



**Original Article**

**PREVALENCE OF HEPATITIS B AND C  
AMONG THE PATIENTS PRESENTING IN  
OUTDOOR DEPARTMENT**

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**ABSTRACT:**

Hepatitis B is a potentially life-threatening liver infection caused by the hepatitis B virus (HBV). . Hepatitis C virus is predominantly a blood-borne virus, with very low risk of sexual or vertical transmission. These are major global health problems. This observational study was conducted in outdoor department of different hospitals. All the patients presenting with any kind of disease were subjected to the screening i.e. Hepatitis B and C screening. A total of 340 patients were included in this study. The mean age of the patients was 44.34±4.57

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years with minimum age of 23 years and maximum age of 59 years. Out of 189 males, 46 males (13.53%) were suffering from Hepatitis B and 39 (11.47%) were suffering from Hepatitis C. Out of 151 females, 32 (9.41%) were suffering from Hepatitis B and 31 (9.11%) were suffering from Hepatitis C.

**Keywords: Hepatitis B, Hepatitis C, Outdoor Patients**

**INTRODUCTION:**

Hepatitis B is a potentially life-threatening liver infection caused by the hepatitis B virus (HBV). It is a major global health problem. It can cause chronic infection and puts people at high risk of death from cirrhosis and liver cancer. A safe and effective vaccine that offers a 98-100% protection against hepatitis B is available. Preventing hepatitis B infection averts the development of complications including the development of chronic disease and liver cancer. Hepatitis B prevalence is highest in the WHO Western Pacific Region and the WHO African Region, where 6.2% and 6.1% of the adult population is infected respectively. In the WHO Eastern Mediterranean Region, the WHO South-East Asia Region and the WHO European Region, an estimated 3.3%, 2.0% and 1.6% of the general population is infected, respectively. And in the WHO Region of the Americas, 0.7% of the population is infected (1, 2).



The hepatitis C virus (HCV) is a small (55–65 nm in size), enveloped, positive-sense single-stranded RNA virus of the family Flaviviridae. The hepatitis C virus is the cause of hepatitis C and some cancers such as liver cancer (hepatocellular carcinoma, abbreviated HCC) and lymphomas in humans. Hepatitis C virus is predominantly a blood-borne virus, with very low risk of sexual or vertical transmission. Because of this mode of spread the key groups at risk are intravenous drug users (IDUs), recipients of blood products and sometimes patients on haemodialysis. Common setting for transmission of HCV is also intra-hospital (nosocomial) transmission when practices of hygiene and sterilization are not correctly followed in the clinic. A few cultural or ritual practices have been proposed as a potential historical mode of spread for hepatitis C virus, including circumcision, genital mutilation, ritual scarification, traditional tattooing and acupuncture. It has also been argued that given the extremely prolonged periods of persistence of HCV in humans, even very low and undetectable rates of mechanical transmission via biting insects may be sufficient to maintain endemic infection in the tropics, where people receive large number of insect bites (3, 4).

These viruses are transmitted by exposure to infectious blood or body fluids. Infection around the time of birth or from contact with other people's blood during childhood is the most frequent method by which



hepatitis B and C are acquired in areas where the disease is common. In areas where the disease is rare, intravenous drug use and sexual intercourse are the most frequent routes of infection. Other risk factors include working in healthcare, blood transfusions, dialysis, living with an infected person, travel in countries where the infection rate is high, and living in an institution (5). Tattooing and acupuncture led to a significant number of cases in the 1980s; however, this has become less common with improved sterilization. The hepatitis B viruses cannot be spread by holding hands, sharing eating utensils, kissing, hugging, coughing, sneezing, or breastfeeding. The infection can be diagnosed 30 to 60 days after exposure. The diagnosis is usually confirmed by testing the blood for parts of the virus and for antibodies against the virus. It is one of five main hepatitis viruses: A, B, C, D, and E (6).

**MATERIAL AND METHODS:**

This observational study was conducted in outdoor department of different hospitals. All the patients presenting with any kind of disease were subjected to the screening i.e. Hepatitis B and C screening. The basic demographic data of the patients was collected. All the data was entered and analyzed in SPSS Ver. 23.0. The qualitative variables were presented as frequency and



percentages. The quantitative variables were presented as mean and standard deviation.

**RESULTS:**

A total of 340 patients were included in this study. The mean age of the patients was  $44.34 \pm 4.57$  years with minimum age of 23 years and maximum age of 59 years. The mean age of male and female patients was  $47.45 \pm 3.46$  and  $43.56 \pm 1.99$  years, respectively. There were 189 (55.59%) male patients and 151 (44.41%) female patients. Out of 189 males, 46 males (13.53%) were suffering from Hepatitis B and 39 (11.47%) were suffering from Hepatitis C. Out of 151 females, 32 (9.41%) were suffering from Hepatitis B and 31 (9.11%) were suffering from Hepatitis C.

**DISCUSSION:**

Hepatitis B vaccination is the best way to prevent all of the ways that hepatitis B is transmitted. People with HIV who do not have active HBV infection should be vaccinated against it. In addition to the 3-dose series of hepatitis B vaccine given over 6 months, as of 2017, there is a 2-dose series given over 1 month. No vaccine exists for HCV and no effective pre- or postexposure prophylaxis is available. The best way to prevent hepatitis C infection is to never inject drugs or to stop injecting drugs by getting into and staying in drug treatment. If you continue injecting drugs, always use



new, sterile needles or syringes, and never reuse or share needles or syringes, water, or other drug preparation equipment (4, 6, 7).

HIV-HBV and HIV-HCV coinfections can be effectively treated in most people. But medical treatment can be complex, and people with coinfection should look for health care providers with expertise in the management of both HIV infection and viral hepatitis. For hepatitis B, treatment can delay or limit liver damage by suppressing the virus. Like treatment for HIV, hepatitis B treatment may need to be taken for the rest of your life. Hepatitis C is a curable disease. Left untreated, it can cause several liver damage, liver cancer, or death. However, new treatments for hepatitis C have been approved in recent years. These direct-acting antiviral treatments are much better than the previously available treatment because they have few side effects and do not need to be injected. These treatments for HCV infection cure about 97% of people, including those living with HIV, with just 8-12 weeks of oral therapy (pills) (5, 8).

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