Prevalence of STI/RTI and HIV Infection in Patients Attending at STI/RTI Clinics in District Government Hospital, Anantapur, A.P.

Nirmala¹, Kommala Penchalaiah², Jahnavi³, Pavani³

ABSTRACT

Introduction: Prevalence of STDs is increasing in the world specially in the developing countries. Objective of the research were a} To study Prevalence of sexually transmitted infections (STI) and reproductive tract infections (RTI) in patients attending STI clinic B} To study prevalence of HIV in these patients C} To study the trends of HIV and RTI/STI.

Material and method: Collected data from hospital since 3 years which consists of symptoms, HIV prevalence, antenatal screening and condom usage etc.

Results: In Anantapur district percentage of patients attending to STI clinics, females 7888 (69.99%) when compared to male patients 3874 (32.0%). According to symptomatology majority of female patients are suffering from vagino-cervical discharge (39%) From the total Percentage of patients attending STI clinics 0.36% of patients are HIV positive.

Conclusion: STI is public health problem in the community as the disease is more of social disease than a medical disease

Keywords: Prevalence, Transgenders, HIV, Sexually transmitted infections.

INTRODUCTION

The prevalence of sexually transmitted infections is seen mostly in developing countries. They are caused mainly by bacterial, viral, protozal etc. The mode of transmission being through sexual contact.

During the past decade there is overwhelming evidence that both ulcerative and non-ulcerative STI promote HIV transmission by augmenting HIV infection and susceptibility. It is currently estimated that India has 2–3 million individuals infected with HIV, and the primary mode of HIV transmission has been via heterosexual contact.

The occurrence of HIV infection and STI's are linked to high risk factors such as unprotected sex. The transmission of STI's together with HIV infection can increase the virulence of STI pathogens. Early diagnosis and treatment at an early stage can be less harmful to the individual. Social and cultural restraints especially among Indian women prevent them to get diagnosed and treated promptly.

The prevalence of HIV infection is 0.91% in India. However the prevalence is different in different regions of the country. The infection is more in the high risk population followed by the bridge population and least in the general population. The high risk individuals include female sex workers, men having sex with men, and injectable drug abusers. The bridge population comprise the truck drivers who travel from place to place and transmit the infection from high risk to general population.

The rise in trend of HIV infection among patients attending the STI clinics has prompted us to analyze the situation. The number of cases of STI 's show an increase in trend despite the availability of diagnostic and treatment facilities. Early diagnosis and treatment can reverse the trend at the individual level and at national level. To tackle the situation the government has taken steps to start the STI clinics at district level. Syndromic management to treat STI's i.e., treatment based on signs and symptoms color coded kits are available to treat the condition. The syndromic management is one of the initiatives under NACO (National AIDS Control Organization).

Given the synergistic transmission of STIs and HIV, the present study was undertaken to determine the prevalence of HIV infection among the patients attending to STI clinics in Government district hospital, Anantapur, Andhra Pradesh. India. Attempt has been made to find out the prevalence of sexually transmitted infections among the patients attending STI/RTI clinics at district hospital, Anantapur.

Objectives of the research were to study Prevalence of sexually transmitted infections (STI) and reproductive tract infections (RTI) in patients attending STI clinic, to study prevalence of HIV in these patients, to study the trends of HIV and RTI/STI and to assess ante-natal screening at STI Clinics.

MATERIAL AND METHODS

The present study has been carried out amongst the patients attending STI clinic of district hospital Anantapur. The present study collected the data from hospitals for a period of three years from January 2013 to October 2015.

- **a.** Inclusion Criteria: All patients between age groups 15 to 49 (reproductive age group), who attended STD clinic were taken and those who were willing to participate after taking informed consent.
- **b. Exclusion criteria**: All those not willing to participate in the study and patients of age groups less than 15 yrs and more than 49 yrs.
- **c. Methodology for data collection:** History of patients was taken like name, age, sex, nature and duration of illness, HIV status poor usage of condoms, lack of knowledge regarding STIs and HIV infection. To detect for HIV status, patient's blood sample was sent for HIV 1 and 2 antibodies by ELISA.

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STATISTICAL ANALYSIS

Data was analyzed using descriptive statistics. Epi Info was used for analysis and presented in the form of tables and figures, wherever necessary. Chisquare test was applied to find any significant association with p valve<0.05 as significant

RESULTS

In the present study percentage of patients attending to STI clinics, females 7888 (69.99%) when compared to male patients 3874 (32.0%). According to symptomatology, majority of female patients are suffering from vagino-cervical discharge (39%) next most presenting symptom is lower abdominal pain(10.3%).

The present study revealed there is decrease in total number of cases from 2013 to 2014. However there is no significant association between HIV status in the respective years.

About 32.1% of patients are from urban area and 28.2% from rural area.

From the total Percentage of patients attending STI clinics 0.36% of patients are HIV positive.HIV prevalence is In the year 2013 is 0.45%, in 2014 is 0.43% and in 2015 is it is 0.15%.

As observed the screening of ante-natal check ups year wise, percentage of patients screened are increasing in 2013 it is 5143, In 2014 it is 7036 and in 2015 it is less because we had data till October of 2015.

From the above figure it is noted that condom usage is increasing from 2013, which indicates the role of STI clinics in the country.

DISCUSSION

In Anantapur district percentage of patients attending to STI clinics, females 7888 (69.99%) when compared to male patients 3874 (32.0%). The difference may be due to ante natal women screening.

According to symptomatology, majority of female patients are suffering from vagino-cervical discharge (39%) next most presenting symptom is lower abdominal pain (10.3%). The present study findings were similar to Mishra et al, Kore et al Nandan D et al studies

Number	Percentage
2793	39
520	7.25
743	10.37
463	6.46
49	0.68
2	0.02
84	1.17
42	0.58
910	12.7
	2793 520 743 463 49 2 84 42

HIV status	2013	2014	Total	
Positive	16	22	38	
Negative	3506	5038	8544	
Total	3522	5060	8582	
Chi square valve-0.018, P valve- 0.8935 (not significant).				

Table-2: Distribution of patients according to HIV prevalence

From the total Percentage of patients attending STI clinics 0.36% of patients are HIV positive. HIV prevalence is In the year 2013 is 0.45%, in 2014 is 0.43% and in 2015 is it is 0.15%. As we look into HIV prevalence it is gradually decreasing denoted by STI clinics performance like increase of condom usage and counselling which are statistically tested. This is also one of the Performance indicator of STI clinics. Overall we can say role of STI/RTI clinics in HIV prevalence is crucial.

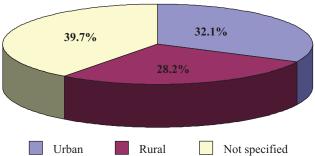


Figure-1: Distribution of patients according to location

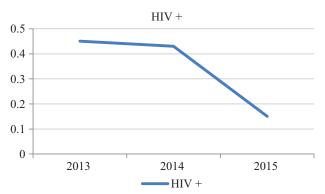


Figure-2: Time trend chart of HIV prevalence.

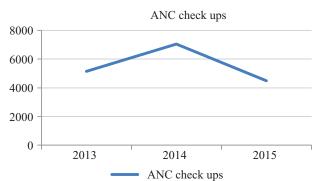


Figure-3: Time trend chart of ANC check-ups.

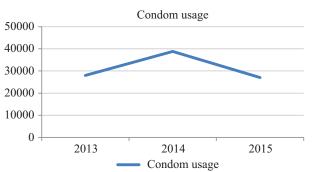


Figure-4: Time trend chart of Condom usage

CONCLUSION

It can be concluded from the above study that STI is public health problem in the community as the disease is more of social disease than a medical disease. Thus STI prevention efforts are critical and should be a high priority for policy makers

RECOMMENDATIONS

- Strengthening of STI Clinics in the country by providing drugs, and laboratory support for diagnosis and treatment.
- 2. Increasing the demand through IEC and NGOs.
- 3. Promote IEC activities for the prevention of transmission of STD and HIV infection.
- 4. Sensitization of the community about the problems related to RTI/STI for early detection and treatment
- 5. Provision of trained lady medical officer in diagnosis and treatment of asymptomatic RTI/STI in MCH clinics.

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