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Editorial

World Hepatitis Day- new challenges

Viral hepatitis is the most common cause of acute and chronic liver disease in the world with over half the world's population exposed to the different hepatotrophic viruses. The estimated 400-500 million people with chronic viral hepatitis has been recently described as a game changer in Hepatology[1]. Hepatitis B and C contribute to a very high grade of disease. The spectrum of viral hepatitis differs with respect to the aetiological agents in different geographical regions of the world. In India, HEV infection is responsible for most of the epidemics of viral hepatitis. HEV infection is responsible for 30-70 per cent of the cases of sporadic hepatitis and the major cause of acute liver failure (ALF)[2-6]. Many a times even epidemics of sporadic outbreaks of hepatitis A, have also been reported form our country[7-11]. Since hepatitis E is rampant in India, the need of the hour is to adopt preventive strategies that could aim at providing clean drinking water, proper sewage disposal and health education. HEV ORF 2 proteins as candidate vaccine[12] could turn out to be an additional armentonium in near future.

In India, hepatitis B accounts for 15-30 per cent of the cases of the acute hepatitis and 70 per cent cases of chronic hepatitis while HCV is an infrequent cause of acute icteric hepatitis though it is responsible for most of the cases of post transfusion hepatitis[13,14]. In our country, hepatitis D is responsible for less than 10 per cent of the patients of acute and chronic HBV infection[15]. In India, the HBV carrier rate is approximately 4 per cent[16]. The majority of severe sequele occur in patients who are chronically infected with HBV; a significant proportion develop liver cirrhosis or hepatocellular carcinoma. Moreover, these chronically infected patients serve as reservoir for continuing HBV transmission. HBV is transmitted by precutaneous or mucosal contact with infectious blood or other body fluids (serum, semen, and saliva). In case of infants and children, the infection is acquired through prenatal transmission and horizontal transmission from infected household contacts. Adolescents and adults are mostly infected through sexual activity, sharing needles in case of injected drugs use (IDU) or accidental needle stick injuries in health care settings. Since the epidemiological data reflect that HBV causes a considerable disease burden in India the basic need is to target higher risk population for HBV vaccination and to insist on inclusion of HBV vaccine in the universal immunization schedule so as to reduce the HBV carrier frequency. Quality control of donor screening in India is another area which needs attention. Awareness compaign by the India National Association of the Study of Liver with respect to the risk of community acquired infection and steps to prevent household and nosocomial spread of HBV infection need to be launched.

In India, HCV infection is acquired mostly through transfusion of blood or blood products[17-19]. In our country, HCV infection as a cause of acute viral hepatitis has been reported to vary between 0-21 per cent[20-23] and responsible for 14-26 per cent cases of chronic liver disease[17,24,25]. A considerable number of cases have asymptomatic HCV presentation. The magnitude of HCV infection amongst the patients of chronic liver disease is likely to increase in future since blood banks in India have only recently introduced the policy of anti-HCV screening. Hence

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all those individuals who have been exposed before this are likely to develop the disease in next 15-30 years. No vaccine has yet been developed against hepatitis C because of the large and frequent genetic variation. Screening and testing of blood and organ donors, strong education programme and infection safety practices in health care settings are currently the most effective preventive measures for hepatitis C. It is believed that failure to address acute transmission of HCV infection will undermine long term attempts to reduce HCV associated disease burden. Further, spending more resources in this direction would allow identification of iatrogenic and nosocomial infections which still occur and are largely unrecognized. A co-ordinated multilevel approach is a priority.

Further improvement of chronic HBV and HCV screening will add to the demand for vaccination and care services, thus increasing the need to prepare added public health and medical systems to administer and care for people with viral hepatitis. There is a need to collect data at the national, State, and direct level so as to evaluate and supervise the prevention policies. The existing viral hepatitis scrutiny systems are not enough in their competence to monitor chronic infections and to measure the burden of morbidity and mortality due to viral hepatitis. The epidemiology of viral hepatitis is shifting and presents new prevention challenges. A better public health response will be required involving governmental, academic, and community-based organizations. A combined effort and sensible stride towards the direction of prevention of viral hepatitis infection and disease control can help accomplished the goal.

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