

PREVALENCE OF HIV IN BLOOD DONORS IN N.W.F.P.

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SUMMARY

At blood bank Postgraduate Medical Institute, Govt. Lady Reading Hospital, Peshawar a study was done on 23278 blood donors regarding their HIV screening the blood donors included were from different areas of NWFP. All of them were healthy and were between the age group; of 18-60 years. They included both male and female sexes. They were from different communities among 23378 blood donors only 2 donors were positive for HIV. Both the positive donors were male.

INTRODUCTION

AIDS is the new octopus for the human community since 1981¹ when it was first identified and reported in United States. In the following decades more and more cases were reported in different parts of world with highest ration in Asia, Africa and America¹.

It was estimated that by the year 2000, there will be 30-40 million cases of AIDS in the world¹.

AIDS is caused by HIV virus, which infects and kill helper T-Lymphocytes and Monocytes resulting in the loss of cell mediated immunity² the patient develop opportunistic infections e.g. Pneumonia,

Fungal Infection. Candidacies and Herpes Zoster. Meningitis, Tuberculosis³ etc. the patient present with fever, sore throat, lymphadenopathy, weight loss and lethargy.

HIV is present mainly in blood, semen and vaginal secretion but it also present in sweat saliva, tears and breast milk³.

The major modes of transmission of HIV are

1. Sexual transmission (both heterosexual and homosexual).
2. Blood Transfusion of HIV infected blood⁶.
3. Injection with contaminated syringe (reused).

4. From mother to baby during birth and through breast milk⁵.

The blood is the most efficient way of transmission HIV. So in order to prevent HIV spread by the Health care providers, there should be a proper system for screening of healthy blood donors with standardized methods. This needs a proper legislation and awareness among the prescribed of blood and general public (the users).

The blood transfusion of infected blood is one of the major mode of transmission of HIV⁷. We conducted a study on 23278 blood donors in blood bank of Govt. Lady Reading Hospital, Peshawar regarding their HIV screening. The study had multiple objectives.

- a. To know the current status/prevalence of HIV in blood donors in NWFP.
- b. To provide HIV negative blood to the recipients and to decrease the social and economical burden of HIV and AIDS cases on community. As the treatment cost of an aids case is in millions which could be easily saved if we screen blood donors for HIV which costs only few hundreds of rupees per donor.

MATERIAL AND METHODS

AIDS is a relatively recent addition to the infectious Hazards of blood transfusion. Although HIV is mainly transmitted through sexual contact but the transfused blood may also be a source of infection⁸. Infection of the apparently almost invariable following infected blood transfusion which later on may develop into full blown AIDS.

HIV causes a persistent infection. Anti HIV is demonstrable in most people 6-12 weeks alter infection but it may take one year. In transfusion practice screening test on used to detect healthy caries. The tests

used are enzyme immunoassays or particle agglutination tests. In our study the methods used for screening of HIV was Serodia HIV [Serodia HIV Gelatin Particle agglutination test kit by Fuji Rebi Inc (Tokyo Japan)] the procedure given in the accompanying manual was strickly followed. All the blood samples were taken from the blood bags.

23278 healthy donors were selected they were between the age group of 18-60 years. There hemoglobin was within normal limit and they had no present or past history of any medical problem. Among the 23278 blood donors only two cases were confirmed by ELISA (INNOLIA HIV-1/HIV-2 Ab by innogenetics N.V. Belgium.

RESULTS

Screening of HIV was done on 23278 cases and out of them two cases were positive for HIV. Both of these donors were male and were between the age group of 25-45 years.

DISCUSSION

A study was conducted at HIV screening center Postgraduate Medical Institute, Lady Reading Hospital, Peshawar in June 1992⁹ in this study 22402 donors were screened for HIV. Non of them was positive for HIV, while in this study out of 23278 donors two donors are HIV positive. This shows that HIV infection is prevalent even in the apparently healthy blood donors which we select for screening.

Another study was conducted in Jinnah Postgraduate Medical Centre, Karachi, the study was voluntary blood donors of Cooege¹⁰. A total of 612 donors were tested for HIV out them none was HIV positive. This might be because the study was done on small number of donors.

RECOMMENDATION

1. Established of proper safe blood transfusion services and universal screening blood donors.
2. Introduction of training programmes about safe blood transfusion practices.
3. Ensure implementation legislation for safe blood transfusion.
4. Transparent and quick mechanism for purchase and distribution of blood screening kits.

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