

A Study of HIV/AIDS Patients receiving ART Treatment in a Tertiary Care Hospital, Central India



Medical Science

KEYWORDS : CIMS, HIV, HSS, PLHA, ADR

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ABSTRACT

Background: Information on HIV patients according sex wise number with percentage received ART treatment in tertiary care hospital, CIMS, Bilaspur, CG have been obtained. AS well as we have studied about educational level, Awareness, ADR. And it was used in this study with the following objectives

Objective 1. To study the HIV patients who were ART treatment have been taking in a tertiary care hospital CIMS Bilaspur, which is out of three ART centre in this State. 2. To

study of HIV/AIDS patients about them awareness and educational level. 3. To find out the Anti Drug Reaction (ADR) of these patients.

Methodology The data under HSS were obtained from ART centre of CIMS a tertiary care hospital Bilaspur, Chhattisgarh. The data has been obtained where HSS was carried out during October 2013 to December 2013. PLHA of educational level, Awareness about HIV and ADR of 44 patients PLHA have been obtained with percentage as well as Z- test, p value. The data were analyzed by SPSS 11.5 version. Tables and Figures have been made respectively.

Results In year 2013, HIV registered in a tertiary care Hospital as well as Medical college, CIMS, Bilaspur, C.G. In this city there is one Govt. Medical College with a tertiary care Hospital. The Number and Percentage of PLHA (People living with HIV/AIDS) are positive Male & Female are (23,41%), (33, 59%) It means that HIV are more Prevalent in Female than Male. So it are alarming for conducting Ante Natal Care HSS programme very carefully. The Mean & SD of Educational level of PLHA are (14+-12.56). AS well as the Z-test has applied with p value. There is no statistical significant, $p > .05$. The Mean & SD of Educational level based on Sex of PLHA are (16+-8.48). AS well as the Z-test has applied with p value. There is no statistical significant, $p > .05$. The Mean & SD of Awareness level of PLHA are (18.66+-15.88). AS well as the Z-test has applied with p value. There is no statistical significant, $p > .05$. The Mean & SD ADR reported of PLHA are (6.28+-4.23). AS well as the Z-test has applied with p value. There is no statistical significant, $p > .05$. with the total no. of patients on ART is 27 with 48% of the PLHA.

Recommendation: HIV of Females are more exceed than in male of HIV. So it are alarming for conducting Ante Natal Care HIV Sentinel Surveillance (HSS) programme very carefully. We have to improve Awareness and Educational Level of HIV Female. Then we have to give an idea to how to prevent to HIV among HIV Females. One more thing to we will control (Prevention to Parrent to Child admmission) PPTCT.

INTRODUCTION

The HIV/AIDS epidemic is one of the world's most serious public health and social problems. India, the third largest economy in Asia and eleventh largest of the world. India has the second largest population around the globe [2] with more than one billion people, half of whom are adults of the sexually active age group. Moreover, the prevalence of HIV infection in India has been steadily increasing over the past few decades [3,4]. Thus, even with a small increase in India's HIV/AIDS prevalence rate thereby would imply a significant component of the world's HIV/AIDS burden. According to the data available from National Family Health Survey 3 (NFHS-3), during 2005-06, 2.5 million people in India are infected with HIV [5]. The first case of HIV infection was reported in Chennai in 1986 which has since spread to all states and union territories. At present, India has the third largest number of HIV & AIDS cases after South Africa and Nigeria. Sentinel surveillance conducted by the National AIDS Control Organization (NACO) shows that in the general population HIV prevalence is low (0.25-0.43%), but among high-risk groups, HIV prevalence is much more. In at least five states, HIV prevalence among injecting drug users (IDU) is even more than 10%, with a highest prevalence of 24% among IDUs are HIV positive in Maharashtra. Prevalence is also elevated among female sex workers and men who have sex with men [6]. Commercial sex workers (CSW) and their clients are at the highest risk for HIV infection and transmission [4]. Certain states in India like Andhra Pradesh, Tamil Nadu, Maharashtra Karnataka, Nagaland and Manipur have been reported to have high number of HIV infected population in India [3]. With this view and above context the present study was carried out with following objectives.

Objective 1. To study the HIV/AIDS patients are taking ART treatment in a tertiary care hospital CIMS (Chhattisgarh Institute of Medical Sciences) Bilaspur C.G., which is out of three ART centre in this State. 2. To study of HIV/AIDS patients about them awareness and Educational level. 3. To find out the Anti Drugs Reaction of these patients.

Materials & Methods

A Retrospective study was carried out in a tertiary Care Hospital Chhattisgarh Institute of Medical sciences (CIMS) of Bilaspur district of Chhattisgarh state. In survey. We have collected the data of HIV/AIDS patients (those who are suffering these infection) from ART Center, Chhattisgarh Institute Of Medical Sciences (CIMS) in study period January 2013 to December 2013. In every year HIV Sentinel surveillance is done from October to December. During HIV Sentinel surveillance the survey was conducted in this phase. HIV/AIDS patients were obtained. Those patients who are suffering HIV infection are obtained according sex wise. Anti Drug Resistance of 44 patients (out of 56 samples) were reported. The statistical analysis was performed using SPSS software (version 17.0). All values are expressed in the form of frequency, percentages, mean and standard deviation and the Z- test. Statistical significance was set at $P = 0.05$.

RESULTS

The HIV/AIDS cases in ART Center of a tertiary Care Hospital Chhattisgarh Institute of Medical Science of Bilaspur district (which is one of ART center out of three ART Center of this C.G. state from January 2013 to December 2013 is shown in table 1. In this table there are 23(41%) male HIV cases registered and 33(59%) female HIV cases are registered. If we look registration of HIV cases according year it was growing. Out of these 27 (48%) patients on ART treatment are receiving on that tertiary care hospital (CIMS) of Bilaspur District. We have obtained that Educational Level of PLHA has Mean and Standard Deviation (16,8.48). The maximum number of HIV/AIDS patients is (57%) illiterate. Out of 23 HIV/AIDS Male 10 (10%) is educated as well as Out of 33 HIV/AIDS Female 22(66%) is educated. With Mean and (S.D.) Standard Deviation are (16, 8.48). Also the test $Z = 0.707, p = 0.32 > 0.05$, it is not statistically significant.

Awareness Level about HIV/AIDS in these samples 56, Mostly PLHA 37(66%) are totally unaware of this disease. Therefore it was not only totally socked information but also told socio economic status of these study samples. Only 9(16%) PLHA out

of them are aware by their Friends . Awareness level has Mean and S.D. are (18.6 ,15.8) and the test $Z = 1.15, p = 0.12 > 0.05$, it is not statistically significant. We have Anti Drug Resistance (ADR) reported on 44 samples out of 56 total samples as mostly 15(34%) patients are suffering Anaemia By Zidovudine and Minor 3(4.5%) PLHA patients are suffering Night Mare By Effaviranz. The ADR has Mean and S.D. (6.28,4.36), the test $Z = 2.05, p = 0.019 < 0.05$ which is statistically significant. It means that particular drug has particular problem. The Anti Drug Resistance based on Sex, Male is 1, Female is 5 with Mean and S.D. (3,2.82) and the test $Z = 0.70, p = 0.23 > 0.05$ which is not statistically significant.

In the Figure1, it is showing that How many male and Female of HIV/AIDS Patients by Bar diagram .In the Figure2, it is showing People living with HIV/AIDS (PLHA) 56 patients of educational levels. In the Figure3, it is showing what are percentage of males and female of HIV/AIDS by Pie chart .In the Figure4, it is showing What are percentage Awareness level about HIV/AIDS of PLHA .In the Figure 5 ADR reported on 44 samples out of these 56 samples in percentage by pie chart.

DISCUSSION AND CONCLUSION

In this study we have analyzed the year wise distribution of HIV cases. Based on this analysis , there are no statistically significant in educational level, educational level based on sex, Awareness level . Chhattisgarh state presents a low prevalence of HIV cases. In our study, we have found that there is statistically significant Anti drug resistance (ADR) in 44 samples out of these 56 samples. It means that For the taking particular Drug has occurred frequently particular type of resistance or problem or side effect.

RECOMMENDATION:

Our recommendation is that We have to emphasize on control and prevention of HIV/AIDS.

We have to aware about HIV/AIDS in lower socio economic group of the people basically in Females. As well as We have to improve educational level and moral support in PLHA group.

Tables:

Number of HIV Male and Female	Number	Percentage		
Male	23	41%		
Female	33	59%		
Total	56	100%		
Education level	Number	Percentage	Z - Score	P - value
illiterate	32	57%	1.432003	0.076071
primary education	12	21.43%	-0.15911	0.436791
secondary education	9	16.07%	-0.39778	0.345397
college and above	3	5.36%	-0.87511	0.190756
Mean	14			
S.D.	12.56981			
Education level based on sex	Number	Percentage	Z - Score	P - value
Male	10	43.48%	-0.70711	0.23975
Female	22	66.67%	0.707107	0.23975
Mean	16			
S.D.	8.485281			
Awareness level	Number	Percentage	Z - Score	P - value
totally unaware	37	66.07%	1.154128	0.124224
aware by TV and Radio	10	17.86%	-0.54559	0.292675

aware by friends	9	16.07%	-0.60854	0.271415
Mean	18.66667			
S.D.	15.885			
	Number	Percentage		
No. of patients on ART	27	48%		
ADR reported (n = 44)	Number	Percentage	Z - Score	P - value
anaemia by zidovudine	15	34.09%	2.059432	0.019726
skin rashes by nevirapine	6	13.64%	-0.06752	0.473083
neuro psychiatrc by efaviranz	5	11.36%	-0.30385	0.380621
pancreatitis by lamivudine	6	13.64%	-0.06752	0.473083
utropenia	3	6.82%	-0.77651	0.218725
night mare by effaviranz	2	4.55%	-1.01284	0.155569
hepato toxicity by nevirapine	7	15.91%	0.168806	0.432975
Mean	6.285714			
S.D.	4.231402			
ADR ratio based on sex	Number	Percentage	Z - Score	P - value
Male	1	4.35%	-0.70711	0.23975
Female	5	15.15%	0.707107	0.23975
Mean	3			
S.D.	2.828427			

Figure1: Bar diagram of HIV/AIDS Patients according Sex

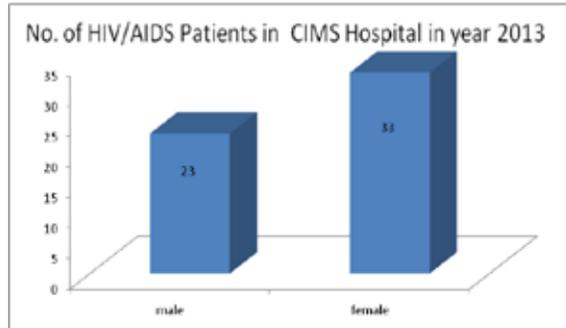


Figure2: Pie diagram representing Educational Level of PLHA

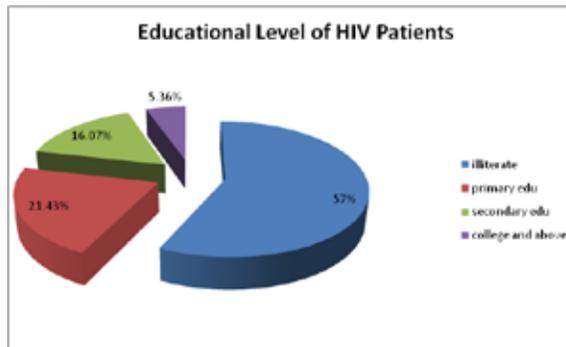


Figure3: Educational level according of HIV/AIDS Male and Female

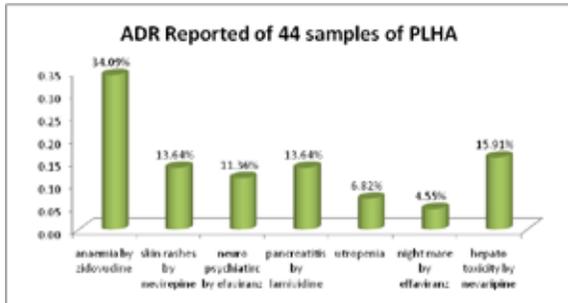
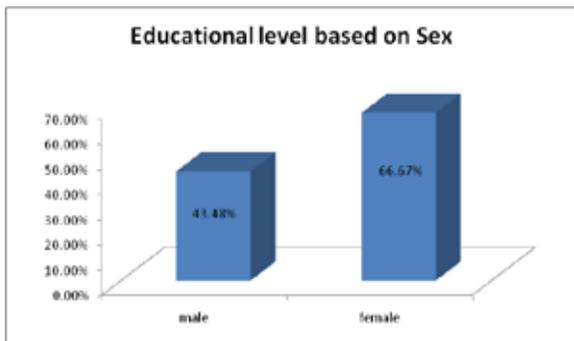


Figure4: Awareness level of PLHA about HIV/AIDS

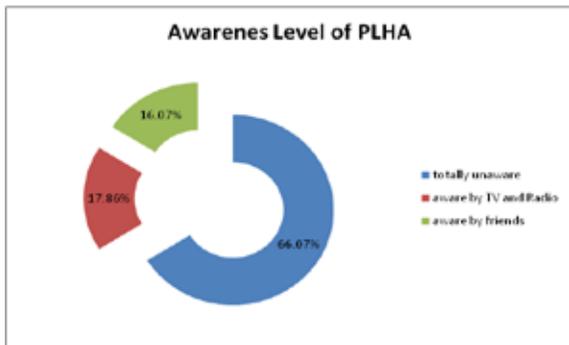


Figure5: ADR Reported of 44 samples of PLHA

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