



## Socio-Demographic and Clinical Profile of HIV Positive Patients Registered at an Integrated Counseling and Testing Center of a Tertiary Health Care Hospital

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### Abstract

#### Background

HIV/AIDS is a major public health problem and has turned out into a global pandemic. Integrated counseling and Testing Centers (ICTC) are entry points for a wide range of interventions in prevention and control of HIV/AIDS. The descriptive cross-sectional study was conducted to assess socio-demographic profile, risky sexual behavior and health issues of HIV positive patients registered during one year at ICTC attached to a tertiary health care hospital in a metropolitan city. Knowledge of these factors is of great help in prevention and control of this devastating infection.

#### Results

During the study period of one year, 94 patients were found HIV positive of which 53(56.38%) were males and 41(43.62%) were females. 71(75.53%) HIV positive patients were in the age group of 18 to 45 years. 87(92.55%) subjects were Hindus. 33(34.37%) were housewives. 09(09.57%) subjects were less than 18 years of age. 62(65.96%) were married. 17(18.09%) clients were belong to broken family. 88(93.62%) subjects were having history of risky sexual behavior either of self or spouse or parents. 87 (92.55%) HIV positive subjects were symptomatic and 07(07.45%) were asymptomatic ( $p < 0.05$ ).

#### Conclusion

The best method to prevent and control HIV/AIDS is to increase awareness and adaptation of safe sexual practices. The knowledge of socio-demographic factors, risky sexual behavior and clinical profile of the HIV positive patients will help to plan a health education programme that will create awareness about HIV/AIDS and adaptation of safe sexual behavior in the community to interrupt and control the disease.

**Keywords:** HIV POSITIVE PATIENTS, ICTC, HIV/AIDS

#### Introduction

HIV/AIDS is a pandemic with 36.9 million people affected worldwide. In 2017, 21 lakh people were living with HIV in India. <sup>1</sup> The HIV pandemic continues to be a matter of concern all over the world. The human immunodeficiency virus infection has grown out of proportions and contributed to escalation in tuberculosis. In the South-East Asia Region, there are 4 million people living with HIV

with an adult prevalence of 0.3%, constituting nearly 11.8% of PLHIV globally and among them India is third in the world. <sup>7</sup>

Integrated counseling and Testing Centre is an opening wedge for HIV diagnosis and support services, especially to the high risks groups. Counseling and testing is a cost-effective and simple way of reducing HIV transmission. <sup>3</sup> This center is an entry point for a wide range of interventions in HIV

prevention and care.<sup>6</sup> HIV Counseling and Testing services were started in 1997 in India. ICTC is a place where a person is counseled and tested for HIV, of his own free will or as advised by a health care provider. Conducting HIV diagnostic tests, providing basic information about HIV/AIDS and link people with other HIV prevention, care and treatment services are some of the important functions of ICTC.

According to NACO report, as on March 2016, 74.40% of PLHIV were aware of their HIV status.<sup>4</sup> The challenges before health care providers is to reach to all the HIV infected people in the country so that they adopt a healthy lifestyle, access life-saving care and treatment as well as help to prevent further transmission of HIV. Thus, integrated counseling and testing services are important components of prevention and control of HIV/AIDS. People who are found HIV negative are supported with information and counseling to reduce risks and remain HIV negative.

The 'Prevention of parent to child transmission (PPTCT) of HIV/AIDS' programme was launched in the year 2002 to offer PPTCT services to pregnant women.<sup>4</sup> HIV counseling and testing services are a key entry point in HIV prevention and treatment of people with HIV. These services provide accurate

information about HIV and help the clients to undergo HIV test in a supportive and confidential environment. With the introduction of anti-retroviral therapy, the scope of voluntary counseling and testing centers further expand to include preparedness and adherence along with counseling for people on ART.<sup>5</sup>

The current study is contemplated with a view to understand the socio-demographic characteristics, risky sexual behavior and health issues of HIV positive clients of ICTC.

### Material And Methods

The descriptive cross-sectional study was conducted at an Integrated Counseling and Testing Centre of a tertiary health care hospital in a metropolitan city. All the HIV positive patients diagnosed and registered at the Integrated Counseling and Testing Centre during one year were included in the study. Data related to socio-demography, risky sexual behavior and health issues of HIV positive patients was recorded in pre-designed and pre-tested formatted proforma after obtaining consent from the subjects. Data of the HIV positive children was obtained from the parents with due consent. Data is analysed and is represented with suitable tables. Suitable statistical test of significance is applied while analyzing the data.

**Table-1 Socio-Demographic Characteristics of HIV Positive Patients (n=94)**

Characteristics	Frequency	
	n	%
<b>Age in years</b>		
< 18	09	09.57
18 - 45	71	75.53
> 45	14	14.89
<b>Gender</b>		
Male	53	56.38
Female	41	43.62
<b>Religion</b>		
Hindu	87	92.55
Muslim	07	07.45

<b>Occupation</b>		
Unemployed	05	05.21
Employed	24	25.53
Self employed	21	21.87
Housewives	33	34.37
Retired	02	02.08
Subjects < 18 years	09	09.57
<b>Marital status</b>		
Married	62	65.96
Unmarried	06	06.38
Widow	15	15.96
Widower	02	02.13
Subjects <18 years	09	09.57
<b>Type of Family</b>		
Nuclear	62	65.96
Joint	15	15.96
Broken	17	18.08
<b>Risk Factors</b>		
History of Risky Sexual Behavior of self or Spouse or Parents	88	93.62
History of Blood Transfusion or Major Surgery or Rape	06	06.38
<b>Cause of Death of Spouse</b>		
N = 17		
HIV/AIDS	14	82.35
Unknown illness	03	17.65

**Table-2 Health Status of HIV Positive Patients (n=94)**

Health Problems	Frequency					
	Total (n=94)		Male (n=53)		Female (n=41)	
	n	%	n	%	n	%
Fever	44	46.81	24	45.28	20	48.78
Loss of Weight	17	18.08	09	16.98	08	19.51
Tuberculosis	20	21.28	11	20.75	09	21.95
Rash over body	13	13.83	07	13.21	06	14.63
Herpes Zoster	10	10.64	05	09.43	05	12.19
Diarrhea	02	02.13	01	01.89	01	02.44
Genital ulcers	08	08.51	05	09.43	03	07.32
Syphilis	03	03.20	02	03.77	01	02.44
Weakness	04	04.25	02	03.77	02	04.88
Others	05	05.32	04	07.55	01	02.44
Asymptomatic	07	07.45	03	05.66	04	09.76

## Results And Discussion

During the study period of one year, 94 patients were found HIV positive, of which 53(56.38%) were males and 41(43.62%) were females. 71(75.53%) HIV positive patients were in the age group of 18 to 45 years. 87(92.55%) were Hindus and 07(07.45%) were

Muslims (  $p < 0.05$  ). 33(34.37%) were housewives, 24(25.53%) were employed, 21(21.87%) were self employed while 09(09.57%) subjects were less than 18 years of age. 62(65.96%) subjects were married, 15(15.96%) were widows and 02(02.13%) were widowers. 62(65.96%) subjects belong to

nuclear family and 17(18.08%) were having broken family. 88(93.62%) subjects were having history of risky sexual behavior either of self or spouse or parents. 06(06.38%) subjects were having history of either blood transfusion or major surgery or rape. Of these 06 subjects, 01(01.06%) female HIV positive subject was victim of rape. 17(18.08%) subjects were either widows or widowers. In case of 14 (82.35%) widows or widowers, the cause of death of spouse was HIV/AIDS while in case of 03 (17.65%) subjects the cause of death of spouse was not known ( $p < 0.05$ ). (Table-1)

On examination, 44(46.81%) HIV positive patients were having fever, 20(21.28%) were suffering from tuberculosis, 08(08.51%) were suffering from genital ulcers, 10(10.64%) were having herpes zoster and 13(13.83%) were having rash over the body. It is observed that, 87 (92.55%) subjects were symptomatic while 07(07.45%) were asymptomatic ( $p < 0.05$ ). (Table-2) Interaction of HIV/AIDS with other infectious diseases is an increasing public health concern. Tuberculosis is one of the significant infectious causes of HIV related morbidity.<sup>6</sup>

Geetika Singh *et al*,<sup>1</sup> found 48 HIV positive clients of whom 32(66.67%) were males while 16(33.33%) were females in their study during July-Dec 2018 in Patna, Bihar. They observed maximum reactivity in the age group of 35-49 years for both males (43.80%) and females (50.00%). The age and sex distribution of reactive cases was not found statistically significant ( $p > 0.017$ ) in their study. They found 1.71% seropositivity in 35-49 years age group and male: female ratio of 2:1. Among HIV positive clients the most common route of transmission was hetero-sexual (89.60%) in both sexes followed by homosexual route (06.25%) and parent to child transmission (4.16%). None of the pregnant woman was found to be HIV positive. Quazi SZ *et al*,<sup>2</sup> found 81 HIV positive clients in their six months duration study in Wardha district in Maharashtra of which 70.50% were males.

Prabha Desikan *et al*,<sup>3</sup> observed 183 sero-positive clients during January 2009 to January 2016 in their retrospective study in Bhopal. Of the 183, 151(82.51%) were males and 32(17.49%) were females. Of the 151 sero-positive males, 62(41.00%) were in the age group of 19-30 years and 48(31.71%) were in the age group of 31-40 years. Among 32

sero-positive females, 09(28.10%) were in the age group of 19-30 years and 10(31.20%) were in the age group of 31-40 years. Sanjiv Ahuja *et al*,<sup>6</sup> observed hetero-sexual route was the most common route of transmission in 78.16% clients. A total of 81.08% males and 83.69% females who were sero-positive were in the age group of 15-49 years. They also observed, a total of 88.04% of females were housewives, 31.08% were having business, 72.15% were married and 66.77% were from rural areas.

HIV is spread as much by human behavior as by the virus. ICTC play valuable role in prevention and control of HIV/AIDS. Targeted interventions and intense information, education and communication (IEC) activities should be directed towards the HIV positive patients to limit the morbidity and mortality among them.

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