# Water Borne Hepatitis A and Hepatitis E in Malwa Region of Punjab, India

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**Water Borne Hepatitis A and Hepatitis E in Malwa Region of Punjab, India**

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**Abstract**

***Introduction:*** Hepatitis-A virus infection (HAV) and Hepatitis E virus infection (HEV) are faecally contaminated water borne infection of great public interest in developing countries. HAV has a world-wide /dablestribution and affects infant and young children in developing countries and its epidemics are not very common. HEV is restricted to tropical countries and affects older children and young adults and its epidemics are common. Studies suggested that HEV is etiologically responsible for 10%–95% of admitted cases of hepatitis. Exposure rates over a period of time are different in different parts of the country and in different socio-economic groups.

***Aim of the study*** 1. To study the prevalence of HAV and HEV in the outbreak of hepatitis in certain areas of Malwa region of Punjab, India.

2. To determine the age specific prevalence rates of HAV and HEV.

3. To determine any change in the epidemiology of these infections.

***Material and Methods:*** This study was conducted in the Department of Microbiology in GGMC and Hospital Faridkot, A leading Tertiary care hospital and the major referral centre of Malwa region of Punjab, India.

***Collection and Serological Tests***: 1.Venous blood samples of patients of acute hepatitis were taken. 2.Relavent information regarding their Age, Sex Education, Socio-economic status, personal and community hygiene were recorded. All of the sera were screened for IgM Antibody to HEV and HAV using IgM capture ELISA Kit (ASIA-LION Biotechnology for

HEV and GENERAL BIOLOGICAL CORPORATION for HAV ) in accordance with the manufacturer's instructions.

***Result and Conclusion :*** 1.The outbreak was due to hepatitis A &E virus(HEV predominating resulting from fecal contamination of drinking water). 2.Hepatitis E is more widely prevalent 3.There is a change in the epidemiology of HAV so, more cases are seen in age group of more than 20 years.

**Keywords:** Infections, Punjab, Hepatitis, Water

**Reference**

B N Tandon, B. M. Gandhi, Y. K. Joshi Etiological spectrum of viral hepatitis and prevalence of hepatitis A and B virus infection in North India. Bulletin of the World Health Organisation 62(1):67-73,1984