INTRODUCTION:
Blood and its components are one of the most important constituents of body for survival. Successful blood transfusion as life saving measures transfusion-transmitted infection continues as a challenge for transfusion experts. imported blood and its components are at a risk of acquiring serious life threatening infectious agents if the donors are not screened properly. The blood transfusion is one of the life saving procedure that is known to save millions of lives annually. The receipt of blood is meant to help, not to harm. The problem is that in developing countries, both in poor and rich countries, there is a lack of adequate blood availability to the patients. Blood from the donors is screened for Hepatitis B, Hepatitis C, HIV 1,2, Syphilis and MP/MF in addition to Rh/ABO compatibility by using the conventional methods addition to Rh/ABO compatibility by using the conventional methods [1] [2] [3]. Due to poor health care facilities and education among the donors, these diseases are accidently acknowledged while screening prior to the blood donation. Meticulous pre-transfusion testing and screening particularly for transfusion transmissible infections is the need of hour. So, proper selection of donor and sensitive screening tests can ensure the quality blood transfusion that is not harmful for the recipient.

MATERIAL AND METHODS:
The present retrospective study was conducted at blood transfusion centre under the department of Microbiology and Pathology SBMCH Chrompet Chennai from January 2013 till February 2016. Total number of donors during this window period of 3 years was 3926 and were tested for HIV, Hepatitis B, Hepatitis C, Syphilis and MP/MF by the standard methods is immune chromatographic tests (ICT’s) [5]. Among the transfusion-associated non-A-non-B viral hepatitis virus HCV is recognized as the commonest cause worldwide due to blood donation [8].Donors were selected by standard criteria’s for donation by taking detailed history and thorough clinical examination. Written informed consent was taken from each donor after explaining pros and cons in their native language. Under all sterile conditions Blood was collected and stored by appropriate methods. All the reactive samples were tested repeatedly before discarding.

RESULTS:

<table>
<thead>
<tr>
<th>S.NO</th>
<th>BLOOD BORNE PATHOGENS</th>
<th>TESTS</th>
<th>TOTAL</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>HIV</td>
<td>HIV 1,2</td>
<td>NIL</td>
<td>NIL</td>
</tr>
<tr>
<td>2.</td>
<td>HEPATITIS B VIRUS</td>
<td>HBsAg</td>
<td>41</td>
<td>1.004%</td>
</tr>
<tr>
<td>3.</td>
<td>HEPATITIS C VIRUS</td>
<td>Anti-HCV</td>
<td>14</td>
<td>0.36%</td>
</tr>
<tr>
<td>4.</td>
<td>SYPHILLIS</td>
<td>VDRL/RPR</td>
<td>07</td>
<td>0.178%</td>
</tr>
<tr>
<td>5.</td>
<td>MALARIAL PARASITE</td>
<td>MP/MF</td>
<td>NIL</td>
<td>NIL</td>
</tr>
</tbody>
</table>

TABLE 1: SERO-PREVALENCE OF DIFFERENT BLOOD-BORNE INFECTIONS AMONG THE BLOOD DONORS

<table>
<thead>
<tr>
<th>S.NO</th>
<th>TOTAL NO. OF DONORS</th>
<th>TOTAL NO. OF POSITIVE DONORS</th>
<th>TOTAL PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>3926</td>
<td>61</td>
<td>1.55%</td>
</tr>
</tbody>
</table>

TABLE 2 : OVERALL SERO-PREVALENCE OF BLOOD BORNE INFECTIONS

DISCUSSION:
Blood transfusion is one of the significant route of transmission of various blood borne infections. But the meticulous pre-transfusion screening and testing has decreased the incidence of transmission of these pathogens to a great extent. Study conducted at SBMCH showed seroprevalence of 1.55% which is significantly low and threat to the recipient (Table 2). All the donors that were positive were males between the age group 18-35years of age. Prevalence of Hepatitis B in present conducted study was 1.044% which is quite high. Prevalence of hepatitis C was 0.356% which was next high to hepatitis B. Prevalence of Syphilis was 0.178% which is significantly low. As per the AABB standards, any person with a positive serological test result for syphilis blood donations should be deferred for a period of 12 months and prevalence of HIV was found to be nil among all donors. So, there is a decreasing trend of transmission of HIV among the blood donors [4][6]. This suggests the need of awareness of general population regarding these diseases and the availability of screening methods can help to ensure the safe blood transfusion.

CONCLUSION:
In this study conducted from Jan 2013 to Feb 2016, 3926 donors were tested. Seroprevalence of Hepatitis B was the highest followed by Hepatitis C and syphilis respectively and concomitantly the prevalence of MP/MF and HIV was found to be nil. It is thus concluded that prevalence of seropositivity among the donors is significantly high and a big hurdle to overcome in transfusion medicine. Motivation and organisation of voluntary blood donation camps can help to identify infected population and reduce the further transmission of these diseases. Simultaneously cheap and easily available screening programs are the need of hour.

REFERENCES:
5. Bahadur S, Pujani M, Jain M. Use of rapid detection tests to prevent transfusion-
transmitted malaria in India. Asian J Transfus Sci. 2010;4:140–1. [PMC free article]
[PubMed]

6. Fasola FA, Kotila TR, Akinyemi JO. Trends in transfusion-transmitted viral infections

Kalyanaraman, P. S. Sarin, E. S. Jaffee, and R. C., Gallo. 1983. Epidemiology of human T-

viruses: implications for diagnosis, development and control of viral disease. Hepatology
14:381–388.

Banks; 1993.