir Razi et al. Knowledge, attitude and practice of university students regarding Hepatitis B and C. ARPN Journal of Agricultural and Biological Science July 2010; Vol 5, No 4: 38-43.