



CODEN [USA]: IAJPBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF  
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1488028>Available online at: <http://www.iajps.com>

Research Article

**STUDY TO KNOW FREQUENCY OF HBsAg, ANTI-HCV,  
VDRL AND HIV POSITIVE CASES AMONG BLOOD DONORS****\*Dr. Maliha Tul Zahra, \*Dr. Beenish Nasim, \*Dr. Hafiz Muhammad Wasim****\*House Surgeon at Mayo Hospital, Lahore****Abstract:**

**Objective:** To investigate the frequency of positive HIV, anti-HCV, HBsAg and VDRL cases among apparently healthy blood donors.

**Study Design:** A Prospective Study.

**Place and Duration of study:** In the Department of Medicine and Blood bank section of Services Hospital, Lahore for Six month Duration from January 2018 to June 2018.

**Methods:** All blood donors were selected for this study. For detection of diseases a rapid diagnostic test kit named "Accu Check" was used. 50 infected donors were found from 833 blood donors. No donors were HIV-positive, but 24 were positive for VDRL, 16 were positive for HCV, and 10 were positive for HBsAg. The individual patient did not suffer more than the infectious disease mentioned above. Not any patient did suffer more than the infectious disease mentioned above.

**Results:** Of the 833 blood donors, 50 (6%) were donors. No donors were HIV positive, but VDRL positive in 24 (2.88%) donors, anti-HCV positive in 17 (1.71%) and HBsAg positive in 10 (1.19%). Not any patient did suffer more than the infectious disease mentioned above. In addition, a total of 50 infected donors, 24 (48%) were positive for VDRL, 16 (32%) were positive for HCV and 10 (20%) were positive for HBV. In addition, 8 of the infected people worked together with A +, B + in 16 work together, 10 with O +, 12 with AB +, 2 with B-, 2 with A- and none with O- or AB. .

**Conclusion:** It was concluded that appropriate examination was mandatory to stop blood-borne infectious diseases.

**Keywords:** HIV, DCRL, HBsAg.

**Corresponding author:****\*Dr. Maliha Tul Zahra,****\*House Surgeon at Mayo Hospital,  
Lahore**

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Please cite this article in press Maliha Tul Zahra et al., *Study to know Frequency of HBSAG, ANTI-HCV, Vdrl and HIV Positive Cases among Blood Donors.*, Indo Am. J. P. Sci, 2018; 05(11).

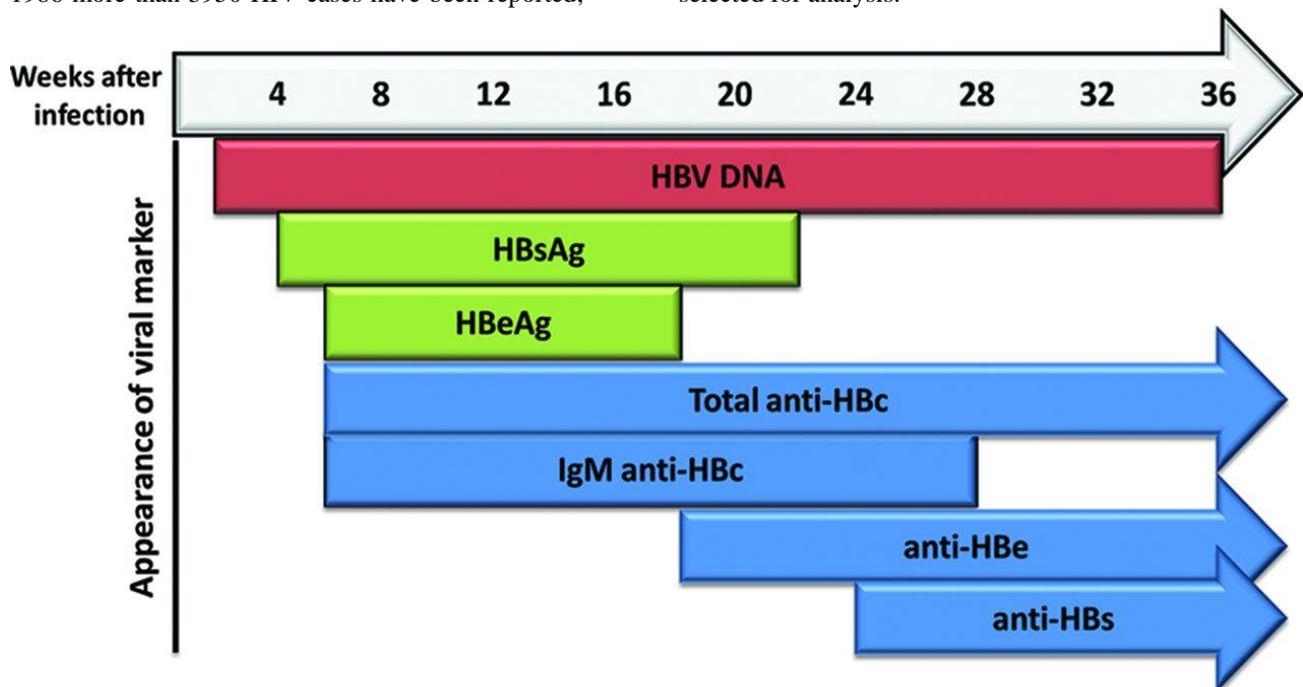
**INTRODUCTION:**

Infectious diseases are the main cause of mortality and morbidity in the world. Carriers are a moving and alarming threat to a healthy population. The most important forms of transmission of infectious diseases is blood circulation. Preventive measures, such as the appropriate choice of donor transfusions, are of vital importance. Detection of HBV, HCV, HIV and VDRL is a prerequisite prior to transfusion of blood. For chronic liver disease worldwide the most common causes are Hepatitis C (HCV) and Hepatitis B viruses (HBV). Both viruses results in chronic hepatitis, which may leads to cirrhosis and ultimately hepatocellular carcinoma. Although the HCV and HBV virus prevalence in the world is 480 million, the combined infection rate in Pakistan is 7.06% in the general population. (HIV) Human immunodeficiency virus is a lentivirus (slow retrovirus replication) that results in (AIDS) acquired immunodeficiency syndrome. HIV in Pakistan is not epidemic dominantly currently. However, the number of patients is increasing. The most recent figures from the National AIDS Program show that since 1986 more than 3950 HIV cases have been reported,

but the government and UN suggests have raised the number of AIDS/ HIV cases to 96,500 with the lowest estimate and the highest estimate from 46,000 (210,000). A venereal disease is a blood test for laboratory testing of VDRL or syphilis. Syphilis is a sexually transmitted disease caused by bacteria spirochete *treponema pallidum*. With regard to syphilis, there is no real prevalence estimate in Pakistan.

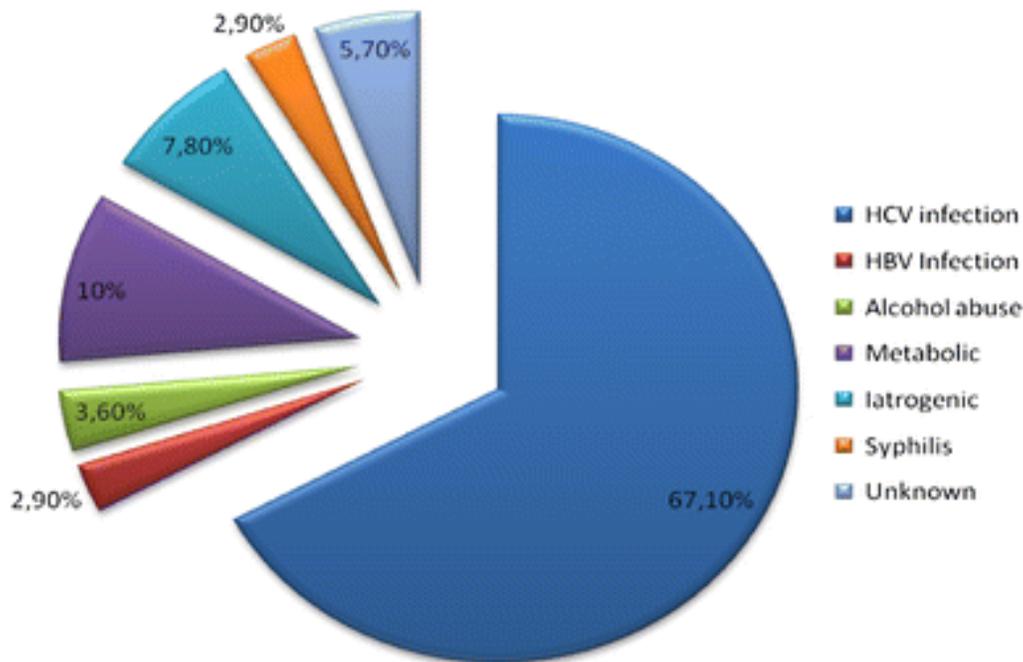
**MATERIALS AND METHODS:**

This Prospective Study was held in the Department of Medicine and Blood bank section of Services Hospital, Lahore for Six month Duration from January 2018 to June 2018. Selection was made with the quick diagnostic test kit "Accu Check". A total of 833 donors were examined. All male donors weighing > 60 kg between the ages of 21-36 with hemoglobin > 14 g / dl were selected for the analysis. In this study, donors with a history of HCV, HBV, HIV or VDRL who were drug abusers or having tuberculosis, body piercing, surgery, transfusion of blood or blood components within 3 months were not selected for analysis.

**DISCUSSION AND RESULTS:**

Blood-borne infectious diseases can remain asymptomatic for decades because they are silent throughout the disease period. To healthy populations, such carriers are sign that care should be taken. Uncontrolled transfusion of silent carriers to receptors is the main cause of blood-borne infections. The results showed that 50 (6%) donors were infected with 833 blood donors. No donors were

HIV-positive, 25 (2.90%) were positive VDRL donors, 17 (1.89%) were HCV and 11 (1.19) were positive for HBsAg. The individual patient did not suffer any more than the above-mentioned infectious disease. In addition, 24 (48%) of 50 infected donors were positive for a total VDRL, 16 (32%), HCV and 10 (20%) were positive for HBV. In addition, 8 of the infected individuals had an O- or AB-O + 2 A, B- and 2 A + B + 16, + 12 AB 10.



### CONCLUSION:

Uncontrolled blood transfusion plays an important role in the spread of infectious diseases. This risk can be minimized only by a trained staff and a suitable detection method used by a quality tool. During the assessment, all findings should be recorded in the OPD for further treatment and advice. This shows that the iceberg's phenomenon in our population must be taken and the need to take preventive and corrective measures in this regard. "In order to raise awareness of this hot topic, the material of IEC (information-training-communication) should be widely distributed among the local population.

### REFERENCES:

- Okoroiwu, Henshaw Uchechi, Ifeyinwa Maryann Okafor, Enosakhare Aiyudubie Asemota, and Dorathy Chioma Okpokam. "Seroprevalence of transfusion-transmissible infections (HBV, HCV, syphilis and HIV) among prospective blood donors in a tertiary health care facility in Calabar, Nigeria; an eleven years evaluation." *BMC public health* 18, no. 1 (2018): 645.
- Sajjadi SM, Pourfathollah AA, Mohammadi S, Nouri B, Hassanzadeh R, Rad F. The prevalence and trends of hepatitis B, hepatitis C, and HIV among voluntary blood donors in kohgiluyeh and boyer-ahmad transfusion center, Southwestern Iran. *Iranian journal of public health*. 2018 Jul;47(7):944.
- Shambesh, Mohamed K., Ezzadin A. Franka, Amal R. Agila, and Faisal F. Ismail. "Frequency of Hepatitis B core antibody and Hepatitis B Virus DNA among apparently healthy male blood donors in Eastern Libya." *Libyan Journal of Medical Sciences* 2, no. 1 (2018): 12.
- Ciccullo A, Gagliardini R, Baldin G, Borghetti A, Moschese D, Emiliozzi A, Lombardi F, Ricci R, Speziale D, Pallavicini F, Di Giambenedetto S. An outbreak of acute hepatitis A among young adult men: clinical features and HIV coinfection rate from a large teaching hospital in Rome, Italy. *HIV medicine*. 2018 Jan 29.
- Musavi, Hadis, Hamideh Rahimi, Wesam Kooti, Ruhollah Dorostkar, Milad Azami, Maedeh Sharghi, Hadis Ashrafi-Zadeh, Mohammad Firoozbakht, and Ramezan Ali Taheri. "Prevalence of Human Immunodeficiency Virus in Iranian Blood Donors: A Systematic Review and Meta-Analysis." *Archives of Iranian Medicine (AIM)* 21, no. 6 (2018).
- Kowalska, Justyna D., Magdalena Ankiersztejn-Bartczak, Leah Shepherd, and Amanda Mocroft. "Cascade of care and factors associated with virological suppression among HIV-positive persons linked to care in the Test and Keep in Care (TAK) project." *Infection* (2018): 1-8.
- Alaidarous, Mohammed, Ranjay K. Choudhary, Mohamed I. Waly, Shabir Mir, Abdulaziz Bin Dukhyil, Saeed S. Banawas, and Bader M. Alshehri. "The prevalence of transfusion-transmitted infections and nucleic acid testing among blood donors in Majmaah, Saudi Arabia." *Journal of infection and public health* (2018).

8. Kiertiburanakul, Sasisopin, Pawinee Wongprasit, Angsana Phuphuakrat, Darunee Chotiprasitsakul, and Somnuek Sungkanuparph. "Prevalence of HIV infection, access to HIV care, and response to antiretroviral therapy among partners of HIV-infected individuals in Thailand." *PloS one* 13, no. 6 (2018): e0198654.
9. Kiertiburanakul, S., Wongprasit, P., Phuphuakrat, A., Chotiprasitsakul, D. and Sungkanuparph, S., 2018. Prevalence of HIV infection, access to HIV care, and response to antiretroviral therapy among partners of HIV-infected individuals in Thailand. *PloS one*, 13(6), p.e0198654.
10. Malagnino V, Salpini R, Maffongelli G, Battisti A, Fabeni L, Piermatteo L, Colagrossi L, Fini V, Ricciardi A, Sarrecchia C, Perno CF. High rates of chronic HBV genotype E infection in a group of migrants in Italy from West Africa: Virological characteristics associated with poor immune clearance. *PloS one*. 2018 Mar 29;13(3):e0195045.
11. Padalko E, Lagrou K, Delforge ML, Jansens H, Ectors N, Pirnay JP, Klykens J, Sokal E, Muylle L, Libois A, Vanderkelen A. Biological tests carried out on serum/plasma samples from donors of human body material for transplantation: Belgian experience and practical recommendations. *Cell and tissue banking*. 2018 Aug 29:1-5.
12. Chipare, I., H. T. Charuma, B. von Finckenstein, and C. J. Gouws. "The validation and implementation of donor screening for hepatitis B virus, hepatitis C virus, human immunodeficiency virus 1/2 and syphilis by ultrio elite assay (Panther system) and chemiluminescence assay (Abbott Architect i2000 SR system) in Namibia." *ISBT Science Series* 13, no. 1 (2018): 112-119.
13. Alias, Hamidah, Woon Lee Yong, Farah Azima Abdul Muttlib, Ho Wai Koo, C-Khai Loh, Sie Chong Doris Lau, Hafiza Alauddin, and Raja Zahratul Azma. "Acquired thrombotic thrombocytopenia purpura associated with severe ADAMTS13 deficiency in a 3-year-old boy: a case report and review of the literature." *Journal of medical case reports* 12, no. 1 (2018): 276.
14. Kalantari, Hamid, Hadi Karimzadeh, Saeed Kalantari, Majid Talebi, Majid Yaran, and Javad Golpayegani. "Correlation between Vitamin D3 level and extrahepatic manifestation in chronic hepatitis type-C virus patients." *Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences* 23 (2018).
15. Kalantari, Hamid, Hadi Karimzadeh, Saeed Kalantari, Majid Talebi, Majid Yaran, and Javad Golpayegani. "Correlation between Vitamin D3 level and extrahepatic manifestation in chronic hepatitis type-C virus patients." *Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences* 23 (2018).
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