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SHIMLA BLOOD BANK REGISTERS SHARP DECLINES IN HEPATITIS-B SEROPOSITIVITY AMONG BLOOD DONORS- ANALYSIS OF ELEVEN YEAR BLOOD BANK DATA, SHIMLA, INDIA.

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BACKGROUND

Globally:

- The endemicity varies from 2-8%.

India.

- has a Hepatitis-B carrier rate of 4%.
- Nearly 1 million HBV infections are added to the HBV pool yearly, of this 3.7% is transfusion related.
- In Shimla blood bank, all donors are screened for HbSAg, however no analysis of trends in Hepatitis-B Seropositivity is available, therefore this study was undertaken.

METHODS

- Secondary data on Hepatitis-B, from Shimla blood bank records were abstracted and analysed from, 1997-2007, using Microsoft excel and epi-info software 3.3.2.
- Seropositivity rate among blood donors was calculated.
- Seropositivity was confirmed using highly sensitive rapid kits for detection of Hepatitis B surface antigen (HbSAg).

RESULTS

- Of the total 10,212 blood donors, 65% were between 25-44 years of age and 87.5% males.
- Cumulative seropositivity rate was 0.94%.
- While the voluntary blood donation increased from 44% in 1997 to 57% in 2007; seropositivity decreased from 1.5% in 1997 to 0.7% in 2007.
- Seropositivity in voluntary donors significantly decreased from 1.65% in 1997 to 0.3% in 2007 (Chi Square = 4.77, Df= 1, P = 0.02).
- Among replacement donors only slight decrease was observed from 1.97% in 1997 to 1.21% in 2007.
- Seropositivity significantly declined among females from 8.34% in 1997, to 0.5.1% in 2007 (Chi Square = 9.73, Df= 1, P = 0.001).
- In males it decreased from 1.53% in 1997 to 0.74% in 2007.
- Overall Seropositivity among blood donors was all times less in the eleven year period than in general population of Shimla, which as per studies done by Ganju et al was 3.5%.

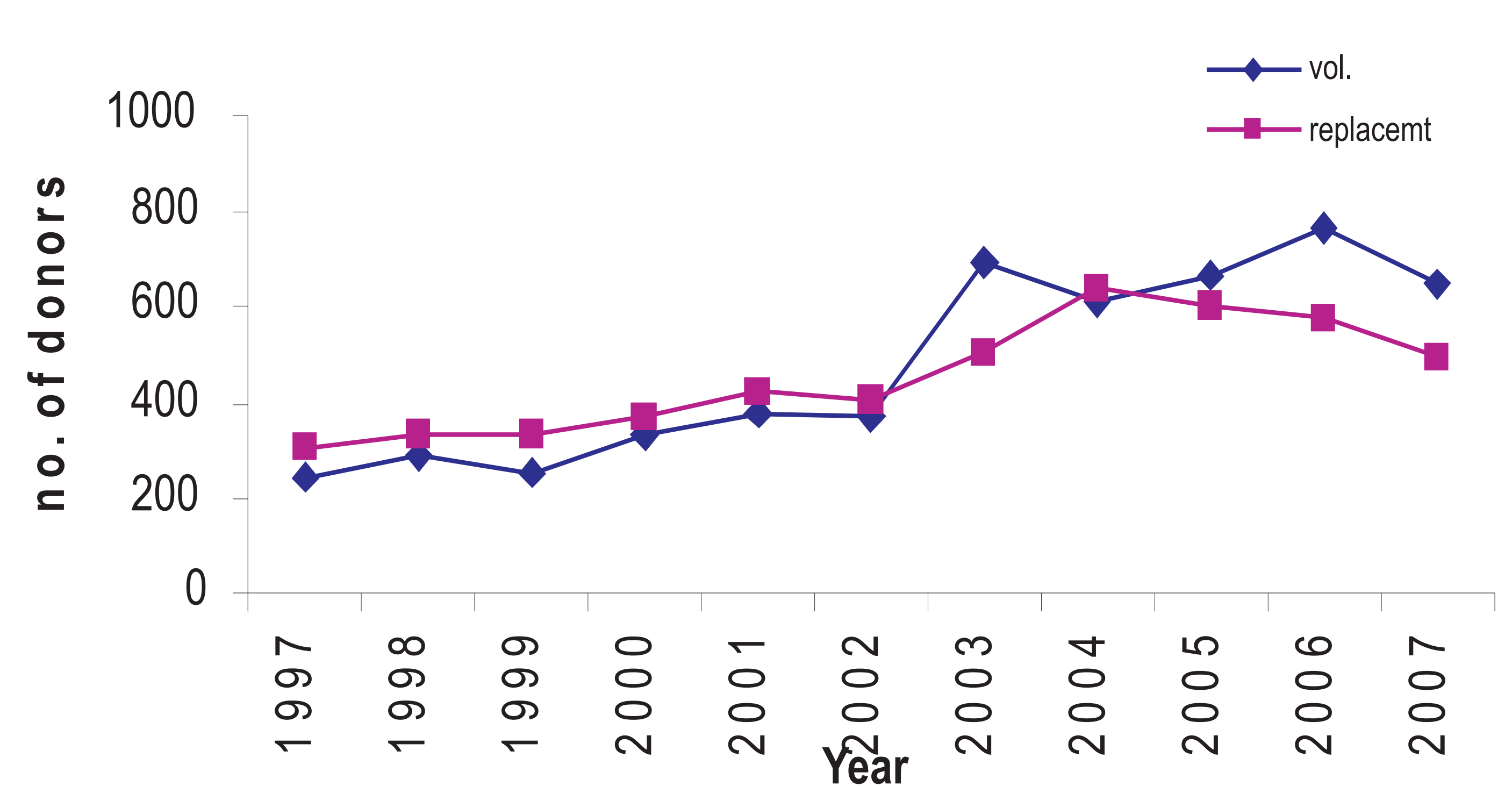
OBJECTIVES

To identify:

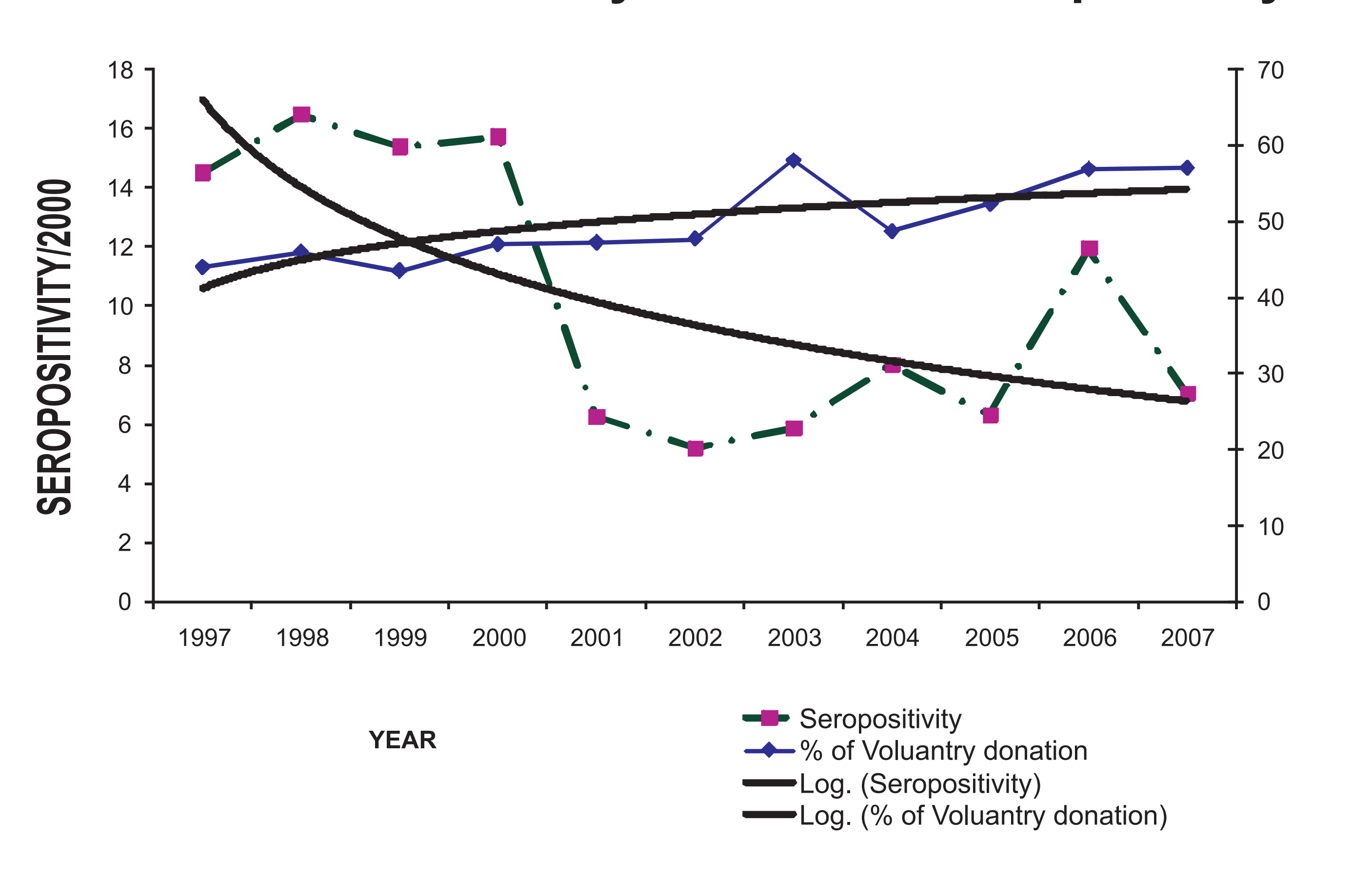
- To know the trends in Seropositivity and draw appropriate lessons for corrective measures in the interest of blood safety.
- To know the trends in Seropositivity among voluntary and replacement donors, donating blood at State Blood Bank, Shimla.

TRENDS OF VOLUNTARY AND REPLACEMENT DONORS 1997-2007, STATE BLOOD BANK, SHIMLA, HIMACHAL PRADESH, INDIA.

Trends of voluntary donors and replacement donors



Relation of voluntary donation to seropositivity



CONCLUSION

- Hepatitis B Seropositivity more than halved during the eleven year period and may be possibly due to the increases in voluntary donation. Therefore there is need to identify mechanisms to retain the voluntary donors to assure blood safety.
- The less Seropositivity among blood donors than general population signifies effective medical screening of donors in the blood bank.

Thank you