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Research Article

Pattern of sexually transmitted infections and reproductive tract infections in women of reproductive age group attending sexually transmitted infections clinic at a tertiary care hospital

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ABSTRACT

Background: Sexually transmitted infections are public health problems, which significantly increase the risk of HIV transmission. A proper understanding of pattern of STIs in different socio demographical areas is important for proper planning of STI control. Reproductive tract infection is caused by sexually transmitted disease and other routes and they are being recognized as a serious public health problem. RTIs cause suffering to both men and women, but their consequences are far more devastating and widespread among women. To describe socio demographic factors related to reproductive tract infections in females of reproductive age group attending STI clinic at obstetrics and gynecology department, GSVM medical college Kanpur.
Methods: A cross sectional study was carried out at STI clinic of Department of Obstetrics and Gynecology from 1 January 15-31 December 2016. Data on variables like age, socioeconomic status, habitat, marital status was collected and all symptomatic and asymptomatic women were counselled for examination and investigations and were given syndromic treatment.
Results: Out of the 4963 women surveyed, 69% were married, 76% belong to 25-35 age group. Laboratory diagnosed RTI were HIV 1.52%, candidiasis 14.65%, chlamydial infections 27.32%, PID 31.50%, syphilis 0.02%. After syndromic management, prevalence of RTI has significantly reduced
Conclusions: Syndromic treatment and health education can definitely reduce STIs and RTIs.

Keywords: STI, RTI, STI clinic

INTRODUCTION

Reproductive tract infections (RTI) and sexually transmitted disease (STD) represent a major public health problem in developing countries. Sexually transmitted disease constitutes a significant health burden and increases the risk of transmission of HIV. Most common of curable STI are gonorrhoea, syphilis, Chlamydia, trichomoniasis.

RTI are caused by organisms normally present in reproductive tract or introduced from outside during sexual contact or medical procedure. The prevalence of self-reported RTI symptoms among Indian women is found to be 11-18%, while the prevalence of laboratory diagnosed RTI ranges from 40-50%.[1] RTI/STI are significant cause of morbidity and mortality in men and women but the outcome is more devastating in women and children.

RTI can be (a) sexually transmitted (trichomoniasis, gonorrhoea, Chlamydia, herpes genitalis, LGV, syphilis, chancroid), (b) non sexually transmitted (candida, vaginosis) (c) STDs not affecring reproductive organs (hepatitis B/C/D, HIV).

STI in pregnant women are more serious than non-pregnant. Syndromic approach shows best outcome of treating patients of RTI/STI attending OPD. Treatment can began in the first visit itself according to the presenting symptom .Main presenting symptoms are urethral discharge, vaginal discharge, genital ulcer, lower abdominal pain.

Counselling of the patients is done as GATHER, which stands for Greet, Ask, Tell, Help, Explain, and Return. An objective of the study was to describe the socio demographic factors and risk factors related to RTI in women of reproductive age group.

METHODS

This study was conducted with the objective of assessing the occurrence of various RTI among women in reproductive age group of 15-45 yrs attending STI Clinic at Department of Obstetrics and Gynecology of GSVM medical college Kanpur during january2015-december 2015.For clinical and social reasons, pregnant women were not included. Pretested, semi-structured questionnaire was used for data collection. SPSS software was used for statistical analysis.

The syndromes related to women such as vaginal discharge, genital ulcer disease, lower abdominal pain, inguinal bubo were based on syndromic approach as recommended by government of India, ministry of health and family welfare for management of RTI/STI were considered. The case definitions of these syndromes as recommended by National Aids Control Organization [2] were strictly followed for diagnosis and treatment of patients.

Each woman was interviewed in private by trained counsellor about her socio demographic and reproductive history, current and past symptoms affecting the reproductive tract and past sexual behaviour. All symptomatic and asymptomatic women were counselled for examination and investigations and given syndromic treatment. Follow up done to assess impact of syndromic treatment.

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RESULTS

Total OPD registrations in the year 2015 (1 January - 31 December 2015) were 44873. Out of which 4963 women (11.06%) were counseled and screened out of which 41.99% belong to class 4 according to Kuppuswamy scale 3 (lower/upper-lower), majority of women belong to age group 25-35yrs (76%), 73% were urban and 69% were married (Table 1).

Table 1: Sociodemographic profile of the study population (n = 4963).

Socioeconomic status		
	Number	Percentage
Class 1	198	3.9 %
Class 2	545	10.98 %
Class 3	1091	21.98 %
Class 4	2084	41.99 %
Class 5	1935	38.98 %
Age		
15-24 years	645	13 %
25-35years	3772	76 %
36-45 years	1042	11 %
Habitat		
Urban	3623	73 %
Rural	1340	27 %
Marital status		
Married	3423	69 %
Unmarried	1043	21 %

In our study population, majority of women had PID (31.50%) followed by Chlamydia (27.32%) and LGV (15.22%) prevalence of HIV was only 1.52% (Table 2).

Table 2: Types of diseases in RTI (n = 4963).

Disease diagnosed	Study population	Percentage
Syphilis	1	0.020 %
HIV	72	1.52 %
Gonorrhea	595	12.26 %
LGV	746	15.22 %
Candidiasis	862	14.65 %
Chlamydia	1341	27.32 %
PID	1538	31.50 %

In the patients screened in our tertiary centre, majority had vaginal discharge (56.30%) as presenting symptom, followed by lower abdominal pain while genital ulcers were the least common presentation (Figure 1).

DISCUSSION

Sexually transmitted infections (STIs) are more dynamic than other infections prevailing in the community. It is important that such dynamic epidemiological changes in STIs acknowledged and kept track of in vast and populous developing country like India, particularly in this HIV era.

In our study, RTI and STIs prevalence was 11.06% which is almost similar to the prevalence estimated by NACO. In our study, maximum prevalence was found in the age group of 25-35 years, a period of maximum sexual and

reproductive activity. In our study, the high case load has been found based on the syndromic approach and steps should be taken for appropriate management of these cases in view of the high potential for spread of HIV/AIDS. There is also a need to conduct further studies to assess various behavioural and socio demographic factors, predisposing these women to risk of RTI and STI.

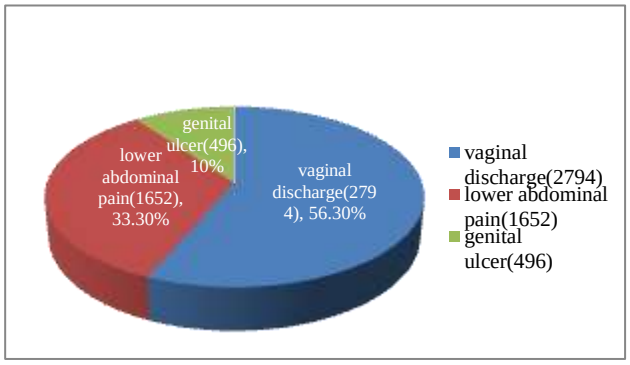

Figure 1: Common presentation of vaginal discharge, lower abdominal pain and genital ulcer.

In our study, multiple sexual partner as a risk factor was found in 15% of the study population, while according to the study in urban Rwanda, it is found to be as high as 33%[4]

Table 3: Risk factors (n = 4963).

Symptoms	Study population	%
Early age of sexual contact	1290	26 %
Multiple sexual partners	744	15 %
Using contraceptive pills as sole method of contraception	595	12 %
Diabetes and other chronic illness	695	14 %
History of venereal diseases	546	11%
IV drug users	NIL	NIL
Alcohol and other drug abuse	NIL	NIL
Unidentified	1091	22 %

In our study, STI prevalence among rural population was 27% and urban 73% while in a study conducted on rural and urban women in Surat showed 52% among rural and 69% among urban.[5]

In our study, 56% of the study population had vaginal discharge as the main presenting symptom while in a study performed in peripheral health set ups in Delhi, only 11.2% of women presented vaginal discharge as the main presenting symptom, 3.7% presented lower abdominal pain as the main symptom.[6]

CONCLUSION

A proper understanding of pattern of STI in a particular region in very important for proper planning of STI control. Prevalence of symptomatic, clinical, and laboratory diagnosed RTIs was 11.06% in our study. This can be further reduced by education, awareness and syndromic treatment of RTI as per NACO guidelines.

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Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

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