



# Viral Hepatitis B and C Need to be Approached as A Major Public Health Problem in Latin America

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## Introduction

Hepatitis B and C viruses, although in their genomic structure are very different, share several characteristics. Both can induce acute hepatitis, chronic hepatitis and progression to cirrhosis having oncogenic capacity related to the development of hepatocellular cancer; both are associated with systemic autoimmune manifestations and, both B virus (genome DNA) and C virus (genome RNA) have the ability to avoid immune response of the infected host [1,2].

They share some of its spreading common routes: nosocomial, blood transfusions, hemodialysis, use of illicit drugs by intravenous or inhaled routes [3]. Horizontal sexual route and perinatal or vertical transmission (mother-newborn) have been and still are predominant in the spread of Hepatitis B, these routes being less efficient when we speak of Virus C, except in patients coinfecting with the Human Immunodeficiency Virus [3,4].

The consideration that Viral Hepatitis is a global major human health problem was reinforced in 2010 by the World Health Organization, which established the Hepatitis World Day in April of that year, determining July 28th as its corresponding date [5].

Prevalence calculation of Hepatitis B Virus (HBV) is based primarily on the determination of the number of people who maintain a positive surface B virus antigen in serum or in plasma. According to different published sources, it is estimated that from Mexico to Patagonia there are between 7 to 12 million people infected by HBV [3-6]. The geographical categorization of HBV epidemiology classified the Amazon as the area with the highest frequency of infected individuals (>8%, reaching in some publications up to 14%), while geographical areas such as Belize in Central America or Suriname in South America, demonstrate 4% rate (intermediate frequency: 2-7%). Mexico, Argentina, Chile and Uruguay show low prevalence (<2%). The rest of the countries of Central and South America are in the lower range of intermediate frequency (2%) [3,6,7].

The estimation of the prevalence of Hepatitis C Virus (HCV) is evaluated by investigating specific IgG class antibodies which indicate past exposed to this virus. Cumulative evidence estimates that prevalence of Hepatitis C virus in Latin America varying from low rate (2.8-4.6 million) to intermediate (6.8 to 8.9 million) and high (9.8-11.9million) rates [3,7,8]. In Latin America, Hepatitis C virus genotype 1 predominates with highest proportion of genotype 1b in the vast majority of countries [9].

Control measures globally known to approach HBV and HCV should be finally considered recognizing warning and action as immediate prevention. These measures must be applied to key populations in the Latin American region now also due to demographic changes derived from economical deleterious and the daily migratory events causing and spreading this major public health problem with solutions in our hands.

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