

ORIGINAL ARTICLE

Knowledge, Attitude and Practices of Barbers about Hepatitis B&C Transmission in Islamabad

Shahid Aziz¹, Iffat Atif², Tahira Sadiq³, Farah Rashid⁴

ABSTRACT

Objective: To determine the knowledge, attitude and practices of barbers about hepatitis B&C transmission in Islamabad.

Study Design: A descriptive cross-sectional survey.

Place and Duration of Study: Study was conducted on barbers (street barbers and shop owner barbers) placed in different sectors of urban areas of Islamabad from September 2012 to March 2013.

Materials and Methods: A KAP survey (knowledge, Attitude and Practice Survey) was done. One hundred and twenty six barbers were selected through non-probability sampling technique. A pre-tested structured questionnaire was used to collect the data. The data was analysed through SPSS version 17. Descriptive statistical analysis was carried out in order to document frequencies and percentages.

Results: It was found that only 39% of the barbers had knowledge about different aspects of Hepatitis B&C (sterilization of instruments before using on next client, mode of transmission, sign and symptoms, treatment, vaccination and which organ is effected most).

Conclusion: There is a huge gap in knowledge about hepatitis B&C transmission amongst barbers which highlights the importance of health education and different awareness raising campaigns to target this issue and bridge the gap.

Key Words: Barbers, Hepatitis B, Hepatitis C, KAP Survey.

Introduction

Developing world is facing a burden of epidemics of blood borne diseases. These diseases increase the morbidity and mortality, ultimately resulting in heavy burden on national economics and individual level.^{1,2} Globally, each year around 2 billion people are infected with the hepatitis B virus (HBV), of which more than 350 million have chronic HBV infections.^{1,2} An estimated, more than 180 million people worldwide are infected with hepatitis C virus (HCV) and 3–4 million are newly infected each year.³ It is a blood borne infection transmitted by infected blood and blood products through transfusions,

contaminated needles, vertical transmission, unsafe sex and reuse of razors by barbers.⁴ The prevalence of Hepatitis B & C infection worldwide in general population is around 10–15%, and majority of the cases are seen in rural population as compared to the urban.^{5,6} Unfortunately, Pakistan has a high prevalence rate of Hepatitis B and C with a constant rise in the number of cases.^{7,8} Some of the major reasons for the constant rise in number of infected cases may be because of lack of health care facilities, low socio economic class, poor political commitment and most important among them is the lack of education and awareness about the transmission of these infectious diseases.⁹

There are many risk factors of hepatitis B&C. Any person who has an exposure and not been vaccinated can become infected. Risk factors include sharing infected needles in drug users, sharing razors/blades, transmission of infection from mother to her child, unprotected sexual contact with infected person, tattooing or body piercing, equipment not properly sterilized, transfusions of infected blood and individuals subjected to medical or dental interventions if equipment is not properly sterilized.¹⁰ Mostly cases of Hepatitis remain undiagnosed, because of non-specific symptomatology. The common symptoms of

¹Department of Social Sciences
SZABIST, Islamabad

^{2,4}Department of Community Medicine
Yusra Medical & Dental College, Islamabad

³Department of Community Medicine
Islamic International Medical College
Riphah International University, Islamabad

Correspondence:

Dr. Tahira Sadiq

Assistant Professor, Community Medicine
Islamic International Medical College

Riphah International University, Islamabad

E-mail: tahira_sadiq@hotmail.com

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hepatitis are loss of appetite, weakness, low grade fever, muscle aches or joint pains, vomiting and abdominal pain.¹¹

The “Barber” profession has a very old history. The historical records of barbers indicate that they have important role in the community.¹² Barbers at that times were considered as the medicine men and the scholars of their religion, they belonged to the groups who offer their services for bloodletting, circumcision, extraction of teeth and different types of minor operations. With the development of health sector, their role has been limited to hair cutting and shaving only.^{13,14}

Control of chronic diseases like hepatitis B&C are very difficult in countries where health facilities are expensive and not easily accessible, especially for low socio economic group. On average the cost of treatment for these diseases is beyond the affordability of an average earning citizen of Pakistan.¹⁴

Almost everyone is utilizing the barber’s services in our society. This may be a potential source of infectious diseases like Hepatitis B & C. Taking into consideration this threat of viral infections particularly Hepatitis and AIDS, linked to this occupation; awareness amongst barbers holds a significant importance. Positive attitude and right practices of the barbers would significantly decrease the prevalence of these infections.^{6,13} Main theme of the current study is to assess the knowledge about the role of barbers in spreading hepatitis B&C infection. The outcome of this current study will motivate the health educators, community developers and non-governmental organization to identify gaps and barriers in knowledge, attitude & practices of barbers with the impacts on disease transmission. The novelty of this research is the inclusion of street barbers who, so far neglected in different studies.

Materials and Methods

A descriptive KAP (knowledge, attitude and practice) survey was carried out among barbers in urban areas of Islamabad from 1st September, 2012 to 30th March 2013. The calculated sample size was 126 using WHO Sample Size Calculator by keeping 95% confidence interval, proportion (P) 9% and precision (d) 0.05 (5%) using non-probability purposive sampling technique. The data was collected by the researcher

assisted by Capital Development Authority.

This study was carried out in different sectors of Islamabad. The barbers selected for this study were both shop owners and street barbers. The purpose of selecting these both types of barber was to represent the different socio-economic group of the community. The data was collected after informed consent from the barber's shops and street barbers and all those barbers /shop owners were excluded who did not give the consent.

The purpose and importance of the study was explained to each respondent and data confidentiality was assured. The data was collected using a structured closed ended questionnaire in Urdu language to avoid language barrier. At the completion of the questionnaire, health education session was given to barbers regarding their own protection as well as the protection of their customers. The data was analyzed using SPSS version 17.0.

Results

There were two types of barbers selected for the study, 104 (82.5%) of them were shop barbers whereas 22 (17.5) were street barbers working in green belt areas sitting at places adjacent to different markets. The mean age of the barbers was 34.4 years + 12.2. Out of the total 34 (27.0%) did not acquire any school education while 1 (.8%) can read and write, 43 (34.1%) got primary education, 33 (26.2%) middle, 13(10.3%) till matric and only 2(1.6%) were educated to intermediate and above. It was found that 50(39%) of barbers had knowledge of Hepatitis B & C as a major disease, 17(13.5%) had some knowledge and 59(46.8%) were totally unaware of the disease.

Discussion

The present study carried out to assess the knowledge of barbers regarding Hepatitis B & C and their current practices. The study revealed that there is a huge gap in knowledge about Hepatitis B & C among barbers, showing more than 85% were not aware of the signs and symptoms of this disease, and almost 80% did not know that they are vulnerable to the infections.⁶

The prevalence of HBV and HCV has been widely investigated in many occupational groups, but relatively few data are available on the prevalence in barbers who are involved in the transmission of these infections and are at elevated risk of exposure

Table I: Knowledge of Barbers about Hepatitis B & C

Knowledge items		Frequency	Percent (%)	p-value
Knowledge of disinfection of instruments after every customer	Yes	50	39.7	0.033
	No	17	13.5	
	Don't know	59	46.8	
Knowledge about spread of hepatitis B & C	Blood transfusion	2	1.6	0.012
	Sexual contact	2	1.6	
	Unclean blades	24	19	
	Unsterilized Surgical and Dental equipment	21	16.7	
	Don't know	77	61.1	
Knowledge about sign and symptoms of Hepatitis B & C	Headache	3	2.4	0.001
	Jaundice	4	3.2	
	General weakness	9	7.1	
	Don't know	107	87.3	
Which body organ is affected	Liver	17	13	0.001
	Don't know	109	87	
Knowledge about treatment	Yes	64	50.8	0.001
	No/Don't know	62	49.2	
Knowledge about vaccination for Hepatitis C	Yes	45	36	0.001
	No/ Don't know	81	64	

About 51% of respondents knew that Hepatitis B & C are treatable diseases and their main source of information was television.

Table II: Attitudes of Barbers about Hepatitis B & C

Attitude of Barbers	Yes (%)	No (%)
Screening against Hepatitis B & C	22 (17.4)	104 (82.5)
Vaccination status of barbers against Hepatitis B & C	9 (7.14)	117 (92.8)
Should we use new blades/razors for every customer	92 (73.0)	34 (26.9)
Registration of the barber shop	13 (10.3)	113 (89.6)

Table III: Practices of Barbers about Hepatitis B & C

Practices of Barbers	Yes (%)	No (%)	p-value
Hand washing	97 (76.9)	29 (23.0)	0.035
Use of disinfectants	41 (32.5)	85 (67.4)	0.002
Reuse of blades/razors	71 (56.3)	55 (43.6)	0.053
Use of antiseptics	84 (66.6)	42 (33.3)	0.014
Disposal method of blades	83 (65.8)	43 (34.1)	0.000

to blood borne pathogens. In our study, 17.5% of mobile barbers and 82.5% shop barbers had evidence of current or past HBV infection (all were unvaccinated against HBV), similar to a previous study in Rabat region of Morocco, in 2007, which showed that traditional barbers 1.9% and 1.7% respectively had active HBV and 1.1% of barbers and 1.3% of clients had chronic HCV.

In Casablanca region same type of study conducted in 2001 among barbers showed that they did not have the knowledge about the concept of infectious risk linked with blood, particularly of hepatitis B and C and HIV; majority of them had not been vaccinated. In this survey different tests were applied in which Syphilis serology found positive in 7%. Hepatitis B virus found positive in 2% and Hepatitis C virus found positive in 5% barbers.

In Islamabad and allied cities, a study was carried out by private university students which showed that barbers knowledge about Hepatitis B & C was very poor which is one of the key health issues of any developing country endorse the findings of current study.^{12,13} The study found out that 13% of barbers had knowledge about Hepatitis B&C affects liver and transmitted through infected razors.

Some studies¹⁴⁻¹⁵ showed that barbers who are relatively young had better knowledge about the hazards of using old blade which was not the case in our study. Similarly, in our study no relationship was seen between the working experience of the barbers and increased knowledge about hepatitis B & C.¹⁶ The findings of current study obviously indicate that more efforts are required for the awareness regarding health issues for both barbers and their customers to decrease the prevalence of these infections. There are several studies showing that barber shops are important places for spreading of Infectious diseases like Hepatitis B&C and HIV/AIDS.⁶ A study conducted in Italy showed strongest association with barber shop shaving for HBV and

with tattooing for HCV cases.¹⁷ While researching on the knowledge and practices of barbers in India¹⁶, it was found that large proportion of mobile barbers working in green belt areas are totally ignored. These mobile barbers are more unaware about the transmission of infectious diseases particularly through different instruments used by them. Similar findings were depicted in our study too, only 19% barbers were aware that infectious diseases spread through their instruments and 62% had no knowledge altogether. In a related study conducted in Italy noted that 90% of barbers washed hands after each customer handling, 66% did not change the towel after each customer. In addition, this study indicated that circumcision or minor surgeries also conducted by these barbers in rural areas.

A study conducted in Sivas region of Turkey "Prevalence of Hepatitis B and C virus infection" explained that Hepatitis B&C infection can be spread through razors, different type of barber's instruments and other related possessions, the findings consistent with the current research.

It is important to realize that more efforts are required to raise awareness amongst barbers by launching different types of awareness programs. For better planning and implementation of adequate health promotion and intervention measures for controlling hepatitis B, it is important for both health care providers and policy makers to know the real burden of chronic Hepatitis B in region and population specific groups.¹⁸ The health officials and authorities must develop appropriate strategies and monitor systems to restrict the barbers not fulfilling the pre-requisites for registration. Large scale efforts and resources are considered necessary to meet these goals. This information is comparable to our study in order to complement the conclusion and recommendations drawn from this study.

Conclusion

The current study highlighted the gap between knowledge & practices of barbers regarding HBV & HCV working in various sectors of Islamabad. Majority of barbers did not know the extent of risk to themselves and their customers are facing due to their lack of awareness about infectious disease spread through their casual attitude and practices. Various awareness raising programs and campaigns are required involving mass media at national level.

The competent authorities must be involved through which all barbers of Islamabad region should be registered, properly vaccinated and tested for Hepatitis B & C on annual basis cost-effectively.

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