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ORIGINAL RESEARCH ARTICLE

A Study on behavioral risk factors of patients attending Suraksha clinic of a rural tertiary care hospital, Darjeeling district, West Bengal

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Abstract

Background: Reproductive tract infections/sexual tract infections (RTI/STIs) have a huge economic impact in terms of costs of healthcare, loss of productivity and the long-term sequelae. Sexually transmitted infections (STIs) are a global health problem. Trends of STIs vary from place to place depending on various epidemiological factors prevailing in that respective geographic area. **Aims:** The aim of this study was to find out behaviour risk factors of patients attending Suraksha clinic of North Bengal Medical College & Hospital. **Methods:** The present study was a Hospital based descriptive epidemiological study with cross sectional design conducted in the Suraksha clinic of North Bengal Medical College & Hospital, Darjeeling, West Bengal, India. All patients reported to the RTI/STI clinic, Suraksha Clinic of North Bengal Medical College & Hospital were included in the study from April 2019 to May 2019. Template was generated in MS excel sheet and analysis was done on SPSS software. **Results:** Maximum respondents belonged to age group of >35 years 32 (41%), followed by 25-35 years 27 (34.6%). Maximum respondents reside in rural areas 56 (71.8%), majority of respondents having the education of Secondary level 29 (37.2 %), followed by Higher secondary 27 (34.6%). Majority 57 (73.1%) belong to class V of socio economic status and 15 (19.2%) belong to class IV socio economic status. Maximum participants were female 69 (88.5%). Maximum respondents were having duration of suffering ≥2 years 26 (33.3%). Maximum respondents were having symptom of white discharge with lower abdominal pain 28 (35.9%) followed by white discharge 21 (26.9%), lower abdominal pain 9 (11.5%). Only 2 (2.9%) were having history of drug abuse. OPC was used by 10 (12.8%) and condom was used by 6 (7.7%). Maximum respondents were treated with kit 2 i.e. 39 (50%), 21 (26.9%) were treated with kit 6. **Conclusions:** There is a need for focused community-based interventions targeting the young, urban, lower-middle-class population to reduce the burden of STIs.

Keywords: Human immunodeficiency virus, National AIDS Control Organization, RTI/STIs, Suraksha Clinic

Introduction

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Sexually transmitted infections (STIs) are infections that spread primarily through person-to-person sexual contact. Sexually transmitted infections (STIs) are a defined as a constellation of infections and syndromes that are epidemiologically heterogeneous, but all of which are almost always or at least often transmitted sexually.[1] There are more than 30 different sexually transmissible bacteria, viruses and parasites.[2] The most common conditions they cause are gonorrhoea, chlamydial infection, syphilis, trichomoniasis, chancroid, genital herpes, genital warts, human immunodeficiency virus (HIV) infection and hepatitis B infection. Several STIs, particularly HIV and syphilis, can also be transmitted from mother to child during pregnancy and childbirth, and through blood products and tissue transfer. STIs are diseases with tremendous health and economic consequences. STIs are of public health concern not only because of their high prevalence worldwide, but also because of their potential to cause serious and permanent complications in infected people who are not treated in a timely and effective way.[3] These complications and sequelae include infertility, fetal wastage, ectopic pregnancy, anogenital cancer and premature death, as well as neonatal and infant infections. In addition STIs are known to facilitate human immunodeficiency virus infection/acquired immunodeficiency syndrome (HIV/AIDS).

According to World Health Organization (WHO) more than 1 million people acquire a sexually transmitted infection (STI) every day globally.[4] WHO estimates that 500 million new cases of one of four curable STIs (chlamydia, gonorrhoea, syphilis and trichomoniasis) occur each year worldwide.[5] 75-85% of them occur in developing countries. STIs/RTIs (reproductive tract infections) are an important public health problem in India.[6] This amounts to occurrence of about 30-35 million episodes of STI/RTI every year in the country.[7] A large proportion of new STIs occur amongst adolescents and young adults who are not be aware that they are infected, which can have a negative impact upon their future sexual and reproductive health. Social stigma, cultural factors and non-priority to reproductive health in the family and non-involvement of the spouse are the most common factors affecting the compliance for treatment. Keeping this in mind the present study was envisaged with the following objective.

a) To find out the socio-demographic profile of patients attending Suraksha clinic of North Bengal Medical College & Hospital.
b) To determine the prevalence and identify behavior risk factors associated with STI in the study population.

Materials and Methods:

Study design: It was a Hospital based descriptive epidemiological study with cross sectional design**.**

Study Area: Study conducted at Suraksha clinic of North Bengal Medical College & Hospital, Darjeeling, West Bengal, India.

Study Period: Study duration was from April 2019- May 2019

Study population: All patients reported to the RTI/STI clinic, Suraksha Clinic of North Bengal Medical College & Hospital from April 2019 to May 2019

Inclusion criteria: Inclusion criteria: All women (15-49 years) attended Suraksha clinic and those who gave the consent to participate in the study.

Exclusion Criteria: Seriously ill patients and patients who will not give any consent.

Sample Size and Sampling Technique: A sampling frame was prepared beforehand consisting of eligible subjects enrolled in Sukasha Clinic of North Bengal Medical College Hospital, Darjeeling from April 2019- May 2019.Complete enumeration technique applied to select the required study subjects from this sampling frame

Study tools:

I. Questionnaires : Pre-designed, pre-tested, semi-structured questionnaire consisting of Socio demographic characteristics and behavior risk factor related variables
II. Relevant Medical Record/ Prescriptions/ Referral Cards

Study Technique : Interview of the patients and record review

Operational definition of STIs/RTIs : Reproductive tract infections (RTIs): Reproductive Tract Infections refer to any infection of the reproductive or genital tract irrespective of whether it is sexually transmitted or not e.g., bacterial vaginosis, Chlamydia trachomatis, Neisseria gonorrhoea, vaginal discharge, lower abdominal pain, ulcers

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in genital organs, burning micturition, Hepatitis B, HIV/AIDS, HSV2, Trichomonas vaginalis. Sexually transmitted infections (STIs): The RTIs which are transmitted through sexual contact

Study Variables/Parameters:

Variables for specific objective 1:

Socio demographic characteristics : Age, Gender, Marital status, Educational status. Family composition, type of family. Per capita income, Socio economic status and occupation.

Variables for specific objective 2:

Behavioural risk factors : IV drug abuse, multiple sexual partner, contraceptive use, duration of symptoms, treatment seeking behaviour and provision of treatment kit.

Methods of data collection: : Data collection was started after approval of the synopsis by Institutional Ethics Committee and obtaining permission from the respective authorities. Staff of Suraksha clinic was priory sensitized about the purpose and benefits of the study and their co-operation was sought for. On reaching Suraksha Clinic, the study subjects were explained about the purpose of the study. They assured about the confidentiality and anonymity of the information. After taking the informed consent, the study subject was interviewed with a predesigned, pretested interview schedule. Clinical examinations were not done. If the participant became distressed during interview due to any reason or wanted to discontinue the study midway due to any reason, he/she could withdraw from the study anytime.

Plan for data analysis: Collected data was cleaned, checked for consistency and completeness and entered in Microsoft Excel data sheet. Data was organized and presented using the principles of descriptive statistics.

Ethical issues: Protocol was submitted to the Institutional Ethical Committee (IEC) of North Bengal Medical College. The study was initiated after obtaining IEC clearance. The study participants were explained about the nature and purpose of the study and their cooperation & support was sought for. The questionnaires briefly explained about the study participant. Informed consent obtained from study participant. The anonymity and confidentiality of the information maintained throughout. Data used for research purpose only.

Expected outcome: This study was a make an attempt to find out knowledge gap regarding STIs & thus it offers opportunity for targeted education about reproductive health.

Results

The present study was a Hospital based descriptive epidemiological study with cross sectional design conducted in the Suraksha clinic of North Bengal Medical College & Hospital, Darjeeling, West Bengal, India. The study was conducted after ethical clearance. All patients reported to the RTI/STI clinic, Suraksha Clinic of North Bengal Medical College & Hospital were included in the study from April 2019 to May 2019. In all the cases, thorough history taking was done after taking proper consent, data thus obtained was noted in the proforma. Template was generated in MS excel sheet and analysis was done on SPSS software.

Table 1: Socio demographic profile of patients (n=78)

Socio demographic profile		Frequency	Percentage (%)
Age (Years)	< 25	19	24.4
	25 - 35	27	34.6
	> 35	32	41.0
	Total	78	100
Marital status	Unmarried	13	16.7
	Married	62	79.5
	Widow	3	3.8
Residence	Rural	56	71.8
	Urban	22	28.2
Literacy status	Illiterate	14	17.9
	Primary	4	5.1

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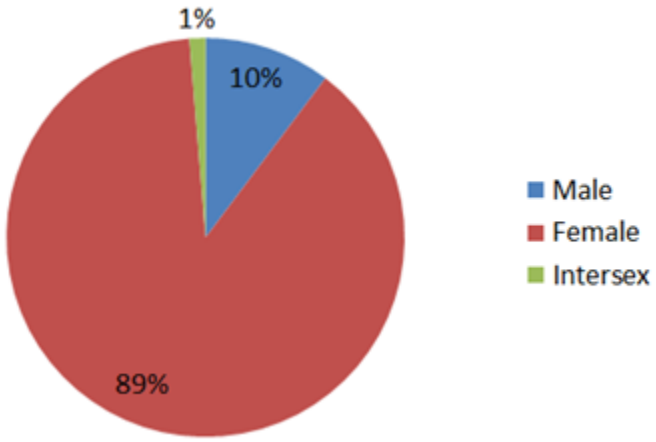
	Secondary	29	37.2
	Higher secondary	27	34.6
	Graduate and above	4	5.1
Occupation	Housewife	36	46.2
	Student	8	10.3
	Unskilled worker	16	20.6
	Service	10	12.8
	Business	8	10.3
	Unemployed	10	12.8
Type of family	Joint	26	33.3
	Nuclear	52	66.7
Socio-economic status	II	1	1.3
	III	5	6.4
	IV	15	19.2
	V	57	73.1

Maximum respondents belonged to age group of >35 years 32 (41%), followed by 25-35 years 27 (34.6%) and <25 years 19 (24.4%). About 62 (79.5%) respondents were married. Maximum respondents reside in rural areas 56 (71.8%) and in urban areas were 22 (28.2%). Majority of respondents having the education of Secondary level 29 (37.2 %), followed by Higher secondary 27 (34.6%) and Illiterate were 14 (17.9%). Occupation of majority of the respondents were Housewife 36 (46.2%), followed by Unskilled worker 16 (20.6%) and Service 10 (12.8%). Maximum respondents belonged to nuclear family 52 (66.7%) and rest 26 (33.3%) were residing with joint family. Majority 57 (73.1%) belong to class V of socio economic status and 15 (19.2%) belong to class IV socio economic status. (Table 1)

Fig 1 : Pie diagram showing gender distribution among the patients



In the present study maximum participants were female 69 (88.5%) and male were 8 (10.3). (Figure 1)

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Table 2: Distribution of study population according to duration of suffering (n=78)

Duration of suffering	Frequency	Percentage (%)
<1 month	07	9.0
1-6 months	22	28.2
6months- 1 year	14	17.9
1-2 year(s)	09	11.5
>_2years	26	33.3
Total	78	100.0

Maximum respondents were having duration of suffering ≥2 years 26 (33.3%), 1-6 months 22 (28.2%), 6 months to 1 year suffering were 14 (17.9%), 1-2 years 9 (11.5%) and <1 month were 7 (9%). (Table 2)

Table 3 : Distribution of study population according to distribution of symptoms (n=78)

Symptoms	Frequency	Percentage(%)
White discharge	21	26.9
Lower abdominal pain	9	11.5
Genital ulcer	7	9.0
Anorectal discharge	4	5.1
White discharge+Lower abdominal pain	28	35.9
White discharge+Genital ulcer	2	2.6
White discharge+Itching	7	9.0
Total	78	100

Maximum respondents were having symptom of white discharge with lower abdominal pain 28 (35.9%) followed by white discharge 21 (26.9%), lower abdominal pain 9 (11.5%), genital ulcer and white discharge with itching 7 (9%) each, anorectal discharge 4 (5.1%) and white discharge with genital ulcer 2 (2.6%). (Table 3)

Table 4 : Distribution of study population according to history of drug abuse, contraceptive use, knowledge of STD, referral, partner notification, counselling of partner and number of condoms provided. (n=78)

		Frequency	Percentage (%)
History of drug abuse	Yes	2	2.9
	No	76	97.4
Contraceptive use	Condom	6	7.7
	OCP	10	12.8
	Other method	21	27.0
	No method	41	53.8
Knowledge of STD	Yes	29	37.2
	No	49	62.8

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Referral	Gynaecology and Obstetrics	60	77.0
	Dermatology	18	23.0
Partner notification	Yes	56	71.8
	No	22	28.2
Counselling of partner	Yes	19	24.4
	No	59	75.6
Number of condoms provided	2	10	12.8
	10	11	14.1
	Nil	57	73.1

Only 2 (2.9%) were having history of drug abuse. OPC was used by 10 (12.8%) and condom was used by 6 (7.7%), other method were used by 21 (27%) and no method was used by 41 (53.8%). Only 29 (37.2%) were having knowledge of STD. majority 60 (77%) were referred by Gynaecology and Obstetrics and 18 (23%) were referred by dermatology. Partner notification was done of 56 (71.8%), counselling of partner was done for 19 (24.4%). Maximum 11 (14.1%) respondents were provided 10 condoms, 10 (12.8%) were provided 2 condoms and no condoms were provided to 57 (73.1%) respondents. (Table 4)

Table 5: History of previous health seeking place

Previous treatment	Number	Percentage(%)
NBMC	16	20.5
Other public centre	20	25.6
Private clinic	12	15.4
Ayurvedic	4	5.1
No treatment	26	33.4
Total	78	100

Previous health seeking centre of the 16 (20.5%) respondents were North Bengal Medical College, 12 (15.4%) were previously treated in private clinic, 20 (25.6%) were got treatment in other public centres and 26 (33.4%0 were not went for any treatment. (Table 5)

Table 6: Type of kit provided to the patients

Type of kit	Frequency	Percentage(%)
Kit 1	3	3.8
Kit 2	39	50.0
Kit 3	0	0.0
Kit 4	0	0.0
Kit 5	0	0.0
Kit 6	21	26.9
Kit 7	0	0.0
No Kit	15	19.2
Total	78	100.0

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Maximum respondents were treated with kit 2 i.e. 39 (50%), 21 (26.9%) were treated with kit 6, 3 (3.8%) were treated with kit 1. (Table 6)

Discussion

In the present study maximum respondents belonged to age group of >35 years 32 (41%), followed by 25-35 years 27 (34.6%) and <25 years 19 (24.4%). About 62 (79.5%) respondents were married. Maximum respondents reside in rural areas 56 (71.8%) and in urban areas were 22 (28.2%). Majority of respondents having the education of Secondary level 29 (37.2 %), followed by Higher secondary 27 (34.6%) and Illiterate were 14 (17.9%). Occupation of majority of the respondents were Housewife 36 (46.2%), followed by Unskilled worker 16 (20.6%) and Service 10 (12.8%). Maximum respondents belonged to nuclear family 52 (66.7%) and rest 26 (33.3%) were residing with joint family. Majority 57 (73.1%) belong to class V of socio economic status and 15 (19.2%) belong to class IV socio economic status. Maximum participants were female 69 (88.5%) and male were 8 (10.3)

This clustering of patients in the above age group is mainly due to the high sexual activity at this age being behaviorally more vulnerable to STI acquisition, as they generally have a higher number of sexual partners and more concurrent partnerships and change in partners more often than older age groups.[8-12] Majority of the patients were female and married, which is consistent with the studies.[13,14]

The majority of respondents were from rural background (71.8%) and urban background were (28.2%). This agrees with the results of other hospital- or clinic-based studies.[15-17] Majority 36 (42.2%) of the attendees were housewives, as seen in other studies.[18,19]

There is varying evidence on whether educational status is a risk factor for RTI/STIs. In a case-control study of risk factors for STIs, Raj et al. (2017)[20] reported a higher level of education among controls compared to cases. Several others[21-23] also consider illiteracy (lower educational status) to be a risk factor for RTI/STIs. In contrast, many studies[19,24,25] found that most patients of RTI/STIs have received at least some level of formal education, leading to the conclusion that formal education has little effect on sexual behaviour.

In the present study maximum respondents were having duration of suffering ≥2 years 26 (33.3%), 1-6 months 22 (28.2%), 6 months to 1 year suffering were 14 (17.9%), 1-2 years 9 (11.5%) and <1 month were 7 (9%).

In our study maximum respondents were having symptom of white discharge with lower abdominal pain 28 (35.9%) followed by white discharge 21 (26.9%), lower abdominal pain 9 (11.5%), genital ulcer and white discharge with itching 7 (9%) each, anorectal discharge 4 (5.1%) and white discharge with genital ulcer 2 (2.6%).

Only 2 (2.9%) were having history of drug abuse. OPC was used by 10 (12.8%) and condom was used by 6 (7.7%), other method were used by 21 (27%) and no method was used by 41 (53.8%). In present study only 29 (37.2%) were having knowledge of STD. majority 60 (77%) were referred by Gynaecology and Obstetrics and 18 (23%) were referred by dermatology. Partner notification was done of 56 (71.8%), counselling of partner was done for 19 (24.4%). Maximum 11 (14.1%) respondents were provided 10 condoms, 10 (12.8%) were provided 2 condoms and no condoms were provided to 57 (73.1%) respondents. Previous health seeking centre of the 16 (20.5%) respondents were North Bengal Medical College, 12 (15.4%) were previously treated in private clinic, 20 (25.6%) were got treatment in other public centres and 26 (33.4%0 were not went for any treatment. Maximum respondents were treated with kit 2 i.e. 39 (50%), 21 (26.9%) were treated with kit 6, 3 (3.8%) were treated with kit 1.

Summary

Sexually transmitted infections had become a major public health problem in India. Mother to child transmission of STIs can cause stillbirths, abortion, neonatal deaths, low-birth weight babies, sepsis, pneumonia congenital deformities. Majority of the population had not crossed the boundary of secondary education. About three fourth of population were above 25 years.

Female attendees were more than males. More than two thirds of people belong to the class V of socio-economic status according to B.G. Prasad scale. Two thirds of the study populations were from nuclear family. White vaginal discharge with lower abdominal pain was the commonest symptom among patients.

Conclusions

A descriptive hospital based study among the Suraksha clinic attendees during April 2019- May revealed the following findings. Female participants were more than males. Most of the participants were married and belong to

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class V socio economic status and came from rural area. White vaginal discharge and lower abdominal pain were the most common presenting symptoms. Majority of them were referred from gynaecology and obstetrics department. Specific kit for treatment and condoms were provided to most of them. Most of the partners of the participants were notified.

Limitations:

Time- Most of the patients of the STI clinic visited the noon hours which coincided with our busy teaching schedule. Problem in probing- As the topic dealt with a sensitive issue ,so it was difficult to probe. Poor infrastructural setup in the STI/RTI clinic hindered the interview

Recommendation:

Infrastructure : Space, confidentiality and cleanliness should be improved. Human resource: There was no male counsellor to attend the male patients which is needed. Medical officer and concerned sister should also be present. Prevention programme: Awareness generation programme for the common people regarding awareness, knowledge, protection and prevention of RTI/STIs should be organized. Partner counseling and notification should be done for all patients

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Conflict of interest: None declared

Ethical approval: The study was approved by the institutional ethics committee

References :

1. Ministry of health and family welfare government of India. National guidelines on prevention, management and control of reproductive tract infections including sexually transmitted infections. Available at: http://www.nacoonline. (Last Accessed: 21st April 2023)
2. Park K. Park's Textbook of Preventive and Social medicine. 23rd ed. Jabalpur: M/s Banarsidas Bhanot publishers; 2013. p. 331-40
3. Sabita Meher, Sujata R. Lavangare, Ratnendra R. Shinde (2016) 'Study of socio-demographic profile and morbidity pattern of women of reproductive age group attending sexually transmitted infections clinic at an urban health centre in Mumbai, Maharashtra, India', International Journal of Community Medicine and Public Health 2016 Oct;3(10):2878-2883
4. World Health Organization (WHO) 2001, Global prevalence and Incidence of Selected Curable Sexually Transmitted Infections: Overview and Estimates, Geneva: WHO, 2001
5. Jindal N, Aggarwal A, Gill P, Sabharwal B, Sheevani BB. Community-based study of reproductive tract infections, including sexually transmitted infections, among the rural population of Punjab, India. Indian J Community Medicine. 2009;34(4):359-61
6. Das D. Prevalence of RTI/STI among Adolescent Married Women in India. Indian J Maternal Child Health. 2014;(2):9-20
7. Choudhry S, Ramachandran VG, Das S, Bhattacharya SN, Mogha NS. Characterization of patients with multiple sexually transmitted infections: A hospital based survey, Indian J sex Transm Dis, 31(2):87-91, 2010.
8. Murugesh SB, Reddy S, Raghunath S. Pattern of sexually transmitted diseases at Davangere. Indian J Sex Trans Dis 2004;25:9-12.
9. Devi SA, Vetrichevvel TP, Pise GA, Thappa DM. Pattern of sexually transmitted infections in a tertiary care centre at Puducherry. Indian J Dermatol 2009;54:347-9.
10. Saikia L, Nath R, Deuori T, Mahanta J. Sexually transmitted diseases in Assam: An experience in a tertiary care referral hospital. Indian J Dermatol Venereol Leprol 2009;75:329.
11. Jain VK, Dayal S, Aggarwal K, Jain S. Changing trends of sexually transmitted diseases at Rohtak. Indian J Sex Transm Dis 2008;29:23-5.
12. Kumarasamy N, Balakrishnan P, Venkatesh KK, Srikrishnan AK Cecelia AJ, Thamburaj E, et al.

ISSN:0975-3583,0976-2833 VOL14,ISSUE05,2023

Prevalence and incidence of sexually transmitted infections among South Indians at increased risk of HIV infection. AIDS Patient Care STDS 2008;22:677-82.

13. Chopra A, Dhaliwal RS, Chopra D. Pattern of changing trend of STDs at Patiala. Indian J Sex Transm Dis 1999;20:22-5.
14. Parmar J, Raval RC, Bilimoria FE. Clinic profile of STDs at Civil Hospital, Ahmedabad. Indian J Sex Transm Dis 2001;22:14-6.
15. Das A, Ghosh P, Ghosh I, Bhattacharya R, Azad Sardar AK, Goswami S, et al. Usefulness and utility of NACO regime in the management of sexually transmitted infections: A pilot study. Indian J Dermatol 2017;62:630-4
16. Agarwal S, Gupta R, Pandey K, Agarwal A, Kirti N, Yadav N. 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. IJRCOG 2016;5:2701–3.
17. Thakur A, Malhotra S, Malhotra S. Clinico-epidemiological profile of 1000 patients attending STI/RTI clinic. 2013;9:1–9.
18. Bhilwar M, Lal P, Sharma N, Bhalla P, Kumar A. Prevalence of reproductive tract infections and their determinants in married women residing in an urban slum of North-East Delhi, India. J Nat Sci Biol Med 2015;6(Suppl 1):S29-34.
19. Saini N, Meherda A, Kothiwala R. Study of pattern and trend of sexually transmitted infections at tertiary care hospital in central Rajasthan. Indian J Clin Pract 2014;25. Available from: http://medind.nic.in/iaa/t14/i11/iaat14i11p581. pd
20. Raj R, Gupta V, Pathak M, Sreenivas V, Sood S, Singh S, et al. What puts them at risk? A cross-sectional case-control survey of demographic profile and sexual behavior of patients with sexually transmitted infections at a tertiary care center in North India. Indian J Sex Transm Dis AIDS 2017;38:22-36.
21. Desai GS. Patel R. Incidence of reproductive tract infections and sexually transmitted diseases in India: Levels and differentials. J Fam Welf 2011;57:48–5. Available from: http://medind.nic.in/jah/t11/i2/jaht11i2p48.pdf.
22. Nayyar C, Chander R, Gupta P, Sherwal BL. Evaluation of risk factors in patients attending STI clinic in a tertiary care hospital in North India. Indian J Sex Transm Dis AIDS 2015;36:48-52.
23. Verma A, Kumar Meena J, Banerjee B. A comparative study of prevalence of RTI/STI symptoms and treatment seeking behaviour among the married women in Urban and Rural Areas of Delhi. Int J Reprod Med 2015;2015:563031.
24. Aggarwal P, Kandpal S, Negi K, Gupta P. Health seeking behaviour for RTIs/STIs : Study of a rural community in Dehradun. Heal Popul Perspect Issues 2009;32:66–72.
25. Thomas PP, Yadav J, Kant R, Ambrosino E, Srivastava S, Batra G, et al. Sexually transmitted infections and behavioral determinants of sexual and reproductive health in the Allahabad District (India) based on data from the ChlamIndia study. Microorganisms 2019;7:557