

The Socio-Demographic Profiles and Health Status of HIV Positives Attending Government General Hospital, Guntur

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Abstract:

Background: As HIV is the world's infectious killer and the Guntur District belong to Andhra Pradesh, India categorized as "A" basing on the high antenatal prevalence for the last two years by NACO (National Aids Control Organization), India has to be given priority to study regarding HIV positives. **Objectives:** 1. to know the socio demographic profiles of HIV positives attending Government General Hospital, Guntur. 2. To study the health status of HIV positives. **Study Design:** It is a cross-sectional study. **Study Area:** STD OP of Government General Hospital Guntur, AdhraPradesh. **Study Subjects:** HIV positive persons attending STD O.P of Government General Hospital, Guntur, Andhra Pradesh. **Sample Size:** 200. **Sample Period:** 01-01-2014 to 31-06-2014. **Results:** In the study group about 61% are males & 39% are females. Maximum that is 88% of study group belong to 15-44 years. And out of this 33% belong to 15-29 years of age group & 55% belongs to 30-44 years of age group. Related to religion distribution majority about 76% of the study group belong to Hindu followed by 16% Christians and 8% Muslims. Pertaining to caste FCs 31%, BCs 30%, SCs 28% and STs 11 per cent were observed in the study group. About 36% of the study group is Illiterate and 64 per cent are literate. Among the literate, maximum 32% are educated up to High School Level and 24% up to Primary Level only, 5% Intermediate and ITI, 3% Graduation and no Post Graduation is observed. Among all the study group maximum 41% are skilled workers and among the females maximum 19% are house wives. Among all the study subjects about 89% (178) of the persons had health problems (Signs & Symptoms) and 11% came to hospital for the purpose of the test & advice. Out of these 89%, about 71% of patients diagnosed HIV after developing signs and symptoms only. Maximum about 54% of patients are suffering from RTI (Respiratory Tract Infections) followed by GIT problems 30%, skin and STD 18%, general health problems 12% and others 6%.

Keywords: HIV/AIDS, HIV Positives, Opportunistic Infections, Health Problems, STD, NACO, Govt. General Hospital, Guntur District.

I. Introduction

Ever since its recognition in 1981, HIV/AIDS continues to ravage all the continents of the world. A retro virus called Human Immunodeficiency Virus (HIV) is the most significant emerging infectious pathogen of 20th century.¹ HIV infection leading to Acquired Immunodeficiency Syndrome (AIDS) is probably the most compelling issue to address for its economic, cultural and social impact in the population worldwide. AIDS sometimes called "Slim disease" has evolved from a mysterious illness to a modern global pandemic which has infected tens of millions in less than 20 years affecting both industrialized and developing countries.

AIDS is a fatal illness caused by HIV which breaks down the body's immune system, leaving the victim vulnerable to a host of life-threatening opportunistic infections, neurological disorders (or) unusual malignancies (2). According to the current estimates from UNAIDS & WHO there were approximately 35 million people worldwide living with HIV in 2013. Of these 3.2 million were children (< 5years) and an estimated 2.1 million individuals worldwide became newly infected with HIV in 2013. HIV is the world's leading infectious killer. According to WHO an estimated 39 million people have died since its first cases were reported in 1981 and 1.5 million people died of AIDS-related causes in 2013(3).

AIDS is affecting mainly the young people in both sexually & economically active age group. Majority of the HIV infections (88.55%) are in the age group of 15-49 years, out of which 31.8% are in the age group of 15-29 years.

India has 2.4 million HIV positive people out of which 61% are male, 39% are female and 3.5% are children(4). In India the epidemic shifts from the highest risk group(commercial sex workers, homosexual men, drug users) to bridge population (clients of sex workers, STD patients, migrant population, population in conflict areas and partners of drug users) and then to general population. The high prevalence states (Group I) in India where the HIV infection has crossed 5% mark in high-risk group and 1% (or) more in antenatal women are Maharashtra, Tamilnadu, Andhra Pradesh, Manipur and Nagaland. All the districts in Andhra Pradesh including Guntur categorized as “A” by NACO(National Aids Control Organization) basing on the surveillance data (>1% of Antenatal prevalence for the last 2 years) (5).

The opportunistic infections cause an increased burden on the health system and the family. Tuberculosis is the most common infection among HIV infected individuals accounting 15% chance of TB/year in PLHA (People Living with HIV/AIDS), and is also the leading cause of death in PLHA in India and worldwide.⁶

II. Material & Methodology

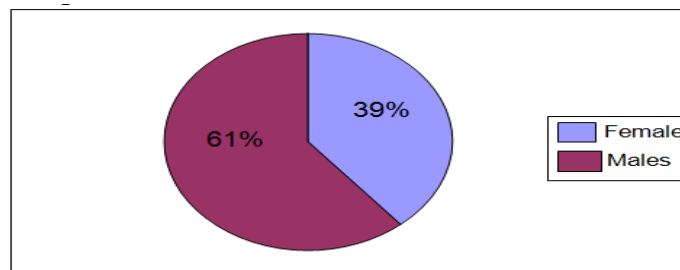
The study was conducted during the period from 01-01-2014 to 31-01-2014 at STD O.P of Government General Hospital, Guntur.

According to hospital census the prevalence of HIV cases attending STD O.P was found to be 35.5%. The sample size was calculated by using the formula $N = 4PQ/L^2$ Where P=35.5, Q= 100-P i.e. 64.5, L= 20% allowable error in P i.e. 7.1, so N= 182 and assuming there may be 10% attrition additional 10% was taken which was calculated to be 200. And all the HIV positives attending STD O.P during the above period were selected as study subjects in this study.They were interviewed by using a pre-tested proforma including information about their socio demographic profiles and health status etc.

The collected data was analysed by using appropriate statistical techniques like percentages, proportions and chi-square test with the help of computer software. The observations were discussed in the light of published material of various authors. The conclusions were made on the synthesis of medical social and statistical angles of the observation with justified differences with the published work of previous authors. The recommendations were made after detailed study of observations.

III. Results

Diagram- 1: Sex distribution:



In the study group about 61% are males 39% are females.

Table- 1: Age distribution:

Sl.No.	Age	Persons	
		No.	%
1.	Below 15 years	Nil	Nil
2.	15-29 years	66	(33%)
3.	30-39 years	88	(44%)
4.	40-44 years	22	(11%)
5.	45 & Above	24	(12%)

- Maximum that is 88% of study group belong to 15-44 years. And out of this 33% belong to 15-29 years of age group & 55% belongs to 30-44 years of age group.

Table- 2: Religion & Caste wise distribution

Sl.No.	Religion	Caste				Total
		FC	BC	SC	ST	
1.	Hindu	46 (23%)	54(27%)	32(16%)	20(10%)	152(76%)
2.	Muslim	14(7%)	2(1%)	0	0	16(8%)
3.	Christian	2(1%)	4(2%)	24(12%)	2(1%)	32(16%)
4.	Others	Nil	Nil	Nil	Nil	Nil
Total		62(31%)	60(30%)	56(28%)	22(11%)	200 (100%)

- Related to religion distribution majority about 76% of the study group belong to Hindu followed by 16% Christians and 8% Muslims.
- Pertaining to caste FC's 31 per cent, BC's 30 per cent, SC's 28 per cent and ST's 11 per cent were observed in the study group.

Table-3: Literacy Status

Educational Status	Male	Female	Total
Illiterate	28 (14%)	44 (22%)	72 (36%)
Primary School	38 (19%)	10 (5%)	48 (24%)
High School	42 (21%)	22 (11%)	64 (32%)
Intermediate & ITI	8 (4%)	2 (1%)	10 (5%)
Graduation	6 (3%)	- -	6 (3%)
Total	122 (61%)	78 (39%)	200 (100%)

- ❖ About 36 per cent of the study group is Illiterate and 64 per cent are literate.
- ❖ Among the literate, maximum 32 per cent are educated up to High School Level and 24 per cent up to Primary Level only, 5 per cent Intermediate and ITI, 3 per cent Graduation and no Post Graduation is observed.

Table- 4: Occupation

Occupation	Male	Female	Total
Professional	2 (1%)	2 (1%)	4 (2%)
Semi-Professional	8 (4%)	- -	8 (4%)
Clerks, Shop Owners and Form Owners	10 (5%)	2 (1%)	12 (6%)
Skilled Workers (Drivers & Tailors)	76 (38%)	6 (3%)	82 (41%)
Semi-Skilled	4 (2%)	4 (2%)	8 (4%)
Un-Skilled	14 (7%)	22 (11%)	38 (18%)
Unemployed	8 (4%)	6 (3%)	14 (7%)
House Wives	- -	39 (19%)	39 (19%)
Total	122 (61%)	78 (39%)	200 (100%)

Among all the study group maximum 41 per cent are skilled workers and among the females maximum 19 per cent are house wives and 7 per cent are unemployed, 18 per cent are unskilled, 4 per cent semi-professionals and 2 per cent professionals.

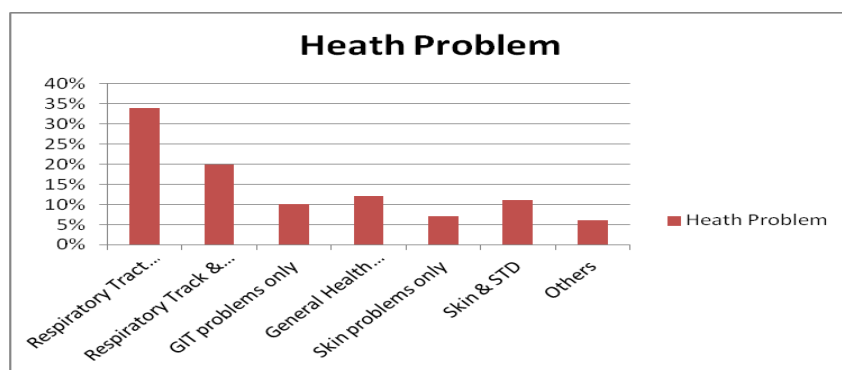
Observation regarding Income:

- Basing on the application of modified Kuppuswamy's classification with reference to per capita income per month maximum 64 per cent had less than Rs. 800/- and 36 per cent had more than Rs. 800/- was observed.

Table-5: Information pertaining to health problems

Type of the Health Problem	Number of Respondents	Percentage
Respiratory Tract Infections only	60	34%
Respiratory Tract & GIT infections	36	20%
GIT problems only	19	10%
General Health Complaints	21	12%
Skin problems only	12	7%
Skin & STD	20	11%
Others	10	6%
Total	178	100%

Among all the study subjects about 89 per cent (178) of the persons had health problems (Signs & Symptoms) and 11 per cent came to hospital for the purpose of the test and advice.



- ✓ Out of these 89 per cent, about 71 per cent patients diagnosed HIV after developing signs and symptoms only.
- ✓ Maximum about 54 per cent of patients are suffering from RTI (Respiratory Tract Infections) followed by GIT problems 30 per cent, skin and STD 18 per cent, general health problems 12 per cent and others 6 per cent.
- ✓ Among the respiratory tract infections tuberculosis is the predominant observation.

IV. Discussion

It is observed that in this study about 61 per cent constituted by males and 39 per cent by females. Which correlates with the figures of studies conducted by A. Shobhana et.al⁷ in the year of 2004 in Kolkota & Pedram Sendi et.al⁸ in the year of 2004 in USA are 72 per cent males & 28 per cent females, 69 per cent males and 31 per cent females respectively. In an another study conducted at Nagpur by Sanjay Sangole et.al⁹ in 2003 it was observed that 87 per cent males and 13 per cent females present in the study group. And among most of the countries in the world 75% of infection is seen in males and 25% is in females. In North America, Europe and Australia about 51% of cases are homosexual or bisexual men. But in our study no homosexual history present in the study subjects.

In our study maximum 88% of study group belong to 15-44 years of age which correlates with our national figure 87.7%⁹ belong to the same age group. And also our study finding i.e. 88% is also comparable to the findings in the study of Bhagyabati Devi et.al¹¹ (93%), Sanjay Sangole et.al⁹ (80%) and Sing A. et.al in Manipal in the year 2003 (80%) respectively. This shows that most cases have occurred among sexually active and economically productive persons who are responsible for child bearing & child rearing. This problem may result in economic loss to the country.

Regarding religion distribution maximum about 76% of study group belong to Hindu followed by 16% Christians and 8% Muslim and with reference to cast FCs 31%, BCs 30%, SCs 28% and STs 11%.

It is identified that out of 122 male persons 112 got married 10 are unmarried and out of 78 females 72 got married, 6 unmarried. And in this study totally 92% are married and 8% are unmarried which could be comparable to the findings of a study belong to A. Sobhana et.al in Kolkata in 2004⁷ 73% married & 27% unmarried and in the study of M.S.Zaheer et.al in 2003¹² 77.1% married & 22.9% unmarried. As the highest percentage of married persons present in the study group there would be happening of much disturbance in their families.

In our study about 36% are illiterate and 64% are literate. Among the literate maximum 32% are educated up to high school level and 24% are up to primary level only. This shows that as the literacy advances the rate of infection is decreasing.

In this study among all the males maximum 38% are skilled workers and among all the females 19% are housewives which are just similar to the figures in a study conducted by M.S. Zaheer et.al¹² in Aligarh in 2003 about 21% of infection observed in drivers followed by 19% in housewives. Infection is found maximum in skilled workers because they are drivers & maysons who are high risk group for HIV/AIDS.

It is observed that majority of our study population (64%) belong to low socio-economic group as their present income per month is less than Rs.800/-. These people are always easily prone for infections because their nutritional status is automatically poor.

Regarding information pertaining to health problem in our study maximum about 54% of patients developed RTI followed by GIT problems 30%, skin & VD 18% etc. Similar findings were reported in the study of Bhagyabati Devi et.al¹¹ at Manipur in 2005 about 55% patients developed pulmonary TB infection, in the study of Patel N.S.et.al¹³ at Ahmedabad in 2003 about 50% developed Pulmonary TB followed by 37% candidiasis as in the study of Dr. Deepali S et.al about 50% RTI, in H.S.Joshi et.at¹⁴ study about 58% RTI and in Vickers I.E et.al¹⁵ at Jamaica 24% Candidiasis. So majority of the HIV/AIDS patients developing RTI (PTB)

early followed by Candida infections in developing countries and Tuberculosis is the earliest opportunistic disease and leading cause of death in people living with HIV/AIDS in India.

V. Recommendations

- The aim of sex education, education about HIV/AIDS prevention is to help the person understand, accept and cope up with the diagnosis and prevent serious reactions such as suicide (or) long-term intractable depressions. This education should be continuous and ongoing process.
- As the literacy is the gateway of getting awareness and our study result shows the importance of improvement of literacy to control HIV/AIDS, the literacy status of the population & patients also should be improved.
- Since HIV/AIDS is now common in women of child bearing age, the incident of HIV/AIDS is on the rise in children also. So to prevent mother to child transmission it is necessary to educate mothers and adolescent females regarding benefits of antenatal care and importance of PPTCT (Prevention of Parent to Child Transmission) with making HIV screening is mandatory in antenatal clinics to prevent 100% child transmission.
- As the HIV seropositivity is more in 20-40 years age group which is economically & sexually productive age group in the family & country the youth should be targeted & sensitized with health education regarding safe sexual practices including use of condoms, avoidance of extra marital sex by means of conducting strengthened awareness and screening campaigns regarding HIV/AIDS with I.E.C (Information, Education and Communication) intervention strategies involving health care staff, volunteers, youth clubs, NGOs, village level workers, opinion leaders and adequate funding etc.
- Strengthening of counseling process is an important aspect of control and prevention of HIV/AIDS because counseling improves the health status of the study subjects by means of improving hygienic practices, taking nutritious diet, adoption of safe sexual practices, abstain from bad habits like smoking & alcohol relieving from false beliefs, prevention of suicidal tendencies and keeping the housing environment healthy etc.

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