

Original Research Article

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Sero Prevalence of HIV among General Population Attending a Tertiary Care Hospital in Telangana, India

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ABSTRACT

In India the first HIV case was detected in 1986, and since then it has been reported from all states and union territories. This is a retrospective study to know the seroprevalence of HIV among patients in a tertiary care hospital. This is a study included 2457 patients who attended Mallareddy Medical College for Women's Hospital, from January 2016 to December 2016. A total of 2457 patients were tested and out of which 38 were seropositive for HIV, with a prevalence rate of 1.5%. Out of these 38 cases 21 were males, and 17 were females (M: F- 1: 0.8). It is essential to strength then all testing protocols to include referral of HIV positive clients to well established treatment, care and support facilities.

Keywords

Seroprevalence,
HIV, Screening.

Article Info

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Introduction

In 1983 Lucmontegnieri and colleagues from Pasteur Institute, Paris isolated a Retrovirus from a West African patient with persistent generalised lymphadenopathy which is a manifestation of AIDS. (Ananthnarayan). In India the first HIV case was detected in 1986, and since then it has been reported from all states and union territories. According to National Aids Control Organization (NACO) the national adult HIV prevalence in India is 0.36% (Harsha Kumar). Six Indian states with high HIV and AIDS prevalence are Manipur (1.4%). Andhra Pradesh (0.90%), Mizoram (0.81%) Nagaland (0.78%), Karnataka (0.63%) and Maharashtra (0.55%). Prevalence of HIV infection among pregnant women in India is reducing. In 1986 the Government of

India established a National Aids Control Committee under the Ministry of Health and Family Welfare to formulate a strategy for dealing with HIV AIDS prevalence. [UNAIDS]. The prevalence of AIDS in India has declined in 2015 (0.26%) as compared to 2001-2003 (0.38%) [NACO, 2016]. The National Aids Control Programme (NACP) started in 1990 lays maximum emphasis on the widespread reach of information, education and communication on HIV/AIDS prevention (Laghave *et al.*, 2015).

Materials and Methods

This is a retrospective hospital based study which included 2457 patients who attended

MRMCW Hospital from January 2016 to December 2016. Blood samples were collected after pretest counseling and informed consent. The samples were tested for HIV antibodies as per NACO guidelines.

The first antibody test done was ELISA. If the initial result was positive, it was confirmed using two other supplemental tests. After HIV test results were known posttest counseling was done and the results were declared. Confidentiality of the data was maintained.

Results and Discussion

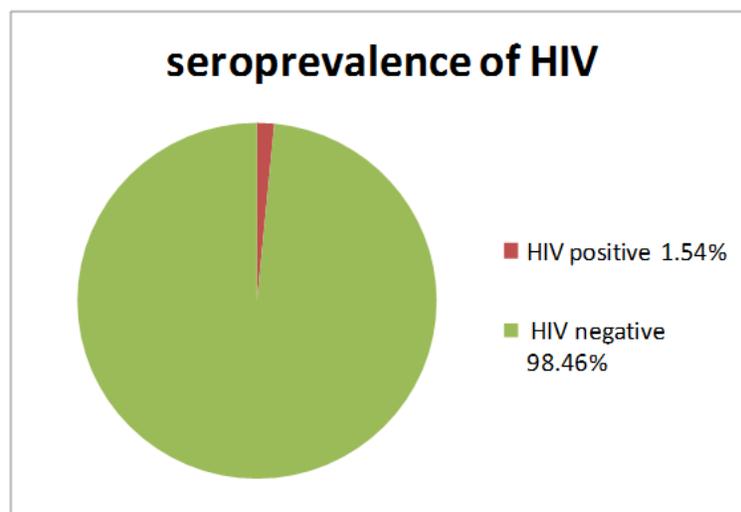
A total of 2457 patients were tested and out of which 38 were seropositive for HIV, with a prevalence rate of 1.54%. Out of these 38 cases 21 were males, and 17 were females (M: F- 1:0.8). In India 90% of the reported cases of HIV are aged between 15 and 40 years and belong to low socioeconomic groups (Monica Malta *et al.*). It is concentrated among vulnerable population which include people who have unprotected sex with sex workers and those who inject drugs with contaminated needles. In rural

areas women account for increasing rate of HIV infection. (S. Solomon *et al.*) the low rate of multiple partner concurrent sexual relationships seems to have protected the larger body of people so far.

India has about 2.1 million people living with HIV, the third largest on the planet after South Africa and Nigeria according to UNAIDS report 2013. According to National Aids Control Organization (NACO) the National adult HIV prevalence in India is 0.36%. The states with high HIV prevalence rates include Manipur (1.40%), Andhra Pradesh (0.90%), Mizoram (0.81%), Nagaland (0.78%), Karnataka (0.63%) and Maharashtra (0.55%).

In 1986, the first known case of HIV was diagnosed by Dr. Suniti Solomon, and her student, Dr. Selappan Nirmala amongst female sex workers in Chennai, Tamil Nadu. [Sternberg *et al.*], [Pandey, *et al.*] It is essential to strength then all testing protocols to include referral of HIV positive clients to well established treatment, care and support facilities.

Fig.1 Pie diagram to show the seroprevalence of HIV at our hospital



Few hospitals and physicians provide health care for people living with HIV/AIDS, partly

because of reluctance among health care personnel to deliver treatment to this

population. The reasons for this reluctance include personal values and prejudices, and inaccurate perception of occupational risk entailed in health care, and the belief that HIV negative patients will refuse to share health care facilities with people living with HIV.

In our study the seroprevalence of HIV is 1.5%. Identifying the high risk group of people in the population and counseling and testing the patients' helps in proper treatment. Highly Active Anti-Retro Viral Therapy (HAART) is started in India based on WHO criteria: absolute CD4 count <200 cells/microliter, patient has an AIDS defining illness or CD4 200 - 350 with opportunistic infections.

Programmes that provide services need to be implemented on public health services throughout the country, in order to decrease the vulnerability of the populations to HIV infection. The study of seroprevalence of HIV helps to formulate preventive steps in reducing the incidence of HIV infection. Developing many appropriate policies and educating people about HIV, promoting safe

behaviour, counseling and creating more awareness among individuals in the community should be done.

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