

# The Menace of Hepatitis B and C: Prevention is Better than Cure

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Viral hepatitis is a health problem for developed countries but it is disaster for developing country like Pakistan. According to World Health Organization (WHO) there are 350 million people with chronic HBV infection and 170 million people with chronic HCV infection worldwide<sup>1,2</sup>. Hepatitis B is estimated to result in 563000 deaths and hepatitis C in 366000 deaths annually<sup>3</sup>. The carrier rate of Hepatitis B virus in Pakistan is reported to be 3-4%<sup>4</sup>. Therefore chronic hepatitis B is a severe problem in Pakistan<sup>5,6</sup>. When compared to vertical transmission, which is less frequent,<sup>7</sup> horizontal transmission (particularly in early childhood), accounts for most cases of chronic HBV infection in intermediate prevalence areas like Pakistan<sup>8</sup>. Children may acquire HBV infection through horizontal transmission via minor breaks in the skin or mucous membranes or close bodily contacts with other children. Similarly the cases of HCV related chronic liver disease (CLD) in Pakistan has tremendously increased. In 1994 only 16.6%<sup>9</sup> patients of CLD were positive for anti-HCV antibodies; however more recent data show nearly 60-70% patients with CLD tend to be positive for anti-HCV<sup>10,11</sup>. In some cases CLD may lead to hepatocellular carcinoma and in-fact it has recently been shown that nearly 50% patients with hepatocellular carcinoma (HCC) in Pakistan are anti-HCV positive<sup>12</sup>. The HCV may be transmitted in different ways but it appears that blood transfusions is still the major cause of HCV transmission in Pakistan as only 25% blood banks in fact screen blood for HCV; others do not do so probably to keep the cost down<sup>13</sup>. Other commonest route of transmission for HCV is use of non-sterile syringe/needle for therapeutic injections<sup>14</sup>. Our cultural belief is that parenteral therapy is more powerful and we see unjustified use of parenteral therapy both in the form of injections and I/V infusions<sup>15</sup> with expected increase in prevalence of the hepatitis. Other risk factors that may be responsible for HCV transmission include excessive use of barbers for shaving, ear piercing and non-sterile surgical and dental practices of unqualified unregistered practitioners (quacks)<sup>16</sup>. In a recent survey (2007-2008) carried out by Pakistan Medical Research Council in collaboration with Ministry of Health and Statistics Division, Federal Bureau of Statistics, it is shown that the overall prevalence of hepatitis B (HbsAg) is 2.5% and hepatitis C (HCV) is 4.9%. Gender showed no difference for HCV, however for HBV males outnumbered females. Overall HBeAg positivity was 14.4% with 17% in Balochistan, 15.3% in Sindh, 14.1% in Punjab and 8.4% in NWFP. For HCV the prevalence

within provinces showed 5% in Sindh, 6.7% in Punjab, 1.1% in NWFP and 1.5% in Balochistan. For HBV the figures were 2.5% in Sindh, 2.4% in Punjab, 1.3% in NWFP and 4.3% in Balochistan. Pakistan is sixth most populous country and its estimated population in 2011 is over 187 million<sup>5,6</sup>. In other words we have 4.67 million peoples affected with HBV virus and about 9.16 millions with HCV. Government has taken measures to control the menace. According to The Nation<sup>17</sup>, Prime Minister Program for Prevention and Control of Hepatitis was launched in August 2005 for a period of 5 years, initially with a cost of Rs 2.594 billion. Since then the number of patients with the disease reporting to Government Hospital have increased manifold, probably due to provision of free treatment, although on a limited scale. In 2005-06 soon after program was launched the number of poor patients, who were registered and treated at government hospitals were 10,815 and 1,000 for hepatitis C and B respectively. While for the year 2008-09 the figure is 84,773 and 7,204 respectively. Free treatment is restricted only to the poor patients through financial support provided by "Pakistan Bait-ul-Mal" and "Zakat and Ushr" departments. In Sindh, 31500 patients of Hepatitis C, 2750 of Hepatitis B and 200 of Hepatitis D have so far been treated under Chief Minister's Special Hepatitis Control Program<sup>18</sup>. Keeping in view the high prevalence rate of HBV and HCV, the efforts underway to cure the problem will remain fruitless. Therefore prevention strategies are best to cope with the problem of viral hepatitis. Many cases of HBV are transmitted vertically and therefore the perinatal Hepatitis B prevention program be implemented from primary to tertiary health care level<sup>4</sup>. The lady health visitors and dais must also be incorporated into this program. The goals of Hepatitis C prevention should be to decrease incidence of new cases by controlling HCV transmission. This can be achieved by identifying persons at risk for infection and provide knowledge regarding disease and spread, risk reduction counseling, HCV testing, and appropriate medical services including substance abuse treatment. Public service message be propagated through print and electronic media to increase awareness in general public.

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