

Original Article

A Study on Sexually Transmitted Infections Using Syndromic Approach among Patients Attending Suraksha Clinic at a Tertiary Care Hospital of West Bengal

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Introduction : A proper understanding of different aspects of Sexually Transmitted Infections (STIs) in different regions of a country like India is very essential for STI control.

Objectives : To assess pattern of STIs using Syndromic approach among patients attending at Suraksha Clinic and to find out treatment seeking behaviour among them.

Material and Method : A cross-sectional study was conducted at a Tertiary Care Hospital of West Bengal. This retrospective study was done selecting all patients who attended the Clinic for first time from 1st May, 2020 to 30th April, 2021. Relevant records were reviewed. Descriptive statistics and chi-square test were used.

Observations : In present study Suraksha Clinic attendees were mainly comprised of female (95.8%); while 65.8% and 64.2% of patients were suffering from Lower abdominal pain and Cervicovaginal discharge respectively. Nearly one-third of them (37.9%) were suffering from more than one disease. About one-fourth of patients (28.2%) accessed the STI/RTI/Suraksha Clinic directly. The treatment seeking behaviour was significantly associated with gender and education of patients.

Conclusions : This Tertiary Care Hospital based study highlighted higher prevalence of certain STIs among attendees to Suraksha Clinic as well as lower proportion of male and directly walk-in patient.

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Key words : Suraksha Clinic, Syndromic approach, Treatment seeking behaviour.

Group of illnesses which are caused by infections, transmitted by sexual contact through exchange of semen, vaginal fluid, blood and other fluids, are called Sexually Transmitted Infections (STIs); it also transmitted by direct contact with the affected body areas of people with STIs. No doubt that it leads to huge Psycho-social consequences both at the individual as well as at the community levels¹. It also plays an important role in the acquisition and transmission of HIV². Besides its contribution to the substantial burden of mortality and morbidity, have made it as one of the major public health problems affecting both developing and developed countries^{1,3}.

The pattern of STIs is found usually to vary from region-to-region, especially in large nations like India³. In our country, the assessment and management of patients is still largely based on syndromic approach suggested by the National AIDS Control Organization (NACO)⁴. Thus the information regarding the profile of STIs relies essentially on syndromic diagnosis⁵.

However, West Bengal State AIDS Prevention &

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Editor's Comment :

- The local epidemiology of STIs addressing lower male attendees to Suraksha clinic and higher prevalence of certain STIs, would be better explored through research with help of grass-root Health workers.

Control Society (WBSAP&CS) is going to ensure better access of STI/RTI related services to the people in need by establishing the 'Suraksha Clinics' at all those hospitals which are not covered by STI Services under NACP-IV, as new initiative. Therefore, new STI clinics are going to be established at Sub-division Hospitals & State General Hospitals also. At present, total 46 (fourty six) STI Clinics are currently running by WBSAP&CS in this State⁶.

In order to plan and implement successful targeted interventions and to combat problem of STIs, availability of current baseline information of STIs in the various parts of the country is essential. Literature review shows that information regarding Suraksha Clinic as well as pattern of STIs is scare in West Bengal. So, present study was planned among patients attending at Suraksha Clinic, to generate valuable information regarding the pattern of STIs using syndromic approach and to find out treatment seeking behaviour of them.

MATERIAL AND METHOD

A retrospective study with cross-sectional design

was conducted with help of the relevant records of STI patients at Suraksha Clinic of a Tertiary Care Hospital of West Bengal over the period of past one year from 1st May, 2020 to 30th April, 2021. Complete enumeration technique was followed to select all study subjects who visited the Clinic for first time during study period. Data were collected through careful review process of counsellor's patient register and clinical records of STI patients.

Data were collected after scientific review and ethical approval of the synopsis by Institutional Ethics Committee. Confidentiality and anonymity of patients' information was assured. Patients were categorized mainly as per the NACO guidelines⁷ into Genital Ulcerative Disease-Herptic (GUD H), Genital Ulcerative Disease Nonherptic (GUD NH), Cervicovaginal discharge, Lower abdominal pain and Urethral discharge.

Collected data were checked for completeness and consistency and then the data were entered in the computer on Excel data sheets (Microsoft Excel, 2013). The principles of descriptive statistics were applied to organise and present the data in tables and diagrams. Proportions in relation to different outcome variables were also calculated. Data were analysed using Statistical Package for Social Sciences [IBM Corp. Released 2011. IBM SPSS Statistics for Windows, Version 20.0. Armonk, New York, United States]. Appropriate statistical tests such as Chi-square test were applied.

OBSERVATIONS

Overall 4348 patients visited at Suraksha Clinic of the Tertiary Care Hospital in West Bengal during study duration, while 2132 study subjects visited for the first time. These patients with first time visit at the Suraksha Clinic were included in present study. Among the total patients more than half were (57.7%) were belonging to 25 to 44 years age group, nearly one-twentieth (4.2%) were male. Overall three-fourth of patients (75.8%) were formally educated while 2.9% were illiterate and 21.3% were non-formally educated. Majority of the patients (71.8%) were referred and 28.2% accessed the STI/RTI clinic directly.

Majority of them were suffering from lower abdominal pain (65.8%) followed by Cervicovaginal discharge (64.2%), GUD-Non herptic (3.1%), GUD-Herptic (2.8%) (Table 1). On further analysis, it was noted that 808 (37.9%) patients had more than one STI. Only two study subjects were found to be HIV-positive.

Addressing treatment seeking behaviour among patients whether suraksha clinic was accessed directly or referred, it was explored that

Table 1 — Distribution of study subjects according to certain characteristics (n=2132)

Characteristics	Frequency	Percent
Age (years) :		
<20	435	20.4
20-24	390	18.3
25-44	1231	57.7
>44	76	3.6
Gender :		
Male	90	4.2
Female	2042	95.8
Education :		
Illiterate	63	2.9
Non-formally educated	455	21.3
Class I - Class IV	460	21.6
Class V - Class VIII	1078	50.6
Class IX and above	76	3.6
Direct walk-in/ Referred :		
Direct walk-in	602	28.2
Referred	1530	71.8
Syndromic diagnosis* :		
Cervicovaginal discharge	1369	64.2
GUD-Non herptic	66	3.1
GUD-Herptic	59	2.8
Lower abdominal pain	1402	65.8
Urethral discharge	17	0.8
Other STIs	25	1.2

Note : * Multiple responses

the behaviour was significantly associated with gender (<0.001) and education (<0.001) of patients (Table 2).

DISCUSSION

Present study revealed that major issues among study subjects were Lower abdominal pain (65.8%) and Cervicovaginal discharge (64.2%). Corroborating with present study Cervicovaginal discharge was noted as most common problem among patients at STI-clinic of a Tertiary Care Hospital of Rajasthan (38%)⁴. Sharma S, Tiwari S, Paliwal V, et al noted in a study of patterns of Sexually Transmitted Diseases using a Syndromic approach from a Tertiary Care Hospital of the Northern India that vaginal/cervical discharge (13.4%) was remarkable problem⁵. In addition to this, among females of STI-clinic, Cervicovaginal discharge constituted the maximum proportion of cases at a Tertiary Care

Table 2 — Association between treatment seeking behaviour and certain characteristics of patients

	Direct walk-in [No (%)]	Referred [No (%)]	Chi-square test
Age (years) :			
≤24 years	242 (30.1)	563 (69.9)	2.128 (1) 0.145
>24 years	360 (27.1)	967 (72.9)	
Gender :			
Male	81 (90.0)	9 (10.0)	176.899 (1) <0.001
Female	521 (25.5)	1521 (74.5)	
Education :			
Illiterate and Non-formally educated	110 (21.2)	408 (78.8)	16.550 (1) <0.001
Others	492 (30.5)	1122 (69.5)	

Hospital of the Northern India (61.04%)⁵ and at a Tertiary Care Hospital of Eastern India (29.9%)⁸. However, Genital Ulcer Disease-herpetic was reported as most common problem among patients of STI-clinic at a Tertiary Care Hospital of North India (21.75%)³, at a Tertiary Care Hospital of Eastern India⁸ as well as among male patients at a Rural-based Tertiary Care Center (24.37%)⁹. Again a study on patterns of Sexually Transmitted Diseases using Syndromic approach from a Tertiary Care Hospital of the Northern India explored that the overall most common STI was balanoposthitis (39.62%)⁵.

Lower abdominal pain was noted in very lower proportion than present study (65.8%) at a Tertiary care Hospital of Rajasthan (2.3%)⁴, at a Tertiary Care Hospital of the Northern India (2.66%)⁵. Such variation in observation might be explained by the way of diagnosis (ie, syndromic approach, investigation based), Socio-economic diversity across the country, sampling technique of different studies and comparatively less male participants in present study.

In present study only two study subjects were found to be HIV-positive. On the contrary, newly diagnosed HIV cases were noted 0.4% in such a study at a tertiary care hospital of Rajasthan⁴ as well as HIV prevalence was reported as widely varied proportion (2.48% to 10.59%) in different studies at STI-clinic in tertiary care hospital across the country^{3,5,8,9}.

In present study majority of the patients (71.8%) were referred. On the contrary, Suvirya S, Singh R and Senthamilizh P, et al in a study regarding treatment seeking behaviour of STI clients in a Tertiary Care Centre of North India found that majority of the patients (84.7%) accessed the STI/RTI clinic directly and only 15.3% were referred¹⁰.

Pearson's Chi-square test revealed in present study that treatment seeking behaviour had a significant association with gender and education but not with age of patients. The study regarding treatment seeking behaviour of STI clients in a Tertiary Care Centre of North India showed similar significant association with age, gender and education of patients¹⁰.

CONCLUSIONS

This Tertiary Care Hospital based study highlighted higher prevalence of certain STIs among attendees to Suraksha Clinic, among whom majority were female and referred patient. The treatment seeking behaviour was significantly associated with gender and education of patients. The local epidemiology of STIs would be better understood through research with help of grass-root health workers. Such further exploration regarding STIs may help us to implement STI control programs successfully as well as to address the Global efforts to combat HIV/AIDS.

Recommendations :

Information, Education and Communication (IEC) techniques need to be strengthened to spread awareness about STI-clinics among general population as well as to increase utilization of such clinics at Tertiary Care Centre by them through direct walk-in. Besides proper training of the Health Care Providers, condom promotion, partner notification and partner management, persuasive counselling to attendees may motivate their peer group to avail the Suraksha Clinic facilities provided by the NACO.

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