KNOWLEDGE, ATTITUDE AND PRACTICE REGARDING HEPATITIS B & C AMONG HOUSE OFFICERS — A STUDY

1FAZAL REHMAN BABAR
2AHMED YAR
3MUZAMMIL JAMIL AHMED RANA

ABSTRACT

Viral hepatitis B and C are a major health concern worldwide, with 170 million people chronically infected and at risk of liver cancer, cirrhosis or liver failure. The modes of transmission include intravenous drug use, blood products, body fluids, tattooing, surgical procedures and sexual intercourse. Thus Health Care Professionals have a high exposure to HBV & HCV infection and are at risk to it.

A cross-sectional quantitative survey on 84 House Officers was conducted at Khyber College of Dentistry and at Bolan Medical College through a semi-structured questionnaire.

Out of total 84 subjects, 44 were male and 40 were female, with mean age 24.7±1.44. The subjects had good level of knowledge regarding disease transmission, prevention and treatment, which ranged from 85-90%. Positive attitudes toward patient care was 67.9% and 59.5% respectively. Overall 53% considered media as most convenient source of information. Needle pricks were 48.3%. 91.7% subjects were vaccinated and some of them had attended few lectures regarding hepatitis.

Key Words: Hepatitis B&C, Dental House Officers, Knowledge, Attitudes, Practices.

INTRODUCTION

Medical and dental health care professional are more vulnerable to various infections like hepatitis B and hepatitis C viruses, staphylococci, streptococci, herpes simplex virus types 1, human immunodeficiency virus (HIV), mumps, influenza, rubella and other prevalent infectious agents.¹

Hepatitis has become one of the major health care problem of the world. About 170 million people are chronically infected with hepatitis C 3-4 million new infections each year and 8000-10000 deaths occur every year. About 3% of the world population is affected by hepatitis C virus.² Worldwide, an estimated two billion people have been infected with the hepatitis B virus (HBV), and more than 350 million have chronic liver infections.³ World Hepatitis Day observed on May 19 aims to raise global awareness of hepatitis B and hepatitis C and encourage prevention, diagnosis and treatment.⁴

Pakistan is also facing the brunt of this disease with reported prevalence of HCV 4-7% and that of HBV 3-4% as reported by different surveys from the country.⁵,⁶ The incidence of new cases of HBV is decreasing worldwide after universal vaccination.⁷ Lack of education and awareness regarding its spread are the main factors contributing to this disease.⁸

High prevalence rates have been found in Southeast Asian countries, such as Thailand, Malaysia and India. In Pakistan, the sero-prevalence of HCV is 6.7% in women and 1.3% in children.⁹ The virus is mainly transmitted through transfusion of contaminated blood and blood products, sexual contacts and intravenous drug users. It is an occupational hazard for health care providers and require adherence to universal precautions.¹⁰ The objective of the study was to assess the knowledge, attitude, and practices regarding Hepatitis B & C among house officers of the two different public sector medical/dental colleges.

METHODOLOGY

The study design was cross sectional descriptive study –KAP Survey. Structured self-administered questionnaire was used to check knowledge, attitudes and practices of dental house officers regarding the Hepatitis B & C. The survey was conducted from October 2011 to December 2011. A purposive sampling technique with size of 84 was used, 40 house officers
were from Khyber College of Dentistry and 44 from Bolan Medical College, Dental Section.

Data were analyzed using SPSS version 16.0. Mainly descriptive statistics were used. Categorical variables like gender and questions about knowledge and practices were described as frequencies and percentages while continuous variables were described as means and range. Chi square tests were used for significance.

RESULTS

With a response rate of 87.5% (84), where 47.6% (40) house officers were from Khyber College of Dentistry and 52.4% (44) house officers participated from Bolan Medical College.

Fig 1: General Knowledge about Hepatitis

Fig 2: Different means of hand washing by house officers

Fig 3: House Officers exposed to pricks in one year

Fig 4: Training on HBV & HCV at Khyber College of Dentistry and Bolan Medical College

Fig 5: Needle pricks in Khyber College of Dentistry Vs Bolan Medical College

TABLE 1: SOCIO DEMOGRAPHIC CHARACTERISTICS OF THE STUDY POPULATION (N = 84)

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum age</td>
<td>22</td>
<td>00</td>
</tr>
<tr>
<td></td>
<td>Maximum age</td>
<td>30</td>
<td>00</td>
</tr>
<tr>
<td></td>
<td>Range</td>
<td>08</td>
<td>00</td>
</tr>
<tr>
<td></td>
<td>Mean age</td>
<td>24.70</td>
<td>00</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>1.446</td>
<td>00</td>
</tr>
<tr>
<td>2.</td>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>44</td>
<td>52.4%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>40</td>
<td>47.6%</td>
</tr>
</tbody>
</table>

TABLE 2: MORE CONVENIENT WAY FOR INFORMATION ABOUT HBV & HCV

<table>
<thead>
<tr>
<th>Information sources</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical institute</td>
<td>22</td>
<td>26.2%</td>
</tr>
<tr>
<td>Mass media</td>
<td>44</td>
<td>52.4%</td>
</tr>
<tr>
<td>Work/study place</td>
<td>03</td>
<td>3.6%</td>
</tr>
<tr>
<td>Other</td>
<td>01</td>
<td>1.2%</td>
</tr>
<tr>
<td>Med. institute &amp; Mass media</td>
<td>09</td>
<td>10.7%</td>
</tr>
<tr>
<td>All above three</td>
<td>05</td>
<td>6.0%</td>
</tr>
<tr>
<td>Total</td>
<td>84</td>
<td>100%</td>
</tr>
</tbody>
</table>
Knowledge about Hepatitis B & C among house officers

Medical College, Dental Section. Details about various aspects can be seen in Fig 1-5 and in Tables 1-5.

DISCUSSION

Various studies regarding the knowledge, awareness and practices of hepatitis B & C have been done. However, the majority of these have reported different level of knowledge and attitude, depending on their study populations education and awareness. Cultural diversity in different cities of Pakistan necessitates performing separate population-based studies in various regions. The objective of this study was to determine the level of knowledge and attitude about HCV and HBV in house officers and practices with patients reporting for dental treatment.

Regarding the availability of a successful treatment of HBV or HCV 15.4% were aware that patients cure completely from it. 73.8% said that they cure partially from treatment and 11.9% said that no such treatment exists. This was different from the study done among medical students in Karachi.

Use of sterilized instruments was chosen by 100% house officers and some used disposable instruments. 96.4% identified the prick from contaminated instruments as the dangerous risk for dentist. 91.97% study subjects of the current study informed that they were vaccinated. This was quite different from the study done on medical students in Bangladesh where 65.50% have been vaccinated.

In study on dental care workers in Japan 25% said they did not change gloves for every patient while 17% did not wear it. One to 30 patients with HBV and HCV positive have been treated by house officers. Mostly used masks, double gloves, goggles, sterilized/disposable instruments. This was in contrast with the study done on Iranian surgeons where 24% used double gloves.

CONCLUSION/RECOMMENDATIONS

This study was conducted to evaluate the magnitude of awareness regarding transmission of Hepatitis B &
Knowledge about Hepatitis B & C amongst the house officers. It also focused on the practice of dental health care professionals regarding the protective and preventive measures to prevent the transmission of hepatitis and infection control. “Safe practices” would decrease the diseases burden as well as save resources. Health care planners need to understand it and medical/dental teaching and training programs need complete re-orientation to achieve this goal.

REFERENCES


17. Song KB, Choi KS, Lang WP, Jacobson JJ. Hepatitis B Prevalence and Infection Control among Dental Health Care Workers in a Community in South Korea. Department of Preventive Dentistry, School of Dentistry, Kyungpook National University, Taegu, South Korea.

18. Nagao Y, Matsuoka H, Kawaguchi T, Ide T, Sata M. HBV and HCV Infection in Japanese Dental Care Workers; Department of Digestive Disease Information and Research, Kurume University School of Medicine, Kurume 830-0011, Japan.


CONTRIBUTIONS BY AUTHORS

2. Ahmed Yar: Results / data analysis.