

# Epidemiology of Chronic Hepatitis B in Turkey

Hasan Özkan

Department of Gastroenterology, School of Medicine, Ankara University, Ankara, Turkey

## ABSTRACT

Hepatitis B virus (HBV) infection is a global public health problem and it is also a major health concern of Turkey. The estimated number of HBV carriers in Turkey is about 3.3 million, with an overall HBV prevalence of 4.57%. Thus, both prevention and therapy of HBV-infected patients are urgent medical need of Turkey. A total of 1,533 among 37,637 patients who were examined at the Department of Gastroenterology, Ankara University School of Medicine were found to be hepatitis B surface antigen (HBsAg) positive (4%). Viral hepatitis treatment is fully reimbursed in Turkey through the national insurance system, which covers all residents across Turkey.

**Keywords:** Hepatitis B virus, Management, National support, Prevalence.

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## INTRODUCTION

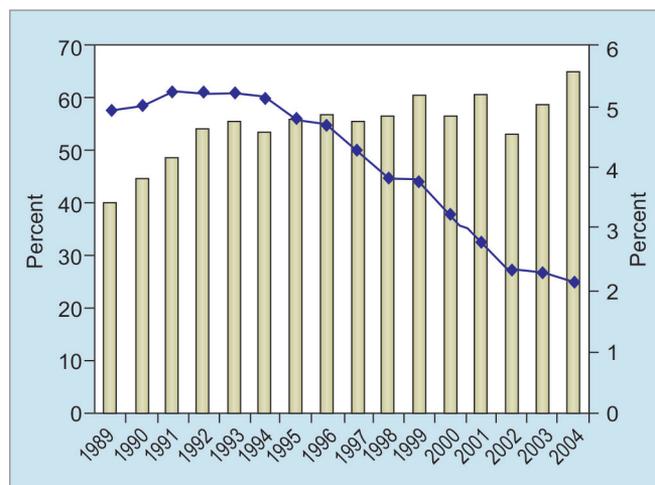
Hepatitis B is one of the most common infectious diseases worldwide. Estimates indicate that almost 2 billion people have been infected with HBV, with more than 380 million people being chronic carriers (6% of the world population on average).

Among all chronic hepatitis B (CHB) cases, approximately 40% will develop cirrhosis, liver failure, or hepatocellular carcinoma. About 750,000 patients per year die from these complications.

According to the World Health Organization, Turkey has intermediate (2–8%) endemicity for hepatitis B. This information has been obtained mainly from studies in blood donors (Graph 1).<sup>1</sup>

The overall prevalence of the hepatitis B surface antigen (HBsAg) has been previously reported to be in the range of 4.0 to 5.0%, which has decreased to 2.0% in recent years.

Since the implementation of universal vaccination of all children and risk groups in Turkey in 1998, a decline in prevalence has been observed. The prevalence across Turkey among children was observed before the vaccination policy. Before 1998, the overall country prevalence was found to be 5.90% among 0- to 15-year-olds. In the aftermath of the vaccination policy, this figure dropped to 2.84% for the same age group.<sup>2</sup>



**Graph 1:** The prevalence of HBV in blood donors in Turkey<sup>1</sup>

The Turkish Society of Viral Hepatitis researched the prevalence of HBV among 73,175 people. The HBsAg positivity was found to be 2.3% with predominant D (HDV) genotype in different parts of Turkey in 2012.

The estimated number of HBV carriers in Turkey is 3.3 million, with an overall HBV prevalence of 4.57%. Even a very conservative assessment means that 10% of the carriers would need treatment, which means that 330,000 chronic HBV cases would be eligible for treatment in Turkey alone. A total of 1,533 among 37,637 patients who were examined at the Ankara University School of

**Address reprint requests to:** Hasan Özkan, Department of Gastroenterology, School of Medicine, Ankara University, Ankara, Turkey  
Phone: +905322629156, e-mail: ozkandr@hotmail.com

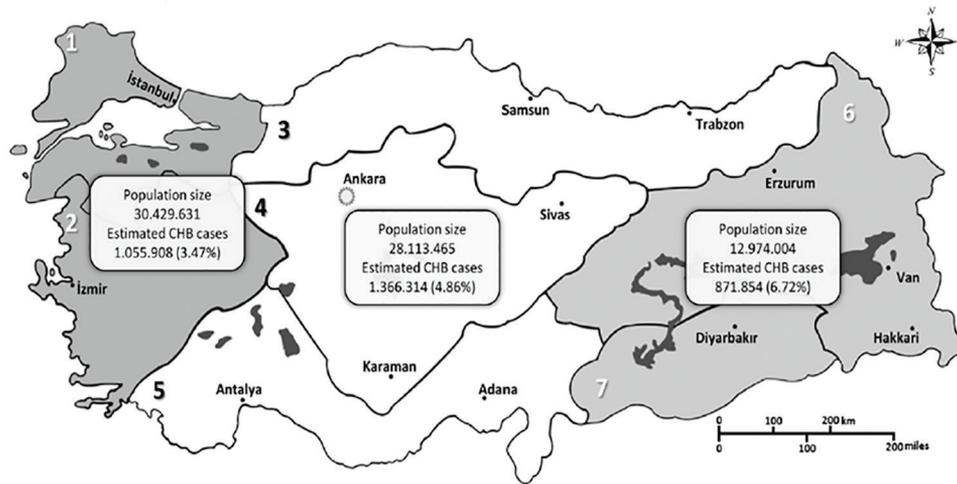
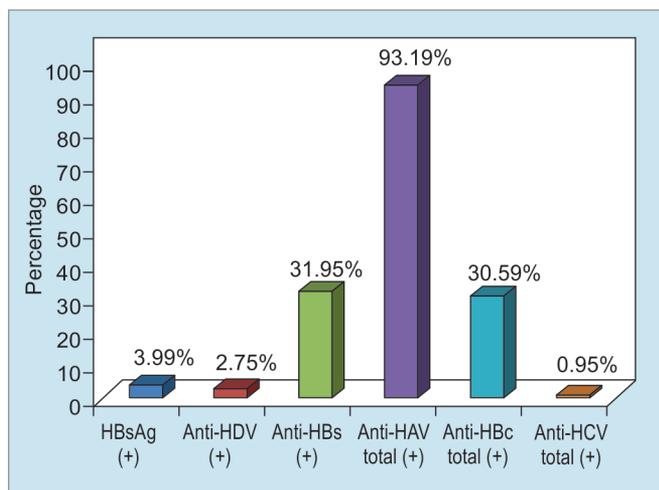
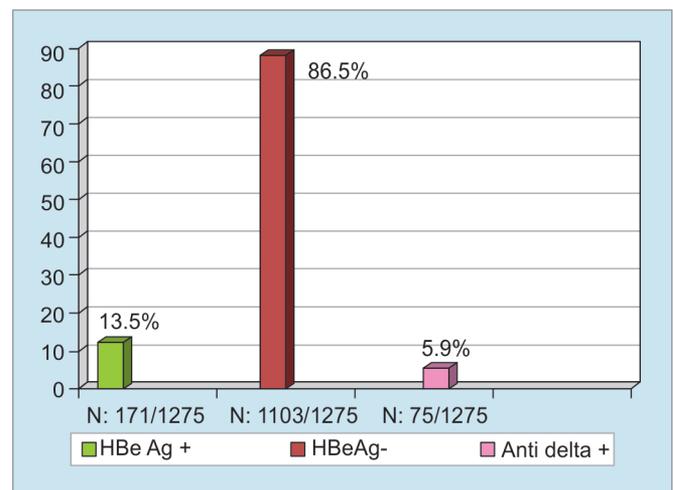


Fig. 1: Distribution of HBV infection in different parts of Turkey<sup>3</sup>



Graph 2: Health situation of HBV in Turkey<sup>4</sup>



Graph 3: HBsAg (+) 1,275 cases (1998–2016)<sup>5</sup>

Medicine Department of Gastroenterology were found to be HBsAg positive (4%) (Fig. 1, Graphs 2 and 3).

Treatment of CHB patients with active disease could reduce mortality related to liver disease among 330,000 chronic HBV cases by 80%.

It must be highlighted that viral hepatitis treatment is fully reimbursed in Turkey through the national insurance system, which covers all residents across Turkey.

In conclusion, several studies revealed an HBsAg positivity in less than 3.5% of the adult population and at least one-third of the population has been exposed to HBV infection in Turkey. The findings of population-based studies in Turkey with respect to the epidemiology of HBV and HCV revealed HBsAg positivity in 4%, anti-HCV positivity in 1%, and anti-HDV positivity in 2.8% of HBsAg-positive individuals.<sup>4</sup>

## REFERENCES

1. Gurol E, Saban C, Oral O, Cigdem A, Armagan A. Trends in hepatitis B and hepatitis C virus among blood donors over 16 years in Turkey. *Eur J Epidemiol* 2006;21(4):299-305.
2. Kanra G, Tezcan S, Badur S; Turkish National Study Team. Hepatitis B and measles seroprevalence among Turkish children. *Turk J Pediatr* 2005 Apr-Jun;47(2):105-110.
3. Toy M, Önder FO, Wörmann T, Bozdayi AM, Schalm SW, Borsboom GJ, van Rosmalen J, Richardus JH, Yurdaydin C. Age- and region-specific hepatitis B prevalence in Turkey estimated using generalized linear mixed models: a systematic review. *BMC Infect Dis* 2011 Dec;11:337.
4. Tozun N, Ozdogan O, Cakaloglu Y, Idilman R, Karasu Z, Akarca U, Kaymakoglu S, Ergonul O. Seroprevalence of hepatitis B and C virus infections and risk factors in Turkey: a fieldwork TURHEP study. *Clin Microbiol Infect* 2015 Nov;21(11):1020-1026.
5. Ozkan H. Abstracts of the 24th Annual Conference of APASL 2015, Istanbul-Turkey. *Hepatol Int* 2015 Mar;9(Suppl 1):1-391.