

## AIDS IN JAMMU

### An Epidemiological Profile

Parveen Kaur, Bella Mahajan, S. K. Verma, Gurmeet Kaur, Sufhia Akhtar

#### Abstract

HIV seropositivity, in blood samples collected from AIDS suspect cases (ASC) and the anonymous unlinked high risk groups, was assessed by using two or three screening tests based on different principles for confirmation of the results. The HIV seropositivity was found to be high (9.4%) in the AIDS suspect cases and 0.9% in the unlinked anonymous high risk group of patients attending STD clinic, District Hospital, Gandhi Nagar, Jammu.

The human Immuno deficiency virus thrives well, not only in the human body but also on our social and cultural habits. AIDS has generated a global concern in the last two decades. The problems associated with this disease are varied and complex. It involves epidemiological, social, ethical, legal and administrative issues. The pandemic of AIDS is ever on the increase. In near future, not only the health services but also the global economy will be affected by the disease.

The earliest detection of the disease in India was in Feb 1986 when HIV-1 infection was found in 10 female commercial sex workers (CSWS) in Madras, Tamil Nadu State (1).

It was in May 1986, sero surveillance for HIV infection was initiated in several parts of India by the (ICMR) Indian Council of Medical Research in collaboration with the Director General of Health Services and State Health authorities (2).

Following this, the National AIDS Control Programme, operational since 1986, was consolidated in 4 years and in 1992 (NACO) National AIDS Control Organisation was officially created (3).

It was only in 1993 that AIDS Surveillance Centre (Now, Blood-testing Centre for AIDS) was established in the Department of Microbiology, Government Medical College, Jammu, J&K State, by the NACO (4).

In this paper we present our statistics of HIV seropositivity in the blood samples collected from AIDS suspect cases attending our Blood Testing Centre, plus samples collected from anonymous unlinked high risk groups of Jammu province from April 1998 to March 1999.

#### Material and Methods

##### *Samples and Subjects :*

A total of 2392 sera samples were collected from AIDS Suspect Cases attending Blood Testing Centre,

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Government Medical College, Jammu (560), unlinked samples received from STD Clinic, District Hospital, Gandhi Nagar, Jammu (645), samples collected for mass surveillance from Pilgrims and local population of the township of Katra, Jammu (412); and inmates from Central Jail, Ambphalla, Jammu (775).

A proforma was filled for recording specific details of risk behaviour, past and current sexually transmitted diseases, socio-economic and demographic details of the AIDS Suspect Cases.

**Methods**

All sera samples were initially screened by UBIR HIV1/2 EIA (April 1998 - October 1998) and INNOTEST HIV - 1/HIV-2 Ab-SP from Innogenetics (Nov. 1998- March 1999) for HIV Antibody. The tests were performed as per manufacturer's instructions and results read using an ELISA reader. Reactive samples were retested in duplicate to confirm the results. Later on an HIV-SPOT Test kit from Genelabs Diagnostics was used as an additional confirmatory test.

**Results**

Out of the total 2392 samples screened in the year 98-99, 59 (2.4%) were found positive for HIV antibody. Out of the positive samples 53/560 (9.4%) were from the AIDS Suspect Cases attending GMC, Jammu and 6/645 (0.9%) were from the unlinked anonymous samples received from the STD Clinic, District Hospital, Gandhi Nagar, Jammu.

None of the sera, collected from the pilgrims and locals of Katra and the inmates of Central Jail, Jammu were found reactive.

Out of the 53 seropositive from AIDS Suspect Cases (ASC) 38 were males and 15 females. All the seropositive

females were wives of HIV seropositive husbands (included in the study).

The peak age incidence for these 53 Seropositive AIDS Suspect Cases, was the 3rd and the 4th decade (Fig 1). Out of the 53 Seropositive Cases 28 (19 males and 9 females) belonged to Jammu District, 21 (15 males and 6 females) were from Kathua District, one was from Udhampur District and 3 were from the neighbouring State of Punjab (Fig. 2). Out of the 38 Seropositive males, 13 were drivers by profession, 11 were labourers, 9 were Government Employees and 4 were in private jobs (Fig. 3).

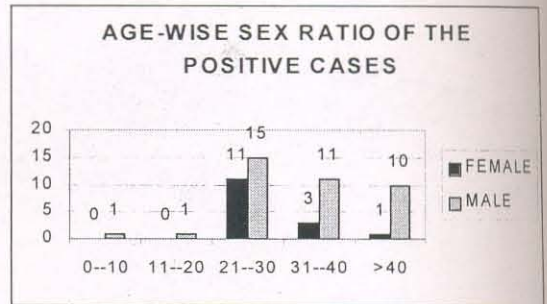


Fig. 1. Age and Sex ratio of HIV positive cases.

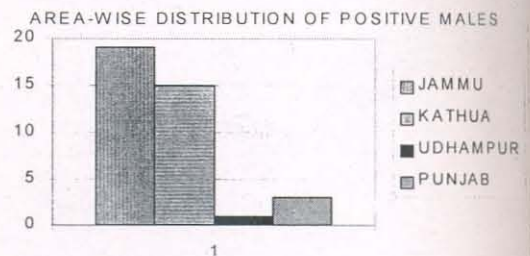


Fig. 2. Area-wise distribution of HIV positive cases.

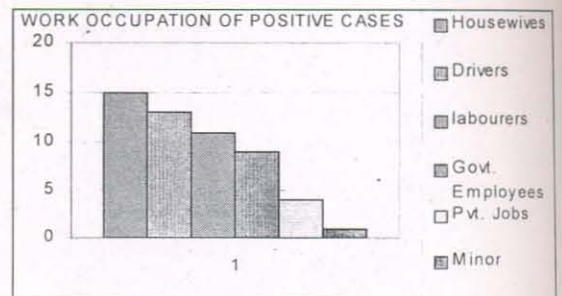


Fig. 3. Occupation of 53 HIV positive cases.

## Discussions

Although the samples of the seropositive groups were hospital based and not epidemiologically selected, hence not representative of any given community, yet some important data have accrued.

The peak age incidence in the seropositive cases was in the 3rd and the 4th decade. If the seropositive infant born to seropositive parents was excluded, the youngest seropositive was a 19 year old male with no obvious history of blood transfusion but positive history of High risk behaviour and promiscuity.

In this study, all of the HIV infected women were house wives and monogamous partners of men who themselves had HIV infection. The detection of such infected women who are themselves without risk behaviour, is of epidemiological interest in our community. In view of the more efficient male to female transmission of HIV, eventually there is bound to be a further increase in HIV seroprevalance among women who acquire infection from their HIV infected husbands.

The incidence of seropositivity (0.9%), in the unlinked STD group of patients, is similar to the incidence reported from the Christian Medical College, Ludhiana ( 0.8%) (5). Higher incidence (3.8%) is reported from Chidambaram in Tamil Nadu (6). HIV infection was not found in 2115 STD Clinic patients investigated during 1986-87 in Delhi (7).

Overseas incidence reported from a STD referral Clinic in Prague, Czech Republic is only 0.07% (8).

The proposed WHO algorithm of using two or three screening tests based on different principles for

confirmation of HIV seropositivity may be showing the serious problems of false negativity as shown in a study conducted by the National Institute of Communicable Diseases, where sera from groups at risk were evaluated by two or three screening tests (9). Strict surveillance and further evaluation of the alternative strategy for HIV testing by the Blood Testing Centre for AIDS needs to be done.

## References

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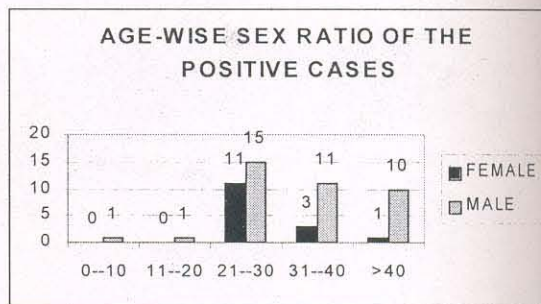


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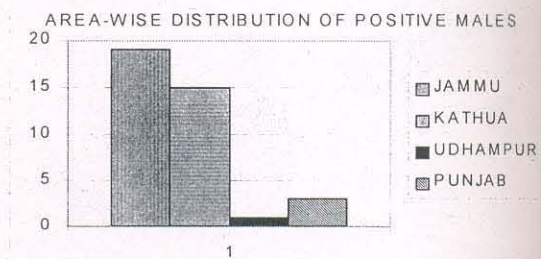


Fig. 2. Area-wise distribution of HIV positive cases.

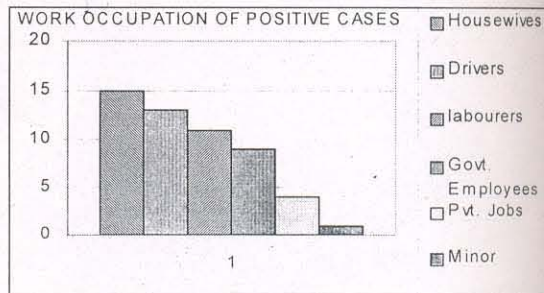


Fig. 3. Occupation of 53 HIV positive cases.