

# AWARNESS LEVEL OF HEPATITS B IN RULAR AREAS OF CHARSADDA

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## ABSTRACT

**Objective:** The Purpose of this research was to see the knowledge of people of rural areas of Charsadda about Hepatitis B

**Materials and Methods:** A total of 100 patients were interviewed during a medical camp. Proformas were filled after consent given by the patients.

**Results:** A total of the 100 patients coming to the medical camp were interviewed. There were (36%) males and (64%) females. Mean age was  $34.2 \pm 11.7$  years; range 17-66 years. Twenty nine (29%) were found positive for hepatitis B. In addition only 54% of the candidates were married. In all (78%) were educated with only 15% of people educated to secondary or higher levels. Only 17% of the people had received complete vaccination.

**Conclusion:** Lack of awareness about Hepatitis B and its spread was found in Charsadda. People should be educated through different means so that they can be prevented against this communicable disease.

## INTRODUCTION

HBV is the most serious type of viral hepatitis causing a potentially life-threatening liver infection leading to chronic liver disease and ultimately result in liver cancer (Hepatocellular Carcinoma) which is the 5<sup>th</sup> most common cancer worldwide<sup>1</sup> "container-title": "Hepatology Research", "page": "n/a-n/a", "source": "Wiley Online Library", "abstract": "Aim\n\nSofosbuvir (SOF). It is estimated that 2 billion people have been infected with HBV and 387 million are chronically infected at present. Around one million HBV related deaths occur annually due to chronic hepatitis, liver cirrhosis, liver decompensation and hepatocellular carcinoma (HCC). HCC accounts for 320,000 deaths per year and is 10<sup>th</sup> leading cause of death worldwide<sup>2</sup>.

Major routes of spread of hepatitis B are through blood and blood products, vertical and horizontal transmission, by sharing of sharp instruments, through contaminated syringes, barber shops and beauty salon equipments. It is found in highest concentration in blood and serum and to a lower extent in semen, saliva, vaginal fluid and breast milk<sup>3</sup>. The major route of transmission of HBV in highly endemic areas are perinatal transmission, blood transfusion or through

accidental contact with blood of an infected individual<sup>4</sup> dose-response association between serum HBV DNA levels measured at the time of initial evaluation and the subsequent risk of cirrhosis. A similar direct relationship has been shown for the risk of hepatocellular carcinoma (HCC).

With improvement of modern medicine, there has been a rise in spread of viral infections like HBV, HCV and HIV due to improper sterilization of medical instruments and also due to improper management of hospital wastes<sup>5</sup> complete HepB vaccine series, and obtain serologic testing after series completion.\nMETHODS: A decision analytic tree and a long-term Markov model represented the risk of perinatal and childhood infections under different prevention alternatives, and the long-term health and economic consequences of HepB infection. Outcome measures were the number of perinatal infections and childhood infections from infants born to HepB surface antigen-positive women, quality-adjusted life-years (QALYs).

Prevention against any infection is proportional to knowledge, attitude and practice of the population. Attitude of people can only be changed if they are educated regarding how to prevent the disease from occurring and how to prevent the spread of the disease from spreading if there is any infected individual present.

In a study that was conducted between 2011 and 2012 showed that in Pakistan HBV prevalence was highest in Baluchistan and lowest in Khyber Pukhtoonkhwa. In Baluchistan HBV prevalence was 9.3%, 2.4% in Punjab, 2.2% in Sindh and 2% in Khyber Pukhtoonkhwa. It also stated that most of the general population remained asymptomatic despite of being infected<sup>3,6</sup>.

A safe and effective vaccine is present for the last 20 years against hepatitis B. Vaccination against hepatitis B infection not only prevents the occurrence

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of the disease but also helps in the prevention of carcinoma (Hepatocellular carcinoma)<sup>7</sup>. However the major obstacle is the cost of vaccine in developing countries and failure to reach the high-risk patients. The Expanded program of immunization was launched in Pakistan during 1978. With the increase in cases of hepatitis B, vaccine again HBV was added to the EPI during 2002<sup>8</sup>. But despite of the significant efforts done by the government of Pakistan people are still reluctant to get themselves/children vaccinated.

Hepatitis B immunoglobulin (HBIG) is prepared from plasma with high titers of Hepatitis B surface antibodies and may confer temporary passive immunity under certain conditions. The major indication for administration of HBIG is single acute exposure of a nonimmune person to splashes of blood, needle stick injury, percutaneous, sexual or ocular contact or from open wounds(human bites) made by a person who is HBsAg positive. The first dose 250-600IU/ml is the recommended dose it should be administered within the initial 12 hours after contact. It is recommended that a second dose of HBIG should also be given after 30 days of the first dose<sup>9</sup>.

The objective of our study was to assess the knowledge about hepatitis B among people of rural areas who attended the medical camp. This work will help us to understand the perception of people about the disease and will guide us in designing and implementation of health promotion and public awareness programs.

## MATERIAL AND METHODS

### **Collection of Sample**

This study conducted during Medical camps held in rural area of Charsadda. 100 questionnaires were filled during interview with the patient after their consent. The questionnaire included questions about awareness of infection, prevention, transmission and treatment of Hepatitis B. It also enquired about hepatitis B vaccination status of the patients. The data was entered in Microsoft Excel and descriptive analysis was carried out.

## RESULTS

### **Characteristics of Study Sample**

A total of the 100 patients coming to the medical camp were interviewed. There were (36%) males and (64%) females. Mean age was  $34.2 \pm 11.7$  years; range 17-66 years. Twenty nine (29%) were found positive for hepatitis B. In addition only 54% of the candidates were married. In all (78%) were educated with only 15% of people educated to secondary or higher levels. 17% of the people had received complete vaccination.

### **Knowledge of Hepatitis B**

It was seen that 27% believed that used syringes were amongst the main causes of Hepatitis B. 73% believed otherwise. Similarly, 84% believed that treatment by drips and blood transfusions were to be blame. It is interesting to note that more than 50% of the females believed that injections, syringes and needles used for piercing of nose or ears for tattooing were not responsible for the spread of the disease. 87% of the candidates also felt that unsterilized instruments of quacks, dental practitioners and surgeons were responsible for the spread of the disease.

Hundred percent of the candidates believed that cough was responsible for the spread of the infection from the infected patient to healthy individual. Ninety-eight (98%) of them believed that handshake and casual contact with the infected was responsible for the transmission of the infection. Furthermore, 97% believed that drinking and eating with the infected one can be cause of infection. 86% individuals 10 males and 76 females confused hepatitis B with Hepatitis A and E. Seventy eight (78%) males felt that used razor blades played a role. Meanwhile, 77% believe that marital relationships also played an active role in transmission. It was interesting to note that 100% believed that infection could be transmitted through breastfeeding while 43% believed that it was transmitted to the baby from mother during pregnancy. Forty one (41%) of the candidates was not immunized, while only 17% of the participants were completely immunized.

## DISCUSSION

Pakistan being one of the developing nations has got a very low literacy rate due to which people are unaware of basic health related problems that can be easily prevented by taking precautionary measure<sup>9</sup>. Hepatitis B virus (HBV) is commonly associated with chronic carrier state especially in young age and children. However, if left untreated it can lead to fatal complications like liver cirrhosis and hepatocellular carcinoma. Hepatitis B is mostly diagnosed accidentally before minor/major surgeries, blood donation or dental procedures.

This survey was conducted to assess the knowledge about hepatitis B in rural areas of Charsadda. Majority of the people (68%) were aware of hepatitis B but not completely educated about its route of spread and its prevention. Majority of the participants of this study heard about the infection from different sources but mainly through radio (57%). Education level of people was mostly primary and it showed male predominance. In the current study, it was also astonishing to note that 98% of people believed that Hepatitis B was spread by causal contact due to which families of the infected personals have out casted them.

Pakistan has one of the highest frequencies of

injections in the world. An average of per person per injection is 8 to 13.6 per annum. People demand being treated by drips and injections because of believe that they can recover quickly. This has encouraged patients, doctors and quacks to reuse the used syringes and unsterilized equipments<sup>10</sup> Pakistan, an investigation was conducted to evaluate the relationship between injections and viral hepatitis infections, to identify the reasons why patients received frequent injections, and to observe the injection practices employed in clinics. Two hundred and three adult patients were interviewed as they left each of the 18 area clinics. Practitioners were interviewed and three consecutive injections were observed at each clinic. Eighty-one per cent of patients received an injection on the day of the interview. Of the 135 patients who provided a serum sample, 59 (44%). Awareness levels of males were higher regarding spread of infection through injections, drips, tattooing and body piercing. 59% of the females on the other hand were of the opinion that injections and drips were not responsible for the spread of infection<sup>11</sup>.

100% of the females believed that hepatitis was transmitted from mother to child through breast milk and 43% believed that it was transmitted during pregnancy from mother to child. However, research shows that Hepatitis B infected mother's can feed their babies unless they are being treated with antiviral drugs<sup>12</sup>. Our results regarding breast feeding were consistent with other international studies therefore this misconception should be cleared by educating the females through Lady Health workers and mass media.

## CONCLUSION

In conclusion there is lack of awareness among people of rural areas of Charsadda. There is a need to educate people through different seminars, televisions, radios or through medical health workers regarding hepatitis B, its transmission and prevention. Grass root seminars and worships should be conducted to educated people and to clear misconceptions of the disease. Inadequate knowledge can lead to reuse of disposable syringes, unnecessary treatments with injections and isolation of the infected from their families.

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