



# Incidence of Presenting Hepatitis A in the Peja Regional Hospital during 2019–2020

Afrim Zeqiraj<sup>1</sup>, Zafer Gashi<sup>1</sup>, Shkelzen Elezaj<sup>2</sup>, Dafina Zeqiraj<sup>2</sup>, Melisa Zogaj<sup>1\*</sup>, Florjana Zogaj<sup>3</sup>, Zenel Shatri<sup>2</sup>, Agim Shabani<sup>4</sup>

<sup>1</sup>Department of Biochemistry, UBT - Higher Education Institution, Prishtina, Kosovo; <sup>2</sup>Department of Urology and Infectious Diseases, Regional Hospital of Peja, Peja, Kosovo; <sup>3</sup>Department of Biotechnology, University of Prishtina, Prishtina, Kosovo; <sup>4</sup>Department of Chemistry, University of Tetovo, Tetovo, Republic of Macedonia

## Abstract

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**\*Correspondence:** Melisa Zogaj, Department of Nursing, UBT - Higher Education Institution- Prishtina, Kosovo.  
E-mail: mz45719@ubt-uni.net  
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**BACKGROUND:** Hepatitis is a very common inflammation of the cells of the liver. Hepatitis can be temporary (acute) or long-term (chronic) depending on whether it lasts less than or more than 6 months. The hepatitis A virus (HAV) infects humans and some primates and is the cause of infectious hepatitis.

**AIM:** Viral hepatitis infections are also present in our country, so the purpose of working on this topic is to expand knowledge in terms of viral hepatitis A, their epidemiology, and preventive measures.

**MATERIALS AND METHODS:** In the realization of this paper, the method of the literature review was used; in addition, information was presented on the number of patients with viral hepatitis A in the regional hospital of Peja, the Republic of Kosovo for the period 2019/2020.

**RESULTS:** From the results obtained, it is clear that the number of patients with Hepatitis A was low and thankfully in non-significant values. However, the fact that the number of Hepatitis B patients is increasing, and especially the increase in the number of Hepatitis C cases, remains a matter of concern, and it is worth noting that care should be taken to prevent the spread of these viruses at a very high rate.

**CONCLUSION:** Given the risk posed by these infections, the prevention of viral hepatitis requires an organized and ongoing program of education and treatment. Recommended measures for the prevention of viral hepatitis are: Ensuring adequate sanitary and personal hygiene. Drink only water that is controlled, avoid drinking alcohol, avoiding any non-particularly recommended medication acetaminophen (Tylenol) and sedatives for 3–12 months because such medications are hepatotoxic, frequent breaks during the day and a good night's sleep eating small, frequent, high-carbohydrate, and low-fat meals. Following the guideline for preventing the transmission of the disease to patients and other persons who are not infected, timely immunization reports all cases of hepatitis to the health department.

## Introduction

Hepatitis is a very common inflammation of the cells of the liver. Hepatitis can be acute or chronic depending on whether it lasts less than or more than 6 months [1]. Viruses may be self-limiting or may progress to fibrosis (scarring), cirrhosis, or liver cancer. Hepatitis viruses are the most common cause of hepatitis in the world, but other infections, caused by toxic substances (e.g., alcohol and some medicines) and autoimmune diseases can also cause hepatitis [2]. Acute viral hepatitis is a distinct clinical syndrome that can be caused by five distinct and unrelated viruses. To date, five types of acute viral hepatitis are known: Hepatitis A (HAV), B (HBV), C (HCV), D or delta (HDV), and E (HEV) viruses [3]. Hepatitis F and G have been identified but are not common. All five forms of hepatitis differ in mode of transmission, mode of onset, and incubation period [4]. Viral hepatitis viruses are classified as parenteral and non-parenteral, referring to the mechanism of transmission. Non-parenteral

forms are Hepatitis A and E which are transmitted through fecal-oral routes, while as parenteral forms are hepatitis B, C, and D [5]. Clinically, acute viral hepatitis is characterized by symptoms of weakness, nausea, vomiting, loss of appetite, and mild abdominal pain, biochemically we have an increase in serum bilirubin and aminotransferase level, in serology with the appearance of the hepatitis genome in the liver, serum antibodies to viral antigens appear, and histologically, according to the degree of necrosis and hepatocellular inflammation [6]. Acute viral hepatitis A is self-limiting and resolves completely without liver damage or viral replication. But some forms of hepatitis can lead to persistent infection with chronic liver damage. The clinical manifestations of the five forms of viral hepatitis are almost similar and the diseases can be differentiated only on the basis of a serological data (Sylejmani, 2016) [7]. Hepatitis A and E are forms of hepatitis infection that spread widely by the fecal-oral route, are associated with poor hygienic conditions, are highly contagious, appear in explosive and sporadic cases, and cause self-limitation of hepatitis. Hepatitis B, C, and D are a form of serum hepatitis that

spreads widely through the parathyroid route and is less common, through intimacy or sexual exposure, and is not highly contagious, occurring sporadically and rarely causing outbreaks (Michael 2014) [7], [8]. Causes of an acute viral hepatitis-like syndrome that cannot be identified as known hepatitis viruses are called acute, non-A, non-B, non-C, non-D, and non-E (neither A nor E) hepatitis or acute hepatitis of unknown etiology [9]. The HAV infects humans and some primates and is the cause of infectious hepatitis. The HAV has been cultured in cell cultures which have made it possible to study its properties, structure, antigens, and proliferation. Based on physicochemical properties and morphological similarity to picornaviruses the HAV is considered an enterovirus type 72 and is classified in the family Picornaviridae [10]. The virus is excreted in the feces, bile, and infected liver. It is spherical in shape, unrolled with dimensions of 27 nm. Viral hepatitis consists of a capsule that encapsulates nucleic acid (WHO, 2015) [11].

### Purpose and objectives

Studies conducted by the World Health Organization have concluded that about 400 million people in the world are infected with hepatitis. Viral hepatitis infections are also present in our country, so the purpose of working on this topic is to expand knowledge in terms of Viral Hepatitis A, Their Epidemiology, and Preventive Measures.

### Materials and Methods

In the realization of this paper, the method of the literature review was used; in addition, information was presented on the number of patients with viral hepatitis A in the regional hospital of Peja, the Republic of Kosovo for the period 2019/2020. Numerous study articles and books have been used on this topic, as well as library literature and online resources.

### Results

From the results obtained it is clear that the number of patients with Hepatitis A was low and thankfully in non-significant values (Table 1). However, the fact that the number of Hepatitis B patients is increasing, and especially the increase in the number of Hepatitis C cases, remains a matter of concern, and it is worth noting that care should be taken to prevent the spread of these viruses at a very high rate (Table 1, Figure 1).

**Table 1: Tabular presentation of the number of patients with Hepatitis A, in the Peja Regional Hospital for the years 2019/2020**

Average age of patients	Number of Hepatitis A patients	Number of Hepatitis B patients	Number of Hepatitis C patients
41 year	1	16	33

### Discussion

This study shows that viral hepatitis is responsible for increased morbidity and mortality, especially hepatitis A, B, and C. According to the WHO, viral hepatitis affects about 400 million people worldwide. About 257 million people are living with HBV infection and about 71 million have chronic hepatitis C infection worldwide. Approximately 15 million people worldwide are chronically (affected) with HDV and HBV, while with regard to viral hepatitis E, the WHO estimates that hepatitis E causes approximately 44,000 deaths/year with the highest prevalence in East and South Asia (WHO, 2015) [11]. Over 13 million people in the European Region are estimated to be living with chronic HBV infection (1.8% of adults) and over 15 million with chronic HCV infection (2.0% of adults) [12]. These two viruses account for the largest number of viral hepatitis in the region. More than 400 people across the European Region die from causes related to viral hepatitis every day according to the WHO (WHO, 2015) [11].

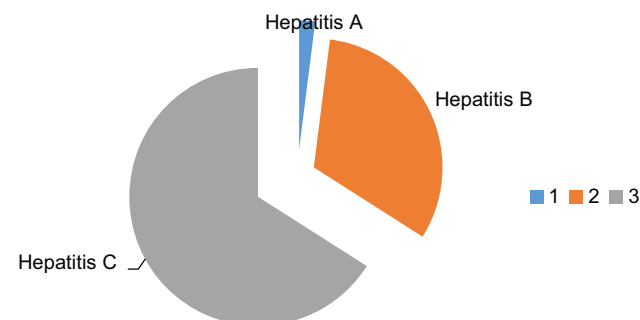


Figure 1: Distribution of viral hepatitis in Peja, Kosovo

### Conclusion

Given the risk posed by these infections, the prevention of viral hepatitis requires an organized and ongoing program of education and treatment. Recommended measures for the prevention of viral hepatitis are: Ensuring adequate sanitary and personal hygiene. Drink only water that is controlled, avoid drinking alcohol, avoiding any non-particularly recommended medication acetaminophen (Tylenol), and sedatives for 3–12 months because such medications are hepatotoxic, frequent breaks during the day and a good night's sleep eating small, frequent, high-carbohydrate, and low-fat meals. Following the guideline for preventing the transmission of the disease to patients and other

persons who are not infected, timely immunization reports all cases of hepatitis to the health department.

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