CORELATION OF HIV WITH PROSTITUTION IN PUNJAB

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AUTHORS' CONTRIBUTIONS

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Short Research Article

ABSTRACT

Introduction: HIV belongs to the genus lentivirus within the family of retroviridae and subfamily orthoretrovirinae. In 2017, 1.8 million people were infected with AIDSand 940,000 died due to this serious disease. HIV found in semen, blood, vaginal and anal fluids, breast milk. It is mainly passes on through unprotected sex, sharing needles or syringes and pregnancy during birth and also passed from one person to other person through this route.
Methodology: The HIV patient's blood sample collected in vial, serological test and HIV Elisa test performed on Elisa plate Reader.
Results: The results shows that 35 (70.00%) out of 50 patients were HIV Elisa positive while15 individuals were HIV Elisa negative. The maximum no of patients were observed in age 45 and 55, minimum no. of patients were found in both age 63 and 25.
Conclusion: These positive tests suggests that the spread of the HIV is due to the unsafe sex or oral sex. Sex may be randomly with HIV effected patients or they do sex without the use of condom. Other main reasons that are responsible for the transmission of HIV includes common use of syringes either by the doctors or by the drug addicted patients that usually share common syringes.

Keywords: HIV (Human immunodeficiency virus); AIDS (Acquired immune deficiency syndrome); cDNA; RNA; GP (Glycoprotein).

1. INTRODUCTION

HIV is one of the most serious health problem of our time. In 2017, 1.8 million people were infected with AIDS, and 940,000 died due to this serious disease [1]. HIV belongs to the genus lentivirus within the family of retroviridae and subfamily orthoretrovirinae [2]. HIV mainly affects the white blood cells and causes the lysis of white blood cells. The lysis of cells reduces the immune components of the cells and that's why the immune system become weak. So the disease provoked by the attack of HIV virus is known as the AIDS (acquired immune deficiency syndrome) [3]. In this disease the immune system of the human becomes more sensitive as compared to the other diseases. AIDS is sexually transmitted disease and also increases by prostitution. The HIV virus is enveloped and having glycoproteins as antigens. Majorly, there are two main glycoproteins known as GP120 and GP41 that are involved in the attachment

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of the HIV virus. Other main feature of the HIV virus is that it contains reverse transcriptase enzymes that do reverse transcription of the mRNA into cDNA [4].

HIV found in semen, blood, vaginal and anal fluids, breast milk. it is mainly passes on through unprotected sex (without a condom), sharing needles or syringes and pregnancy during birth [5]. The HIV patients shows symptoms, fever, ash, sore throat, cswollen glands, muscle pain, joint aches, headache, upset stomach and body pain. In the early stages of HIV infection the amount of HIV virus in your blood is high and it is more likely to pass the virus onto others [6].

2. MATERIALS AND METHODS

The blood sample was collected by Ahmad Pur East region. There were totally 50 patients that belong to different areas of Ahmad Pur East region. The blood sample was put into gel vials and the vials were centrifuged at 3000 rpm for 10 minutes. After that serum was extracted from all the collected blood samples individually. After that HIV serology test was performed for their initial diagnosis.

2.1 Serology Test

10 ul serum were dropped into the HIV serology kit and one drop of the buffer was also added. Keep for 2 minutes at room temperature. After this thin layer of chromatography runs and show positive and negative results. The HIV positive samples undergo Elisa technique for their better identification on the basis of antibodies. The Elisa technique have cut value for HIV was 1.0 and show positive cases.

3. RESULTS

The blood sample of 50 patients belong to different areas of southern Punjab were used in HIV test. The mean age of patients was 45.5 ± 8.1 in Table 1.

The age was categorized into 3 groups, 20-40, 41-60 and above 61 age formed 1st, 2nd, and 3rd group. Number of patients in age groups, 20-40, 41-60 and above 61 were, 13, 29, and 8 respectively. The number of patient was found in order of 29 >13 > 08 in 2nd, 1st, and 3rd age groups, respectively. The highest number of HIV patient (29) were found in 2nd group while the lowest patients (08) were found in 3rd group. The 8 (61.53%) patients showed the positive Elisa while 5 patients (38.46%) showed no negative Elisa were belong to the1st age group. The 21 (72.41%) patients showed Positive Elisa while 08 patients (27.58%) showed negative Elisa were belong to the 2nd age group. The 6 (75.0%) patients showed positive Elisa while 2 patients (25%) showed negative Elisa were belong to the 3rd age group. The 35 (70.0%) out of 50 patients were HIV Elisa positive while15 individuals were HIV Elisa negative (Table 2).

The highest no of AIDS patient (29) were found in 2nd group while the lowest patients (08) were found in 3rd group.

The maximum number of patients were observed in age 45 and 55, minimum number of patients were found in both age 63 and 25. The results of their statistical analysis showed that the signification ($P<0.05$) (0.02) correlation was observed in age group.

Table 1. Minimum and maximum age of AIDS patient collected from different areas of southern Punjab

Sr. No	Patient Data	Patient Age
1	Minimum age	26
2	Maximum Age	65
Mean ±S.E		45.5 ± 8.1

Table 2. Distribution of AIDS patient by age group

Age	Percentage (%)
20-40	**(n=13)**
HIV Positive ELISA	08 (61.53%)
HIV Negative ELISA	05 (38.46%)
41-60	**(n=29)**
HIV Positive ELISA	21 (72.41%)
HIV Negative ELISA	08 (27.58%)
61< (above 61)	**(n=8)**
HIV Positive ELISA	06 (75.00%)
HIV Negative ELISA	02 (25.00%)
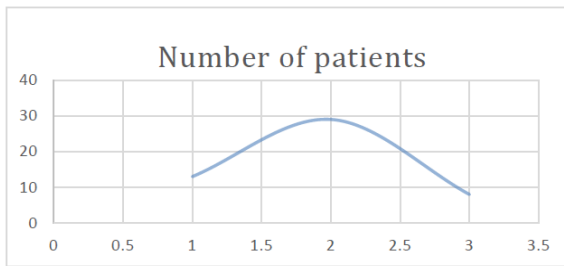
Fig. 1. Marital status of the patient

The graph shows that observed patient were marital status, but their attention to play with prostitution and oral sex. The patient old history shows that they have syphilis positive and repot inconsistent condom use with paying sex partners. The differences in HIV infection rates between the men of each sexual self-identity category are related to number of non-paid partners, cocaine use. Drugs uses, injection uses acquaintance with a person with AIDS, history of syphilis, history of hepatitis and, repoted receptive anal sex, no use of condoms.

4. DISCUSSION AND CONCLUSION

The peoples of different areas of prostitution were recorded positive for the HIV. These positive tests suggests that the spread of the HIV is due to the unsafe sex or oral sex. This sex may be randomly with HIV effected patients or they do sex without the use of condom. Other main reasons that are responsible for the transmission of HIV includes common use of syringes either by the doctors or by the drug addicted patients that usually share common syringes.

CONSENT

As per international standard or university standard, patients' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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