

Evaluating the relationship between demographic and clinical variables in patients with hepatitis B in the comprehensive health service centers of Ardabil between 2014 and 2021

Abstract

Background: Viral hepatitis is one of the 5 infectious causes of early human death worldwide. Timely diagnosis and effective treatment of this virus can reduce illness, disability and death caused by this infection.

Aim: This study was conducted with the aim of determining the relationship between demographic and clinical variables in patients with hepatitis B in comprehensive health service centers in Ardabil between 2014 and 2021.

Materials and methods: This descriptive-analytical cross-sectional study was conducted in Ardabil between 1393 and 1400. In this study, 833 patients were referred to health centers in Ardabil province for follow-up and treatment of hepatitis. In the field of demographic information, clinical information and examination of the relationship between clinical information and demographic information of hepatitis B patients were studied separately by census. The obtained information was analyzed using descriptive statistics and analytical tests in SPSS-V26 software.

Results: Based on the important findings of this study, the most affected age group was the age group of 30 to 39 years with 27.3% (227 people). 83.6% (696 people) of these patients had no vaccination history and 2.8% (23 people) mentioned incomplete

vaccination history. Clinical symptoms were seen only in 14.9% (124 people). In terms of disease status, 90.9% of patients were in chronic carrier state (829 people) and 6.5% were in acute disease state (54 people). In 96.6% of patients (804 patients), the most important positive marker reported was HBsAg. The condition of the disease had a significant relationship with the patients' marriage, place of residence and occupational group, and the chronic condition was significantly more in the married population. HBsAg level had a significant relationship only with the place of residence and the number of positive cases was higher in urban areas, and HBsAg positive cases were reported significantly higher in rural areas. Other hepatitis markers did not show significant relationship with demographic variables. Also, co-infection with hepatitis C had no significant relationship with these variables. Clinical symptoms were significantly more reported from rural areas despite fewer positive cases. Also, clinical symptoms were reported in different occupational groups.

Conclusion: Although infant vaccination has reduced the prevalence of HBV in the younger population since 1993, there is still room to improve vaccination programs and educate medical personnel about preventive methods as well as patients about vertical and interfamilial spread.

Keywords: hepatitis B - clinical symptoms - demographic variables - vaccination