## **Original Article**

# Knowledge and practices of barbers regarding hepatitis B and hepatitis C in Bahra Kahu, Islamabad–Pakistan

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#### **ABSTRACT**

## **Objective**

To determine the knowledge and practices of barbers from Bahra Kahu, Islamabad, regarding risk of transmission of HBV and HCV.

## **Subjects and Methods**

Forty-one barbers were selected by consecutive sampling from the Bara Kaho locality from August 2008 to November 2008 for this cross- section study. The participants were interviewed regarding their knowledge about hepatitis, its mode of transmission, risk of transmission with razors re-use, change of blade, and the media they use for information and entertainment.

#### Results

The age range of participants was 14 to 60 years (mean 27.06±9.37). Majority of the them were uneducated (61%) while some had maximum education level of eighth grade. 46.3 % had a job experience of 6-10 years and 14.6 % had more than 10 years of working experience. Only 38 % had knowledge of hepatitis B and C and 20.5% had knowledge of different types of hepatitis. Almost all the barbers (97.4%) had practice of using new blade for every customer. Trend of vaccination against hepatitis B was very low (10.3%).

#### Conclusion

The attitudes and practices of barbers regarding the use of new blades and the disposal of

sharps were very good. However, they had very little knowledge of the routes of spread

of hepatitis B and C. (Rawal Med J 2010;35:).

Keywords

Barbering; hepatitis; hepatitis B; hepatitis C; knowledge

INTRODUCTION

Hepatitis B and hepatitis C infections are the major blood transmitted infections in the

country. Worldwide, 2 billion people have been infected with the hepatitis B virus (HBV)

and more than 350 million have chronic lifelong infections, a virus 100 times more

infectious than HIV. An estimated, more than 180 million people worldwide are infected

with hepatitis C virus and 3-4 million are newly infected each year.<sup>2-4</sup> Barbers are

important professionals of the community which are still owned, cared and financed by

the community especially the rural one but majority of them do not have any perception

of unhealthy working practices in barbering.<sup>5</sup> In Pakistan, barbers perform hair cutting,

nail trimming, pedicure, manicure and shampooing/dying of hair. In addition to

circumcision and abscess drainage, especially in rural areas and urban slums.<sup>6</sup>

Facility-base data have shown higher prevalence of viral hepatitis in Pakistan<sup>7</sup> and

prevalence of hepatitis B and C in the general population has been estimated to be 3%

and 5.31% respectively<sup>8</sup> with burden of disease due to infectious diseases to be 38.4%. 9-10

This aim of this study was to determine the knowledge and practices of barbers from

Bahra Kahu, Islamabad, regarding risk of transmission of HBV and HCV.

#### SUBJECTS AND METHODS

The data for this cross-section study was collected through a pre designed and pre-tested questionnaire. 41 participants were selected by consecutive sampling from the Bara Kaho locality from August 2008 to November, 2008. The purpose of the study was explained and informed written consent was obtained from the study participants. The barbers age was from 14 to 60 years. Consecutive sampling was done to include all the working barbers regardless of their educational status, so that we could have the broader picture. The laboratory tests were performed to find out Hepatitis B and C infections among barbers and they were all negative. They were interviewed regarding their knowledge about hepatitis, its mode of transmission, risk of transmission with razors re-use, change of blade, and the media they use for information and entertainment. Statistical analysis was performed using SPSS version 15. Descriptive statistics were used to calculate the frequencies and proportions of knowledge, and practices. Mean and standard deviation were calculated for the numerical variables.

#### RESULTS

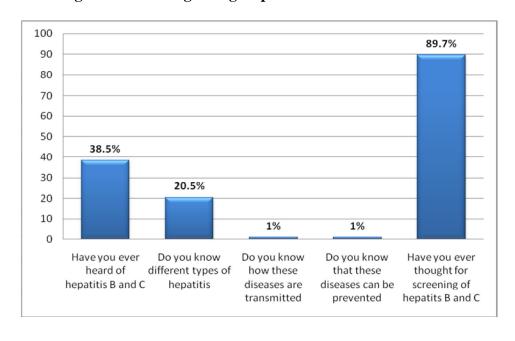
The age range of barbers was 14 to 60 years with mean age  $27.06 \pm 9.37$  years. All the barbers included in the study were males who were practicing in the Bhara Kaho area, Islamabad. Majority of the barbers were uneducated (Table 1). Almost all the barbers were providing only two kinds of general services which were hair cutting and shave.

Table 1. Demographic charactristics of study population.

Age (years)	
Mean ±SD	27.06±9.37
Gender (%)	
Male	41 (100%)
Female	0 (0%)
<b>Qualification</b> (%)(education)	
Uneducated	25 (61%)
Primary	8(19.5%)
Middle	8 (19.5%)
Matric	0 (0%)
Working Experience (%) (years)	
0-5 years	16 (39%)
6-10 years	19 (46.3%)
> 10 years	6 (14.6%)
Service Charges in Rupees (Mean ±SD)	
Hair Cutting	27.44±3.95
Shave	18.21±3.14

Only 38 % said yes in reply when they were asked about their knowledge of hepatitis B & C. Majority of the barbers (89.7%) showed their interest for screening of hepatitis B & C (Fig.1).

Fig 1. Knowledge of Barbers regarding Hepatitis B & C.



Almost all the barbers (97.4%) had practice of using new blade for every customer. (Figure 2).

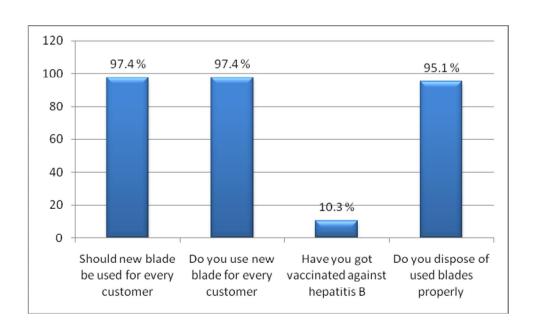


Fig 2. Attitude and Practices of Barbers regarding Hepatitis B & C.

Trend of vaccination was very low and only 10.3% barbers were vaccinated against hepatitis B. Almost all the barbers had practice of properly disposing the used blades which was throwing them in the rubbish or public waste bin.

## **DISCUSSION**

Razor sharing and shave from barbers has been identified as a key risk factor for HBV spread in Italy and for HCV among psychiatric patients in Japan, Egypt and Pakistan. <sup>11-14</sup> In Pakistan, unsafe practices include administration of unnecessary injections, <sup>15</sup> daily facial shave and armpit shave as risk factors for HCV. <sup>14</sup> In our study, knowledge of the barbers was not very good and only 38 % replied in affirmative when they were asked about their knowledge regarding hepatitis B & C transmission and routes of infection.

Only 20.5% barbers had knowledge of different types of hepatitis. Interestingly, majority of the barbers (89.7%) showed their interest for screening of hepatitis B & C. In another study regarding knowledge and practices of barbers about hepatitis B and C in Rawalpindi and Islamabad, the researchers identified that 13% of barbers knew that Hepatitis was the disease of liver and could be transmitted by razors. In our country, we have a great problem of quackery as well and street dentists, barbers and natural healers who contribute to the spread of these diseases. However, there is no information on knowledge regarding the spread of blood-borne pathogens and practices of barbers from Pakistan and very little from the rest of the world. In the spread of the spread of the spread of the world.

A large proportion of population enjoys the services of barbers in our community and they would play a vital part in prevention and control of these infections. <sup>17</sup> In our study, 97.4% barbers were of the view that a new blade should be used every time for a shave or a hair cut. So there was no gap between the attitude and practices of the barbers regarding the use of new blades. Our study revealed that trend of vaccination was very low with only 10.3% were vaccinated against hepatitis B. Our study showed that almost all the barbers had practice of properly disposing the used blades. This desirable practice could be due to public demand and then again, the media awareness campaigns could have played their role.

A study from Nishtar Hospital Multan showed that among males 59% cases of hepatitis B and 66.7% of hepatitis C had been going to barbers for shaving. Sometimes barbers themselves are exposed accidentally to the blood and bodily fluids of their customers, which is a health hazard. Another study of frequency of hepatitis B and C virus infection in barbers of Sivas region of Turkey concluded that both Hepatitis B and Hepatitis C viral

infections might constitute occupational hazards for the barbers and the sources of infection could be not only such personal risk factors as 'sharps' injuries and scissor cuts, but may also include other unknown factors.<sup>19</sup>

#### **CONCLUSION**

In our study, barbers had very little knowledge of the routes of spread of hepatitis B and C, but their attitudes and practices regarding the use of new blades and the disposal of sharps were very good. This virtually non-existing gap between their attitude and practice may be due to the media information and health education on the part of the government as well as public demand for use of new blades every time.

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