



## Hepatitis B and D

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### ABSTRACT

In recent years, liver diseases have taken an important place among the main causes of premature disability and death of the population. Every year, more than 1 million people of the world are infected with liver diseases. Death due to viral hepatitis is increasing year by year. According to WHO data in 2015, viral hepatitis caused the death of 1.34 million people. 720,000 of them died from chronic liver diseases - liver cirrhosis and cancer, and 470,000 died from hepatocellular carcinoma (WHO, 2015y). In this article, the scientific work conducted on hepatitis B and D diseases on a global scale is studied, and their advantages over each other are explained in more detail.

### Keywords:

Hepatitis B (GBV), Hepatitis D (GDV), pathogen, interferon-alpha

**Introduction:** *Hepatitis D virus (GDV)* is a defective virus, and together with *hepatitis B virus (GBV)*, its development is manifested in hepatocytes[1]. Chronic hepatitis D leads to cirrhosis of the liver in 5-10 years in 70% [4] severe and rapidly developing form of viral hepatitis. Currently, the number of people infected with GDV worldwide is 15 million [5]. There is an increase in severe and rapidly progressive liver disease associated with it. In addition to genome replication, the liver can also be found in lymphocytes. Together with viral hepatitis B, it accounts for 5% of all infected patients worldwide[3], corresponding to 10-20 million people[8]. Chronic hepatitis D is characterized by a more severe course compared to patients with hepatitis B, an accelerated rate of development of cirrhosis, the risk of hepatocellular antibody production and decompensation of liver cirrhosis. Chronic hepatitis B is also considered a global disease. More than 240 million people are carriers of the

hepatitis B virus, which can lead to: liver cirrhosis, liver cancer, and even death [9]. In addition, DNA replication of GBV has been found in blood serum and liver. Advances in molecular biology have focused on GBV and shown that it remains a major challenge for virology[7].

**Objective:** To study and analyze more than 30 scientific works on hepatitis B and D diseases worldwide.

### Research And Results Analysis.

In the process of studying and analyzing about 30 scientific works on hepatitis B and D diseases, which have become global problems, especially on its complications, the following was determined.

Research in Africa by Michael Manns of the Hannover Medical School in Germany has shown that hepatitis B virus infection can be controlled for a long time with oral nucleoside analogues that inhibit the viral polymerase.

However, this does not affect chronic GDV. There is no specific treatment for chronic GDV yet. Treatment of chronic GDV infection with pegylated interferon-alpha for 48 weeks resulted in clearance of hepatitis D virus RNA in 25% of patients [6].

In 2003, in studies conducted by F. Patrizia at the University of Cagliari in Italy, treatment with **interferon-alpha** was an effective method in chronic hepatitis D. High doses (3 times a week or 5 times a day) are required for at least 1 year to have short- and long-term effects on disease outcomes. Therapy should be continued until the GDV RNA genome does not replicate and the GBV antigen disappears. Liver transplantation is considered to be the only correct method of treatment in the last stages of GDV-related liver diseases [7].

found that the risk of GDV reinfection by the graft is safer than GBV reinfection and can be prevented by continuous administration of anti-GBV immunoglobulins[11, 12].

According to a number of Kyrgyz scientists, it is important to determine the distribution characteristics and endemic role of certain genotypes of GBV and GDV coinfection. A large-scale screening of Central Asian GBV and GDV was found to allow estimation of the distribution routes[10] and evolutionary divergence time of virus isolates. They emphasized that understanding the epidemiology of the infectious process is important for the development of infection prevention and treatment programs.[2]

## Conclusion

We can conclude from the results of the analysis that it is no exaggeration to say that the most effective of the conducted scientific works is the scientific work studied and put into practice by the Italian F.Patrizia. Because it takes less time for the treatment process, and high-dose interferon-alpha also serves to completely or partially eliminate the GBV antigen.

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