

AWARENESS OF HEPATITIS C TRANSMISSION AND PREVENTION AMONG RURAL POPULATION

ABSTRACT:

Background: Hepatitis C virus (HCV) infection remains a major public health concern, particularly in rural populations where low literacy levels, limited access to healthcare, and unsafe traditional practices contribute to continued transmission. Lack of awareness and widespread misconceptions further hinder early detection and prevention efforts. This study aimed to assess the awareness of HCV transmission and prevention among the rural population, identify common misconceptions, and determine the association between socio-demographic factors and awareness levels.

INTRODUCTION:

Hepatitis C virus (HCV) infection is a major global public health problem and an important cause of cirrhosis, hepatocellular carcinoma and liver-related mortality. The World Health Organization (WHO) estimates Globally, an estimated 50 million people have chronic hepatitis C virus infection, with about 1.0 million new infections occurring per year. WHO estimated that in 2022, approximately 242 000 people died from hepatitis C, mostly from cirrhosis and hepatocellular carcinoma (World Health Organization).^[1,2] Despite the availability of highly effective direct-acting antiviral (DAA) regimens that can cure more than 95% of treated patients, access to testing and treatment remains limited in many low- and middle-income countries (LMICs), and global elimination targets for 2030 are currently off-track. (World Health Organization).^[1,2]

Often asymptomatic in the acute phase of illness, hepatitis C (HCV) and hepatitis B (HBV) viruses were responsible for 96% of viral hepatitis associated deaths in 2015, and remain major sources of morbidity and mortality globally (WHO).^[3]

Materials and Methods:

A community-based, cross-sectional study was conducted in selected rural villages of province - Sindh, Districts - Tando Allahyar, Hyderabad, Mirpurkhas and Lahore district, Punjab province, Pakistan. A total of 200 adults aged 18–50 years, residing in the area for at least one year, were selected using random sampling. Data were collected using a pre- tested, structured questionnaire administered through face-to-face interviews by trained investigators in the local language. The questionnaire assessed demographic characteristics, knowledge of HCV transmission routes, preventive measures, and misconceptions. Descriptive statistics were used to summarize awareness levels, while chi-square tests examined associations between socio-demographic variables and awareness. Logistic regression analysis was used to identify independent predictors of adequate awareness.

Results:

Knowledge level showed no significant association with sex, age, marital status, or education ($p > 0.05$), but was significantly associated with occupation ($p = 0.023$), with doctors demonstrating the highest good knowledge (81.8%). Higher knowledge was strongly associated with positive attitudes, including perceiving Hepatitis C as very serious and non- discriminatory views toward infected individuals ($p = 0.001$). Knowledge was also significantly related to selected preventive practices—receiving injections in the past year, use of sealed sterile syringes, and household use of injectable drugs ($p < 0.05$)—but not with blood transfusion history, tattooing/ear piercing, or sharing sharp instruments, indicating partial translation of knowledge into practice.

Conclusion:

Awareness of hepatitis C transmission and preventive measures among the rural population remains suboptimal, with persistent misconceptions that may contribute to ongoing transmission. Strengthening targeted health education, improving access to reliable information, and promoting safe practices at the community level are essential to reduce the burden of HCV in rural settings.

Keywords:

Hepatitis C, awareness, rural population, transmission, prevention, misconceptions, cross-sectional study