

FREQUENCY OF INCIDENTALLY DETECTED ASYMPTOMATIC HEPATITIS B & C SUBJECTS RECENTLY RECRUITED AS CIVIL SERVANTS IN PUNJAB.

Hira Kareem, MBBS, M.Phil, Morbid Anatomy & Histopathology, Demonstrator Pathology, Services Institute of Medical Sciences

Daniyal Nagi, MBBS, MCPS, MRCP (Eng), MRCP (Ireland) Associate Professor Medicine KEMU

Sobia Khalid, MBBS, M.Phil, Morbid Anatomy & Histopathology Lecturer Pathology, University of Health Sciences, Lahore.

Romman ul Haq, MBBS, DMRD, Consultant Radiologist Services Hospital Lahore.

M. Jahangir Mujahid, MBBS, Consultant Gastroenterologist Gujranwala Liver Foundation.

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ABSTRACT

Objective: To identify the prevalence of and hepatitis C virus in asymptomatic healthy individuals who have to appears new recruitments of civil services in different departments of government of Punjab. **Data Source:** Services Hospital, Lahore. **Design of study:** Descriptive study. **Setting:** This study was conducted in Department of Pathology SIMS and the samples were collected from the Services Hospital, Lahore. **Period:** In 2017 from 1st January – 30th July. **Method:** A total of 9629 selected government servants from 18 to 30 years (mean 23.22 + 0.53 years) of age in different cadres from basic pay scale (BPS) 01 to 18, attending the hospital, were included in the study. Three millimeter of blood was subjected to rapid screening test. All the positive cases on the rapid screening were confirmed by 3rd Generation Enzyme Linked Immunosorbent Assay technique. **Results:** A total of 2.81% were HCV positive and 1.66% was positive for HEPATITIS B VIRUS respectively. **Conclusion:** The prevalence rate of Hepatitis C virus and infections remains high in the province of Punjab especially in the lower socioeconomic group in otherwise asymptomatic persons.

Key words: Hepatitis B, Hepatitis C, Asymptomatic subjects, screening, health care professionals,

Correspondence Address

Hira Kareem,
28/40 Davis road Lahore.
sambii@live.com

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INTRODUCTION

HBV and HCV infections are highly endemic in Pakistan.¹ HBV prevalence across Pakistan has been reported to be 1.11%, 3%, 3.2% and 4%.^{2,5} The HCV prevalence was estimated at 3.3%, 2.2% and reached 16.3%.^{6,8} The global prevalence of HBV and HCV varies considerably around the world. Prevalence of HBV is the highest in Taiwan (15-20%), 2% to the Japan and the lowest < 1% in Australia & New Zealand.⁹ The HCV prevalence low (0, 01-0, 1%) was reported in the UK and the Scandinavian countries, then the highest has been reported in Egypt.¹⁰

A lot of studies are being carried out in this

serious health topic in Pakistan, lot of knowledge is trying to deliver by our sensible media but still many of our people are being unaware about their health status before going such medical checkups by authenticating laboratories. Our study explores the prevalence of viral infection among healthier adults as well as higher prevalence of HCV compared with HBV. Individuals come from a low socio-economic group and have little education and awareness besides potentially exposed to more risk factors (unhygienic living standard, dangerous blood transfusions, etc.) leading to the transmission of HBV and HCV. This difference in the prevalence of HCV & HBV in different socio-economic groups

has been proved in various other studies.

Bhatti MS et al conducted a study in a private medical sector in Lahore and in their study they screened 524 students and found a very low incidence of HBV & HCV. Only 10 (1.1%) were HBsAg positive and 11 (2.1%) were reactive to Anti HCV antibodies.⁽¹²⁾ As it is proved that infectivity by viruses is directly proportional to the socioeconomic status of people as well as education and awareness played basic role.

Similarly another study was conducted in Armed Forces of Pakistan where 1550 individuals were seeking their recruitment and found positive for the presence of HBsAg and Anti HCV antibodies by Mirza IA et al. 504 (3.24%) individuals were found to be positive for HBsAg, 574 (3.69%) for Anti HCV antibodies and 49 (0.13%) for both HBsAg and Anti HCV antibodies.¹³

HBV and HCV can cause cirrhosis of the liver, and they can be transmitted through contaminated blood and blood products.⁽²⁾ These are usually transmitted by percutaneous exposure to contaminated blood and as little 0.01 ml may transmit the infection, which makes them a big culprit. The main issue is that many healthy asymptomatic individuals are suffering from these viruses without any clue and they are in the most danger zone as they can transmit the virus unknowingly. Hence most of the general population is chronically infected with HBV and HCV asymptotically despite being infectious. So this study was conducted in order to assess the frequency of HBV and HCV in healthy individuals, selected for recruitment in various provincial ministries of Punjab. However, the literature is still insufficient to clearly indicate the overall situation because of its limitation on the identification of the impact in healthy individuals.

METHODOLOGY

A descriptive study was carried out in Services Hospital, Lahore. All the newly recruited government personal both male and females in

various cadres from basic pay scale (BPS) 01 to 18 attending the hospital from 1st January 2017 to 31st July 2017 were included in the study. However individuals with any known systemic illnesses like diabetes, hypertension, and tuberculosis, previous history of infection or treatment for HBV or HCV infection, chronic liver disease and asthma were excluded from the study. As part of health assessment before recruitment all the baseline blood, urine and radiological investigations were assessed including screening for HBV and HCV before final issuance of the medical fitness certificate by the medical superintendent of Services Hospital, Lahore. Obtaining this certificate is mandatory before any newly appointed civil servant is allowed to join his/her place of duty. Informed consent was taken from all the individuals before investigations. Three milliliter of blood sample was collected in a disposable syringe and was subjected to rapid screening using the Immunochromatographic (ICT) kit. All the positive cases on the rapid screening were confirmed by 3rd Generation ELISA technique. Data was recorded. Results were tabulated and expressed as percentages.

RESULTS

Out of the 9629 individuals included in the study, ranging in age group from 18 to 30 years (mean 23.22±0.53 years). In study group, frequency of HCV, HBV was 271 (2.81%), 160 (1.66%) respectively. Frequency percentage of HBV & HCV in study group is given in figure 1.

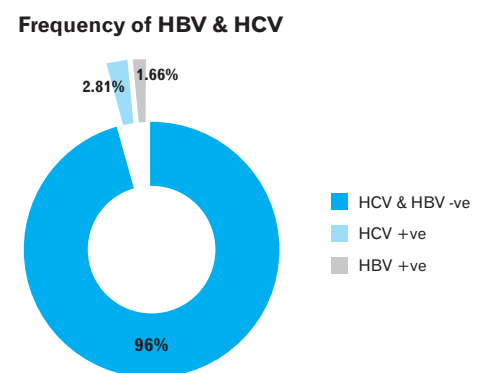


Figure 1: Frequency percentage of HBV & HCV

