

SEROPREVALENCE OF TRANSFUSION TRANSMISSIBLE INFECTIONS AMONG BLOOD DONORS AT SAWAI MAN SINGH HOSPITAL IN JAIPUR,RAJASTHAN

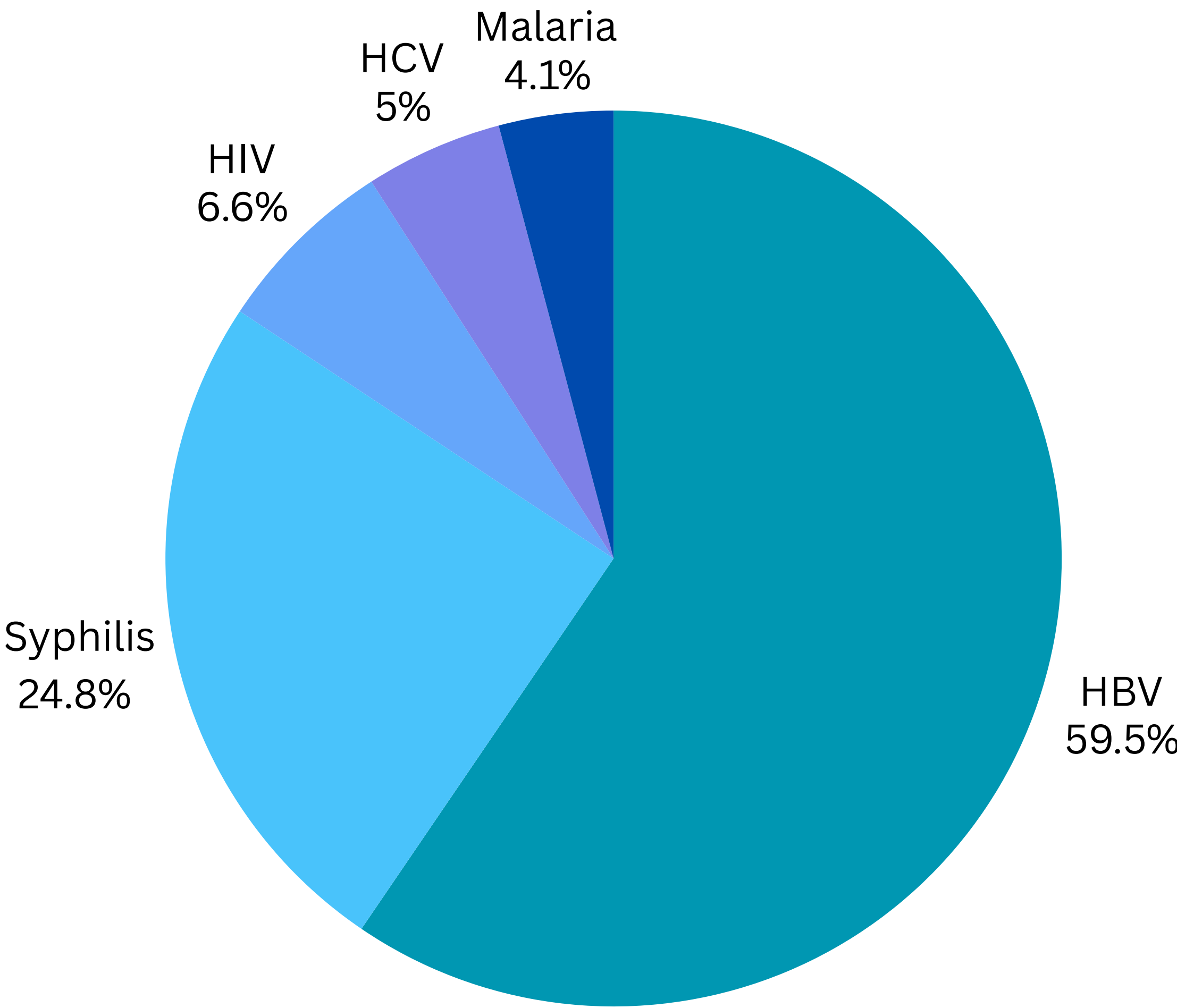
Dr Abhinav Jangir [Resident Doctor],Dr Sunita Bundas [Senior Professor]Department of IHTM,SMS Medical College, Jaipur,Rajasthan

Aims & Objectives

To find the prevalence of TTIs in voluntary and replacement donors.

Materials & Method

This cross-sectional study was conducted from October 2022 to November 2023 at the blood center of Sawai Man Singh Hospital in Jaipur, Rajasthan. Serum samples from voluntary and replacement blood donors were screened for various infectious agents. Hepatitis B virus (HBV) was tested using third-generation ELISA, while Hepatitis C virus (HCV) was also screened with a third-generation ELISA. For Human Immunodeficiency Virus (HIV) Types 1 and 2, fourth-generation ELISA kits were used. Additionally, screening for syphilis was performed using a modified Treponema pallidum hemagglutination test, and malaria parasites were detected through a rapid card test.



Conclusion:

Despite pre-donation counseling and medical examination, TTIs remain a challenge in blood donation practices. HBV was the most common TTI, while malaria had the lowest prevalence. Enhanced public awareness, screening, and the use of sensitive tests could help reduce the incidence of TTIs

Results

Out of 48426 donors screened over the year , 71.8% were voluntary, and 28.2% were replacement donors, with a male-to-female ratio of 97.4% to 2.6%. Among the total donors 1.23 % tested positive for TTIs, with the following breakdown: 0.72% for HBV, 0.30% for syphilis, 0.08% for HIV, 0.06% for HCV, and 0.05% for malaria.

Reference

- Bhaumik, P., & Debnath, K. (2014). Prevalence of Blood-Borne Viral Infections among Blood Donors of Tripura. Euroasian Journal of Hepato-Gastroenterology, 4(2), 79–82.
- Sunderam, S., Karir, S., Haider, S., Singh, S. B., & Kiran, A. (2015). Sero-Prevalence of Transfusion Transmitted Infections among Blood Donors at Blood Bank of Rajendra Institute of Medical Sciences, Ranchi. Healthline: Journal of Indian Association of Preventive and Social Medicine, 6, 34–40.