



SOCIO-DEMOGRAPHIC PROFILE OF PEOPLE LIVING WITH HIV/AIDS (PLWH) ATTENDING ART CENTRE AT THE GOVERNMENT GENERAL HOSPITAL GUNTUR, INDIA: A CROSS SECTIONAL STUDY

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ABSTRACT

Back ground: There has been no epidemiology of HIV/AIDS with regarding to socio-demographic profile of the patients receiving ART treatment, which is helpful in planning the future complex needs of PLWH and prevent prospective of the disease.

Aim: To know the socio-demographic profile of the PLWH attending ART center in government general hospital, Guntur.

Methodology: A cross sectional study was conducted. The patients were screened based on inclusion and exclusion criteria. Data was collected and the obtained results were tabulated and interpreted using SPSS version 17, Chi- square test.

Results: 250 patients were included in the study. On reviewing the data it was found that more than half (55.2%) were females compared to males (40.8%). The age distribution showed most of them were adults aged between 30-49yrs (61.6%) of the study population. Those with illiteracy and primary level of education constituted (66%). Having income accounted for (57.2%) compared to those who don't have any income (42.8%). Single marital status had a prevalence of (14%) and the married (67.6%) was the majority. This finding suggested that most likely form of HIV transmission in Guntur is sexual. The non-consanguineously married patients (71%) outnumbered the consanguineously married patients (29%). This conclude that their no relationship between the HIV transmission and the lineage/ Kinship marriage. This finding showed patients are mostly having the family history of HIV (46.4%) more than half of it was constituted by husband (55.1%) Those with no habits (71.6%) outnumbered compared with those having habits (28.4%), of which (13.6%) are alcoholics.

Conclusion: This study showed that as many women as men were equally vulnerable. Risk factors for HIV infection were being adults, illiteracy, employed with low level of income, presence of family history of HIV which was mainly from husband to wife. These findings suggested that HIV transmission in Guntur was sexual.

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INTRODUCTION

Human immunodeficiency virus (HIV) infection is a global pandemic disease. It continues to be a major public health issue in the developing countries especially India. According to the UNAIDS and WHO reports globally, around 37.9 million people are currently living with HIV/AIDS, of which 23.3million people are receiving ART treatment with global prevalence of 62% of people living with HIV/AIDS by the end of 2018^[12]. India has the third largest epidemic in the world with 2.1million people living with HIV. In 2017, HIV prevalence among adults (aged 15-49) was estimated 0.22%^[11].

However, in 2017 new infections increased from 80,000 to 88,000 and AIDS-related deaths increased from 62,000 to 69,000^[11]. Andhra Pradesh has the second largest adult HIV prevalence is 0.63% (2.70 Lakhs). Guntur tops the list of HIV positive cases in the state. It is one of the leading cause of the deaths.

National AIDS Control Programme – III envisages district level planning and implementation of all the programmatic initiatives. For the purpose of planning and implementation of NACP-III, all the districts in the country are classified into four categories based on HIV prevalence in the districts among different population groups for three consecutive years. The definitions of the four categories are as follows:

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Category A: More than 1% ANC prevalence in district in any of the sites in the last 3 years.

Category B: Less than 1% ANC prevalence in all the sites during last 3 years with more than 5% prevalence in any HRG site (STD/FSW/MSM/IDU).

Category C: Less than 1% ANC prevalence in all sites during last 3 years with less than 5% in all HRG sites, with known hot spots (Migrants, truckers, large aggregation of factory workers, tourist etc).

Category D: Less than 1% ANC prevalence in all sites during last 3 years with less than 5% in all HRG sites with no known hot spots OR no or poor HIV data.

(ANC: Ante-natal Clinic; HRG: High Risk Group; STD: Sexually Transmitted Disease; FSW: Female Sex Worker; MSM: Men who have Sex with Men; IDU: Injecting Drug User.)^[13]. Guntur district comes under the category A in the Andhra state.

Aim and Objectives

Aim

The present study was aimed to know the socio-demographic characteristics of people living with HIV/AIDS at the government general hospital, Guntur.

Objective

To know the socio-demographic profile of PLWH attending ART center at the government general hospital, Guntur.

METHODOLOGY

MATERIALS AND METHODS

Study design: Cross-sectional observational study
Study period: The study was conducted within a time period of 6 months i.e., from 1st September 2018 to February 28th 2019.

Study site: The study was conducted in ART PLUS center of Government General Hospital, Guntur, a tertiary care teaching hospital.

Materials used: Patient consent form, Pre tested standardized questionnaire.

Inclusion criteria

- Patients who are diagnosed with HIV/AIDS.
- HIV patients who are receiving ART treatment.
- Patients who are concerned to participate in the study & willing to give informed consent.
- Those who can understand English / local language.
- Patients of either gender & age > 21 years.

Exclusion criteria: Patients with organic mental disorders, Pregnant women

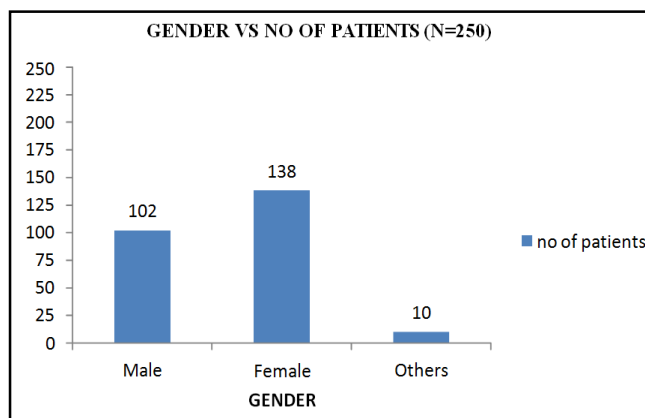
Data collection: Data was collected by asking the self-prepared and validated questionnaire which is used to know the socio-demographic characteristics of people living with HIV/AIDS.

Statistical analysis: The data obtained was interpreted using SPSS version 17, Chi-square test.

RESULTS

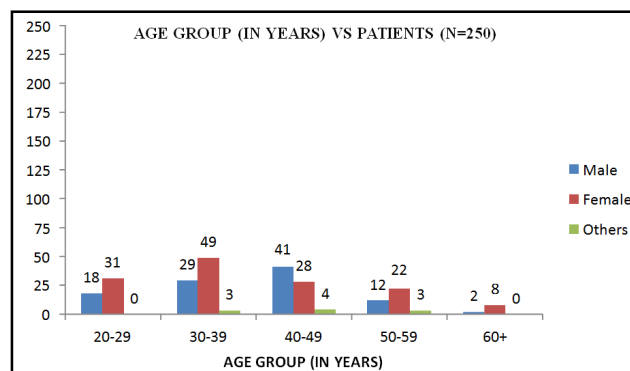
Gender Vs no of Patients

Gender	No of Patients (N=250) n (%)
Male	102 (40.8)
Female	138 (55.2)
Others	10 (4)



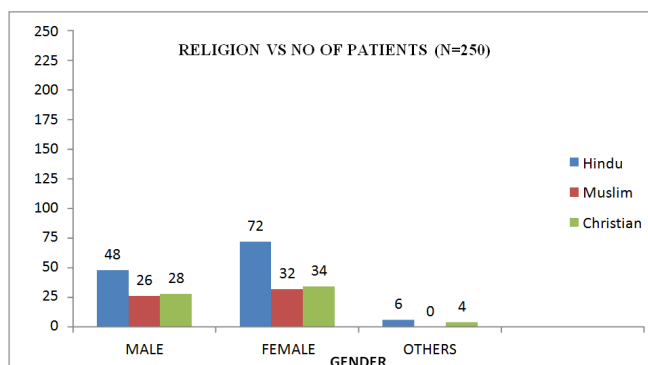
Age Group (In Years) Vs No of Patients

AGE GROUP (IN YEARS)	AGE GROUPS (N=250)			TOTAL PERCENT n (%)
	MALE n=102 n (%)	FEMALE n=138 n (%)	OTHERS n=10 n (%)	
20-29	18 (7.2)	31 (12.4)	0 (0)	49 (19.6)
30-39	29 (11.6)	49 (19.6)	3 (1.2)	78 (32.4)
40-49	41 (16.4)	28 (11.2)	4 (1.6)	73 (29.2)
50-59	12 (4.8)	22 (8.8)	3 (1.2)	37 (14.8)
Above 60	2 (0.8)	8 (3.2)	0(0)	10 (4)



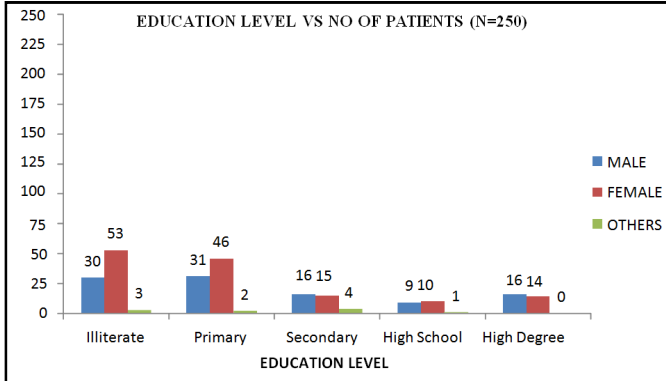
Religion Vs No of Patients

Religion	No of Patients (N=250)			Total Percent n (%)
	Male n=102 n (%)	Female n=138 n (%)	Others n=10 n (%)	
Hindu	48 (19.2)	72 (28.8)	6 (2.4)	126 (50.4)
Muslim	26 (10.4)	32 (12.8)	0 (0)	58 (23.2)
Christian	28 (11.2)	34 (13.6)	4 (1.6)	66 (26.4)



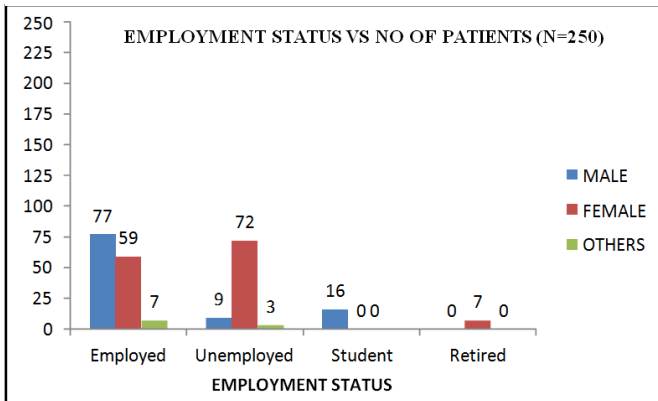
Education Level Vs No of Patients

Education Level	No of Patients (N=250)			Total Percent n (%)
	Male n=102 n (%)	Female n=138 n (%)	Others n=10 n (%)	
Illiterate	30 (12)	53 (21.2)	3 (1.2)	86 (34.4)
Primary	31 (12.4)	46 (18.4)	2 (0.8)	79 (31.6)
Secondary	16 (6.4)	15 (6)	4 (1.6)	35 (14)
High School	9 (3.6)	10 (4)	1 (0.4)	20 (8)
High Degree	16 (6.4)	14 (5.6)	0	30 (12)



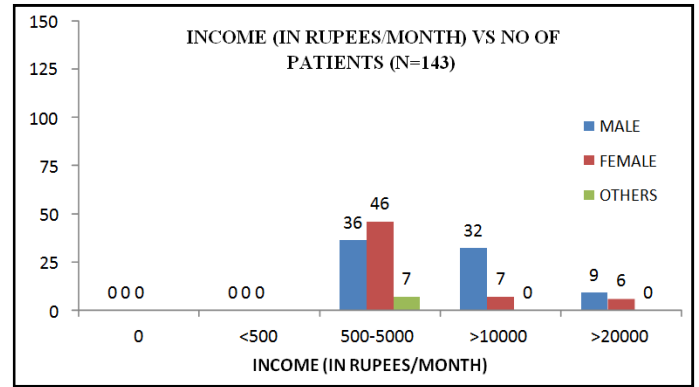
Employment Status Vs No of Patients

Employment Status	No of Patients (N=250)			Total Percent n (%)
	Male n=102 n (%)	Female n=138 n (%)	Others n=10 n (%)	
Employed	77 (30.8)	59 (23.6)	7 (2.8)	143 (57.2)
Unemployed	9 (3.6)	72 (28.8)	3 (1.2)	84 (33.6)
Student	16 (6.4)	0 (0)	0 (0)	16 (6.4)
Retired	0 (0)	7 (2.8)	0 (0)	7 (2.8)



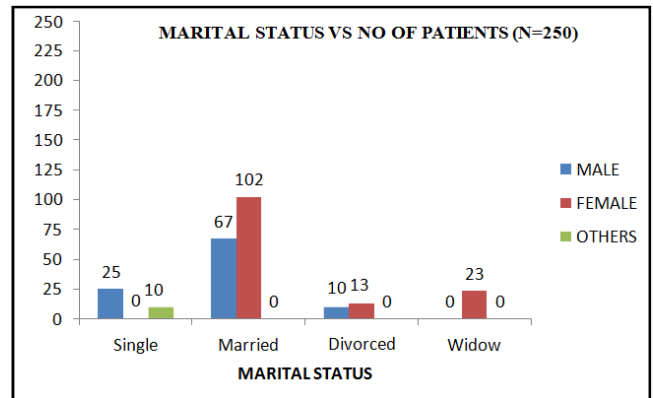
Income (In Rupees/ Month) Vs No of Patients

Income (in Rupees/Month)	No of Patients (N=143)			Total Percent n (%)
	Male n=77 n (%)	Female n=59 n (%)	Others n=7 n (%)	
0	0 (0)	0 (0)	0 (0)	0 (0)
<500	0 (0)	0 (0)	0 (0)	0 (0)
500-5000	36 (25.17)	46 (32.16)	7 (4.89)	89 (62.2)
>10000	32 (22.37)	7 (5)	0 (0)	39 (27.3)
>20000	9 (6.3)	6 (4.2)	0 (0)	15 (10.5)



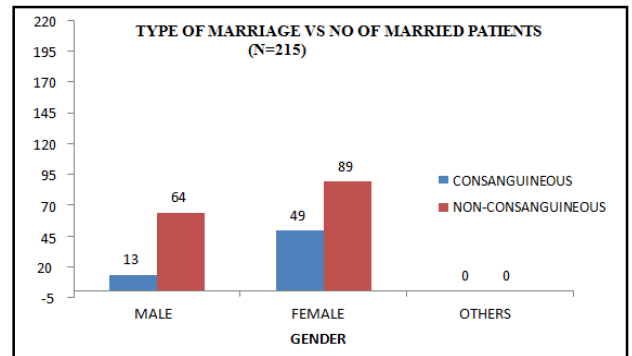
Marital Status Vs No of Patients

Marital Status	No of Patients (N=250)			TOTAL PERCENT n (%)
	Male n=102 n (%)	FEMALE n=138 n (%)	OTHERS n=10 n (%)	
Single	25 (10)	0 (0)	10 (4)	35 (14)
Married	67 (26.8)	102 (40.8)	0 (0)	169 (67.6)
Divorced	10 (4)	13 (5.2)	0 (0)	23 (9.2)
Widow	0 (0)	23 (9.2)	0 (0)	23 (9.2)



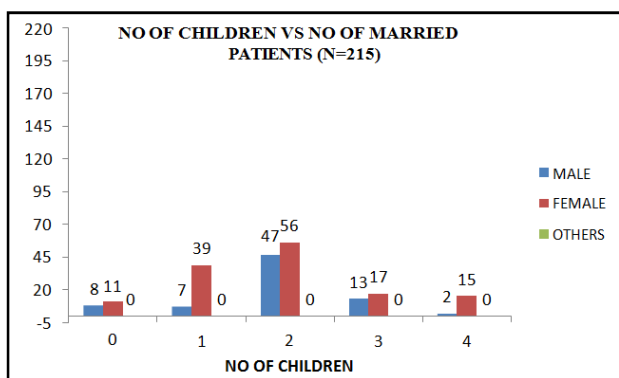
Type of Marriage Vs No of Married Patients

Type Of Marriage	No of Married Patients (N=215)			Total Percent n (%)
	Male n=77 n (%)	Female n=138 n (%)	Others n=0 n (%)	
Consanguineous	13 (6)	49 (23)	0 (0)	62 (29)
Non-Consanguineous	64 (30)	89 (41)	0 (0)	153 (71)



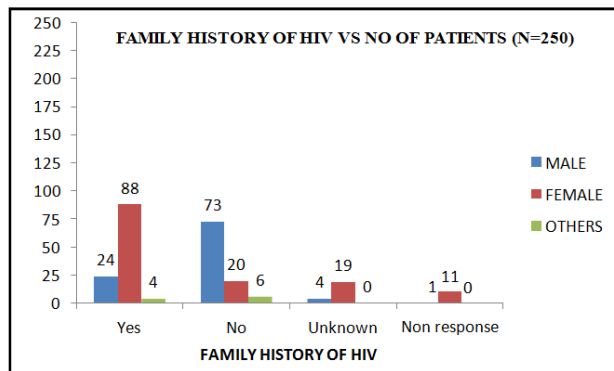
No of Children Vs no of Married Patients

No of Children	No of Married Patients (N=215)			Total Percent n (%)
	Male n=77 n (%)	Female n=138 n (%)	Others n=0 n (%)	
0	8 (4)	11 (5.1)	0 (0)	19 (9.1)
1	7 (3.2)	39 (18.1)	0 (0)	46 (21.3)
2	47 (22)	56 (26)	0 (0)	103 (46)
3	13 (6)	17 (8)	0 (0)	30 (21)
4	2 (0.9)	15 (7)	0 (0)	17 (9)



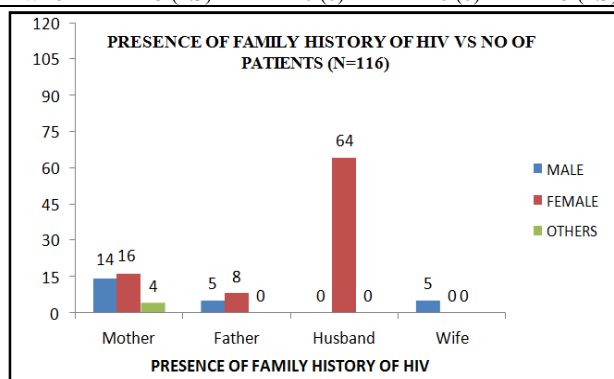
Family History of HIV Vs No of Patients

Family History of HIV	No of Patients (N=250)			Total Percent n (%)
	Male n=102 n (%)	Female n=138 n (%)	Others n=10 n (%)	
Yes	24 (9.6)	88 (35.2)	4 (1.6)	116 (46.4)
No	73 (29.2)	20 (8)	6 (2.4)	99 (39.6)
Unknown	4 (1.6)	19 (7.6)	0 (0)	23 (9.2)
Non response	1 (0.4)	11 (4.4)	0 (0)	12 (4.8)



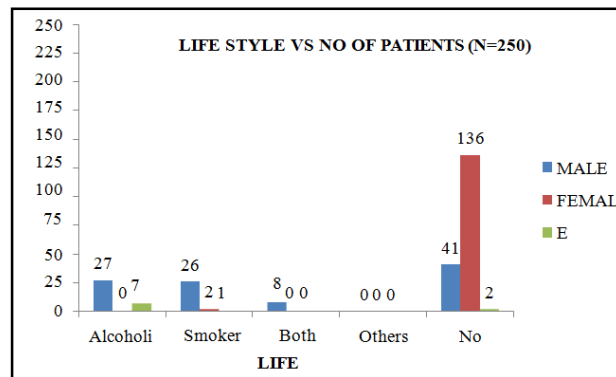
Presence of Family History of HIV Vs no of Patients

Presence of Family History of HIV (IF Yes)	No of Patients (N=116)			Total Percent n (%)
	Male n=24 n (%)	Female n=88 n (%)	Others n=4 n (%)	
Mother	14 (12.1)	16 (13.8)	4 (3.4)	34 (29.3)
Father	5 (4.3)	8 (7)	0 (0)	13 (11.3)
Husband	0 (0)	64 (55.1)	0 (0)	64 (55.1)
Wife	5 (4.3)	0 (0)	0 (0)	5 (4.3)



Life Style Vs No of Patients

Life Style	No of Patients (N=250)			Total Percent n (%)
	Male n=102 n (%)	Female n=138 n (%)	Others n=10 n (%)	
Alcoholic	27 (10.8)	0 (0)	7 (2.8)	34 (13.6)
Smoker	26 (10.4)	2 (0.8)	1 (0.4)	29 (11.6)
Both	8 (3.2)	0 (0)	0 (0)	8 (3.2)
Others	0 (0)	0 (0)	0 (0)	0 (0)
No	41 (16.4)	136 (54.4)	2 (0.8)	179 (71.6)



DISCUSSION

- A cross-sectional observational study was carried out on “Socio-Demographic characteristics of people living with HIV/AIDS at the government general hospital, Guntur: A cross sectional study” 250 patients met the inclusion criteria and were included in the study. The data obtained was tabulated and analysed.
- Based on the results obtained our study revealed that HIV/AIDS is predominantly prevalent in females 138 (55.2%) which was dissimilar to study done by “Qingyan Ma, *et al.*, (2016)” on “I can coexist with HIV: a qualitative study of perceptions of HIV cure among people living with HIV in Guangzhou, China” which showed that HIV/AIDS was predominantly found in males 14 (63.6%)^[1].
- In our study we found out that patients between 30-39yrs 81 (32.4%) age group were majorly suffering with HIV which was in similar to study done by “Qingyan Ma, *et al.*, (2016)” on “I can coexist with HIV: a qualitative study of perceptions of HIV cure among people living with HIV in Guangzhou, China”, which revealed that age group between 30-39yrs 8 (36.3%) and 40-49yrs 8 (36.3%) are mostly effected with HIV/AIDS^[1].
- Our study also found that patients belonging to Hindu religion 126 (50.4%) were majorly suffering with HIV which was similar to study done by “Eknath Naik, *et al.*, (2009)” on “Cost of treatment: The single biggest obstacle to HIV/AIDS treatment adherence in lower middle class patients in Mumbai, India” which revealed that most of the patients belonging to hindu religion 90 (59.2%) are majorly suffering with HIV^[2].
- Our study also revealed that patients with no education 86 (34.4%) i.e. illiterate were majorly prone to develop HIV which was similar to study done by “Swechchha Sharma, *et al.*, (2015)” on “Knowledge and Attitude towards HIV/AIDS among the Patients of Raipur District of Chhattisgarh”, which revealed that most of the patients with no education (illiterate) 87 (27.11%) are suffering with HIV^[3].
- We also tried to assess the employment status of patients and found that most of them are employed 143 (57.2%),

which is similar to study by "Hassan Reza, *et al.*, (2017)" on "Life expectancy after HIV diagnosis based on data from the counselling center for behavioural diseases", which revealed that patients who are employed 122 (50.5%) are majorly suffering with HIV [4].

- Our study also found that most of the patients with income of 500-5000 rs/ month 89 (62.22%) which is in dissimilar to study done by "Ogunmola O, *et al.*, (2013)" on "Relationship between socioeconomic status and HIV infection in a rural tertiary health center" which revealed that patients with >10,000 52 (42.6%) are majorly suffering with HIV [5].
- We also tried to assess the marital status of patient and found that most of them were married 169 (67.6%). The patients with non-consanguineous marriage 153 (71%) were more suffering with HIV which is in similar to study by "Qingyan Ma, *et al.*, (2016)" on "I can coexist with HIV: a qualitative study of perceptions of HIV cure among people living with HIV in Guangzhou, China", which revealed that most of the patients were married 12 (54.5%) [11].
- Our study also revealed that patients with 2 child 1043 (46%) are suffering with HIV which is in dissimilar with "Barbara Nattabi, *et al.*, (2011) on "Family planning among people living with HIV in post-conflict Northern Uganda: A mixed methods study" which revealed that patients with 1 child 394 (40.9%) are suffering with HIV [6].
- Our study found that most of the patients are having family history 116 (46.4%) of HIV which is in similar to study done by "Jayne Lewis Kulzer, *et al.*, (2012)" on "Family model of HIV care and treatment: a retrospective study in Kenya", which revealed that patient with family history 200 (84.7%) of HIV are majorly suffering with HIV [7].
- Our study revealed that patients having family history of HIV which is mostly transmitted from husband 64 (55.2%) which is in similar to study done by "Jayne Lewis Kulzer, *et al.*, (2012)" on "Family model of HIV care and treatment: a retrospective study in Kenya", which revealed that patient with family history of HIV which is mostly transmitted from husband 41 (65.1%) are majorly suffering with HIV [7].
- We also tried to assess the life style of patients and found that most of them are not having any habit of smoking/alcohol 179 (71.6%) are majorly suffering with HIV, which is in similar to study done by "Todd M. Pollack *et al.*, (2017)" on "Cigarette smoking is associated with high HIV viral load among adults presenting for anti retroviral therapy in Vietnam", which revealed that patients with no habit of smoking/ alcohol 277 (43.5%) are majorly suffering with HIV [8].

CONCLUSION

Based on the results obtained study strongly concludes that females are majorly suffering with HIV compared to males and others, the most affected age group is between 30-39 yrs who belong to Hindu religion and most of the patients were illiterate, if employed with an income of 500- 5000 Rs/- per month and most of the patients were non-consanguineously married bearing 2 children are majorly suffering with HIV.

Most of the patients have family history of HIV i.e transmitted from husband to wife and their life style is normal.

Limitations

- Even though the patient had provided informed consent, it is completely up to the patient whether to give the right information or not. So, there may be bias in the study.
- There is no comparison with control group.

Challenges Faced

- Most of the patients are not willing to participate.
- Collecting the data from the patients.

Future Prospectives

- Comparison with the control group
- Giving scores to the answers and using a scale to calculate the data.

Acknowledgement

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