Awareness of Hepatitis 'B' Among People of Khyber Pakhtunkhwa Province of Pakistan

Mamoon Ahmed1, Nasrullah Malik2, Fatimah Ashraf1, Muneeb ur Rehman1 and Amir Rashid3

ABSTRACT
Hepatitis B virus is causing serious health concerns in countries like Pakistan. In Khyber Pakhtunkhwa province, 0.6 million people were estimated to be infected with this virus in 2008. The authors aimed to assess knowledge regarding vaccination, testing and routes of transmission of hepatitis B virus among people of Khyber Pakhtunkhwa, as such knowledge among masses will help limit the infection. People belonging to 12 different districts of Khyber Pakhtunkhwa province were interviewed over a period of 5 months from October 2013 to February 2014. A pre-tested questionnaire was used and in-person survey of randomly selected 1,938 people was carried out throughout the province. Ninety-nine percent people said they knew about hepatitis B virus and 42% said they had got tested for it too. Out of them, 63.2% knew that a vaccine is available for hepatitis B virus. The proportion of respondents, who said hepatitis B virus can spread by sharing razors, toothbrush, syringes or sexual contact, was 97.94%, 95%, 99.3% and 77%, respectively. Only 28.7% knew, it can also spread vertically from mother to child during childbirth. People were quite aware of the routes of transmission of this disease, but they lacked knowledge regarding vaccination and prevention of this menace. Settings should be set up where routine preventive care and immunization services are provided.

Key Words: Awareness, Hepatitis B, Pakistan, Vaccination.

Hepatitis B virus infection is endemic in most Asian countries. Half of Americans tested positive for hepatitis-B surface antigen are of Asian origin. Hepatitis B virus [HBV] is causing serious health problems throughout the world, particularly in developing countries like Pakistan.1 The etiology of this infection was not identified till 1960s,2 and only then, after development of laboratory markers for this infection, was its significance as a major cause of morbidity and mortality worldwide fully appreciated. Many cases of HBV resolve spontaneously but some may progress to cirrhosis, hepatocellular carcinoma and death. One third of population alive today – more than 2 billion people worldwide – got infected with this virus in some stage of their life. HBV takes a life every 30 seconds.3

Infection due to hepatitis B virus [HBV] can either be asymptomatic or present as acute hepatitis. Because chronic HBV infection is usually asymptomatic until advanced liver disease has developed,4 HBV screening is necessary in order to identify both the infected individuals and those who remain susceptible to infection. According to World Health Organization [WHO], in the Indian subcontinent, an estimated 2 - 5% of the general population is chronically infected with this disease.5 Hepatitis B and all of the complications resulting from it are preventable by hepatitis B vaccination, and therefore, elimination of HBV transmission and of new acute and chronic infections is a feasible goal. HBV infection rate is increasing day-by-day. The reason may be lack of proper health facilities or poor economic status and insufficient public awareness about transmission of major communicable diseases, including hepatitis B virus.6

Khyber Pakhtunkhwa [KP] is the second most populous province of Pakistan. Individuals were eligible for this study if they were residents or worked in KP, were aged 16 years or more, were able to communicate in Pushto, Urdu or English, and did not belong to medical profession. After taking due permission and informing the respondents about this study, as an ice-breaking question, in the language they understood, respondents were asked if they had ever heard of hepatitis B or not. If they had heard about this, they were asked about the symptoms. After this, the respondents were asked if they had ever got themselves tested for HBV.

Sample size was calculated using the online sample size calculator. With an estimated population of 24 million, a confidence interval of 95% and confidence level of 3%, the sample size turned out to be 1,067. Still we included 1,938 people in this study. Randomly selected 1,938 people were interviewed, out of whom 950 (49%) were females and 988 (51%) were males. One hundred and fifty-five (7.9%) people were either not educated or were below grade 10, while 335 (17.28%) were postgraduates.

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Table I: Results regarding knowledge, vaccination and testing for HBV (N=1,938).

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heard about HBV</td>
<td>1918</td>
<td>99</td>
</tr>
<tr>
<td>Vaccine is available for HBV</td>
<td>1225</td>
<td>63.2</td>
</tr>
<tr>
<td>Ever got tested for HBV</td>
<td>870</td>
<td>44.9</td>
</tr>
</tbody>
</table>

Table II: Knowledge regarding routes of transmission of hepatitis B virus (N=1,938).

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing razors</td>
<td>1898</td>
<td>97.94</td>
</tr>
<tr>
<td>Sharing toothbrush</td>
<td>1841</td>
<td>95</td>
</tr>
<tr>
<td>Sharing syringes</td>
<td>1924</td>
<td>99.3</td>
</tr>
<tr>
<td>Sexual contact</td>
<td>1492</td>
<td>77</td>
</tr>
<tr>
<td>Can’t spread by cough</td>
<td>1260</td>
<td>65</td>
</tr>
<tr>
<td>Mother to child during childbirth</td>
<td>556</td>
<td>28.7</td>
</tr>
</tbody>
</table>

Table I shows the proportion of respondents replying about knowledge of types, vaccination and testing for HBV. Table II shows the result of knowledge about modes of transmission of HBV with majority knowing the mode of spread. Population-based sampling method was used and administered face-to-face survey in the language the respondents could easily communicate in. There was a good cooperation rate, as just a dozen people refused to become a part of the study.

Hepatitis B prevalence estimates for Khyber Pakhtunkhwa province in 2008 ranged between 3 - 9%, or approximately 0.6 million patients. The province is mindful of this threat and has taken significant remedial measures: the provincial programme for the prevention and control of hepatitis is an illustration of the response. This Annual Development Programme funded project was implemented from July 2009 to June 2012. The programme was conceived to supplement the declining federal intervention in combating hepatitis.7

Most of the respondents had a good awareness regarding HBV and its mode of transmission. In a study carried out among Asians residing in San Francisco, America,8 90% had heard about HBV while in this study 99% had heard of this disease.

In 1992, the World Health Organization recommended the integration of hepatitis B vaccine into the national immunization programmes of all highly endemic countries by 1995 and all other countries by 1997. As of 2004, more than 150 (78%) of 192 World Health Organization member states had adopted universal childhood hepatitis B vaccination policies.9 The awareness among our respondents was quite low as over 36% people did not know that a vaccine is available for HBV. Nevertheless, the implementation of worldwide vaccination against HBV requires greater effort to overcome the social and economic hurdles. Safe and effective anti-viral treatments are available but are still far from ideal, a situation that, hopefully, will be improved soon. It is believed that, with hepatitis B immunisation, the global control of HBV infection is possible by the end of the first half of 21st century.

Transmission of HBV, from mother to child, most often occurs during the birth process; in-utero transmission can occur but it accounts for less than 2% of perinatal transmissions. Sharing syringes is a leading cause of spread of HBV. Over 99% respondents knew that HBV can spread by contaminated syringes.

There is a need to educate people about the various types of hepatitis virus. HBV and HCV are common and most people know about them. But generally people are not aware about hepatitis A virus, which unlike HBV and HCV, can spread through contaminated water, but usually is not involved in chronic diseases. Knowledge about a problem is typically the first step towards risk reduction and improvement in the quality of life. Awareness among general population regarding HBV infections can be increased by national campaigns. WHO also organizes World Hepatitis Day on July 28 every year to increase awareness and understanding of viral hepatitis.

It was found that people were generally well aware of the routes of transmission of this disease, but they lacked knowledge regarding vaccination and prevention. This disease cannot be wiped out till people start getting themselves and their children vaccinated against HBV. Infant vaccination coverage needs to be increased. People should get good access to settings where routine preventive care and immunization services are provided.

REFERENCES