

Original Research Article

Self-reported reproductive tract infection/ sexually transmitted infection and health care seeking behavior among the women living in a slum of Kolkata

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Abstract

Background: Sexually Transmitted Infection (STI) is a public health problem of significance in most parts of the world. It adversely affects reproductive health in both sexes but its impact on women's reproductive health is far devastating.

Objectives: The study was conducted to know the prevalence of self-reported STI among the currently married women living in the slum area of Kolkata, the factors related with it and also to study their care seeking behavior following the infection.

Materials and methods: This community based descriptive study was conducted by interviewing currently married women residing in a slum of Kolkata. Symptoms of STI and healthcare seeking behavior following the infection were enquired. Symptoms were grouped into complexes and presumptive diagnosis was made.

Results: The prevalence of symptoms suggestive of STIs in the study population was found to be 47.8%. The most common symptoms reported by the sufferers were low backache (29.6%), burning micturition (25.2 %), and genital itching (23.5%). All symptoms were more common in the women living in the joint family, having one or more history of abortion. Symptoms of urinary tract infection was more in the age group of >30 years and those with >10 years of marriage. Whereas, vaginitis was more common in <30 years (p= 0.01). Only 49.0% of the sufferers consulted a health facility for

treatment and most of them (62.9%) availed health service from the urban health training centre of the area.

Conclusion: The present study found high prevalence of self-perceived reproductive morbidity among women in the slum setting. In the study there was no scope of laboratory investigation and was based on recall of the event in preceding three months.

Key words

Reproductive age group, RTI, Self-reported, Slum, STI.

Introduction

Sexually Transmitted Diseases (STDs) are a group of communicable diseases that are transmitted predominantly by sexual contact and caused by a wide range of bacterial, viral, protozoal and fungal agents [1]. Globally more than one million people acquire a STD everyday [1]. It accounts for 1.9% of the burden of disease in disability adjusted life years in females around the world, the magnitude being higher in South-East Asia and Africa [2]. India has a high incidence of STDs with a reported number of about 33,570 cases of syphilis and 97,180 cases of gonorrhoea in the year 2013 [1].

With the HIV/AIDS epidemic, there has been a resurgence of concern about Sexually Transmitted Diseases. In recent years, the focus has been shifted from Sexually Transmitted Diseases to Reproductive Tract Infections/Sexually Transmitted Infections (RTIs/STIs). Reproductive tract infection (RTI) is a broad term that includes sexually transmitted as well as other infections. Most of the infections of reproductive tract are often remains asymptomatic and therefore neglected. Sexually transmitted infections (STIs) are also stigmatized in the society. For these reasons, RTI/STI was mainly addressed in the setting of STD and gynecology clinics. In the last decade, considerable work has also been done to determine the load of gynecological morbidity in cases with STI/RTI [3-5], but their profiles in the general population remained elusive [6]. The STD Control Program has been started in India since 1946 but the program got a new challenge with the launch of the National AIDS Control Program in 1987. STI control was one of the

main strategies in prevention and control of HIV/AIDS. In the recent years, apart from strengthening of STD clinics, efforts were also made to integrate STD case management in the primary health care delivery system through effective and efficient “syndromic management.” under the umbrella of National Health Mission (NHM) [7]. In India although, there has been a well-defined system of primary health care delivery in the rural areas but the urban set-up is characterized by a multiplicity of agencies with wide variation in availability of services. Specially, the slums, with dense, heterogeneous and high risk population, are the worst part in most of the cities. On this background, the present study was undertaken.

Objectives

- To know the prevalence of RTI/STI by symptom complexes in currently married women of reproductive age group living in a slum of Kolkata;
- To assess the factors associated with RTI/STI; and
- To study their health care seeking behavior in relation to RTI/STI.

Materials and methods

The present study was community based descriptive study conducted in a river-side slum area of North Kolkata. The area is spread over 0.3 square km consisting of approximately 2000 people. The study was carried out from December 2014 to April 2015. The study populations were all currently married women in the reproductive age group (15-45 years) living in that slum for more than 6 months. In a study done by Miteshkumar N. Bhandari and

Srinivasan Kannan in the slums of Rajkot city [8] the prevalence of any symptoms of RTI/STI was around 57%. Taking this as prevalence “P” and after finite population correction the final sample size became 115. Those women who were unmarried, divorced, widowed or separated and those who did not give consent were excluded from the study. The study subjects were interviewed, using a semi-structured schedule. They were enquired about any symptoms of RTI/STI experienced in last 3 months. The symptoms reported by the women were grouped into ‘symptom complexes’ and a presumptive diagnosis was made. If vaginal discharge with or without smell and/or genital itching and/or redness of genitalia were reported, then a presumptive diagnosis of vaginitis was made. Low backache, lower abdominal pain with fever or vaginal discharge and deep pain during sex were taken to indicate pelvic inflammatory disease. Burning micturition and painful swelling on the groin was taken to be indicative of urinary tract infection and inguinal bubo respectively. Data thus collected were coded and analyzed, using SPSS version 20. Chi-square and Fisher’s Exact test were also applied wherever applicable.

Results

Out of a total of 115 respondents, 51(44.3 %) were between 20 and 30 years of age and married for less than 10 years. Duration of married life of the study subjects ranged from 1 to 35 years. The total number of pregnancies of the women varies from 0 to 6. Ten respondents (8.7%) were nulliparous while 59.1% had 1-3 children. At the time of the data collection, 9 (7.8 %) women were found to be pregnant. 63 (54.8%) respondents had past history of one or more abortion (**Table - 1**).

55 respondents (47.8%) reported any problems in the past three months. The problems reported most frequently were low backache (29.6%), burning micturition (25.2 %) and genital itching (23.5%). Other self-reported problems were vaginal discharge (reported as Wetting/staining of underclothes/ with or without unpleasant

smell), deep pain during sex, lower abdominal pain with fever or vaginal discharge, redness of genitalia etc. there were no complaint of ulcers on the genitalia (**Table – 2**). When the symptoms were grouped as ‘symptom complexes’ to derive a presumptive diagnosis, it was seen that 31.3% of the respondents were suffering from pelvic inflammatory disease followed by urinary tract infection (25.2%) and vaginitis (23.5%) (**Table – 3**).

Table - 1: Characteristics of the study participants (n=115).

Characteristic	Mean (Standard Deviation)
Age (years)	29.3 (±7.5)
Years of schooling	3.1 (±2.8)
Family income (Rs.)	4347.42 (±2366.67)
Duration of marriage (years)	10.8 (±7.7)
Pregnancies per woman	2.6 (±1.9)
Live births per woman	2.0 (±1.7)

Table - 2: Self-reported reproductive health problems (N=115)*.

Problem	No	%
Low backache	34	29.6
Burning micturition	29	25.2
Genital itching	27	23.5
Vaginal discharge	20	17.4
Deep pain during sex	18	15.6
Lower abdominal pain with fever or vaginal discharge	12	10.4
Redness of genitalia	4	3.5
Painful swelling on the groin	1	0.9
Ulcers on the genitalia	0	0
Any problem	55	47.8

*multiple responses are there

All symptoms were more common in the women living in joint family. Symptoms of urinary tract infection was more in the age group of >30 years and those with >10 years of marriage whereas vaginitis was more common in the lower age group (<30 years). The association between age and vaginitis was statistically significant, ($\chi^2 = 7.06$, $p = 0.01$). All symptom complexes were

more prevalent in women having one or more history of abortion, but the association was not statistically significant (**Table – 4**).

Table – 3: Symptom complexes in the study subjects (n=115)*.

Problem	No	%
Pelvic Inflammatory Disease	36	31.3
Urinary Tract Infection	29	25.2
Vaginitis	27	23.5
Inguinal Bubo	1	0.9
Genital Ulcer	0	0.0

* Multiple responses are there

Out of the 55 women who experienced one or more reproductive health problems only 27 (49.0%) consulted a health facility for treatment. The respondent having painful swelling of groin visited health facility. Other than that, participants with symptoms of urinary tract infection and pelvic inflammatory disease sought treatment at health facility in 55.2% and 30.5% cases, respectively (**Figure – 1**). 17 respondents (62.9%) went to the Urban health training centre (UHTC) of a tertiary care hospital serving the slum. 8 women (29.6%) visited Tertiary care hospital and 2 (7.4%) visited local private practitioners.

Table – 4: Reproductive Profile and Self-reported reproductive morbidity of the respondents (N=115).

Reproductive Profile	Urinary Tract Infection (n ₁ = 29) No. (%)	Vaginitis (n ₂ =27) No. (%)	Pelvic inflammatory Disease (n ₃ = 36) No. (%)
Types of family			
• Joint	20 (69.0)	21(77.8)	26 (72.2)
• nuclear	9 (31.0)	6 (22.2)	10 (27.8)
Duration of marriage			
• <10 years	13 (44.8)	18 (66.7)	22 (61.1)
• ≥10 years	16 (55.2)	9 (33.3)	14 (38.9)
Age (years)			
• Up to 30	10 (34.5)	18 (66.7) *	15 (41.7)
• >30	19 (65.5)	9 (33.3)	21 (58.3)
No. of pregnancies			
• Up to 3	21(72.4)	16 (59.3)	19 (52.8)
• >3	8 (27.6)	11 (40.7)	17 (47.2)
H/O abortion			
• Yes	16 (55.2)	17 (63.0)	20 (55.6)
• No	13 (44.8)	10 (27.0)	16 (44.4)

*statistically significant

Discussion

The present study found that the prevalence of self-reported reproductive tract infection among currently married women living in a slum of Kolkata to be 47.8% which is higher than the national figure [9]. There are some community based studies from urban and rural areas in the Indian context found the prevalence of self-reported morbidity varying from 55 to 75% [3-5]. On the other hand some other studies

conducted in the slums of different cities in India reported its prevalence to be 27% in urban women of Agra district of Uttar Pradesh [10], 35.6% in women living in urban slums of Tirupati, Andhra Pradesh [11], 32% in urban women in Sundergarh district of Odisha [12] and 27.8% in Punjab [13]. The differences could be attributed to the socio-demographic characteristics like education and standard of living because those studies had been conducted

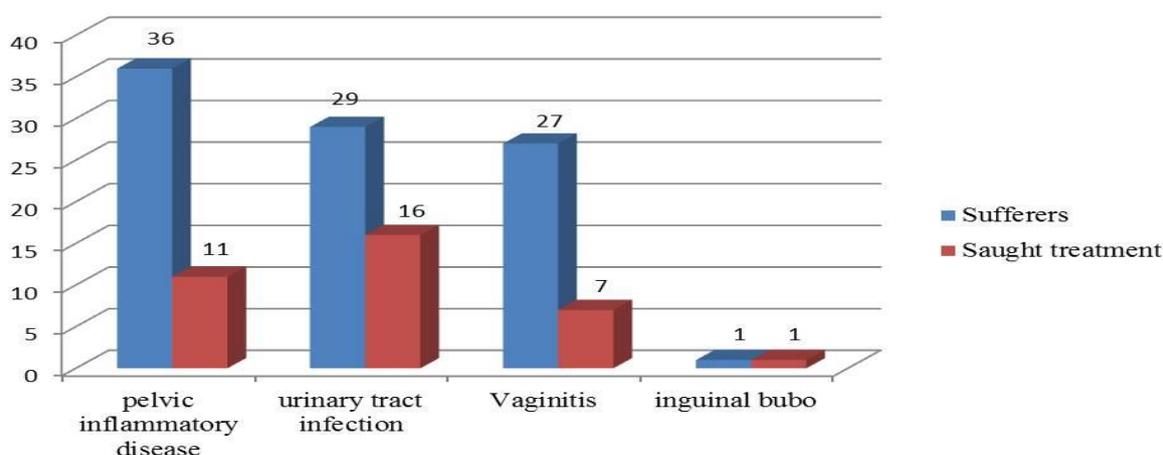
over a span of a decade. The present study found most frequently reported problems were low backache (29.6%), burning micturition (25.2 %) and genital itching (23.5%). In one study, the most common symptoms of RTI/STI reported by the respondents were pain on urination (57.8%), followed by frequent urination (53.3%), pain during sexual intercourse (26.7%) [14]. Whereas the study of Sunila garg [15] found problems reported most frequently were low backache (51.1%), pain during menstruation (41.1 %) and vaginal discharge (31.6 %) which is quite similar with the present study. The study found that symptoms of urinary tract infection was more in the age group of >30 years and those with >10 years of marriage. Whereas, vaginitis was significantly ($\chi^2 = 7.06, p=0.01$) more common in the lower age group (<30 years). According to one study, vaginitis was 22.6% (highest) in the 35-44 years and 11.8% in the 25-34 years age group [14]. The other study found the prevalence to be highest in the 15-19 years old and lowest in those aged more than 30 years [11]. In this study, duration of marriage, parity and number of abortions were not found to be statistically related to reporting of symptoms of RTI/STI, but few other studies found significant association between these socio demographic factors and RTI/STI [11, 13]. All symptoms of RTI/STI were more common in the women living in the joint family. This finding was in agreement with the findings of Sri Devi and Swarnalatha [11] and may be because women in joint families

generally have less privacy and decision-making power, affecting their treatment-seeking opportunities. History of abortions was found in all types of symptom complexes. Though majority of the women reported having taken services for abortions or for evacuation of spontaneous abortion, the post-abortion care could be lacking predisposing the women to infection. As per the present study findings, 49% women sought medical help following symptoms of RTI/STI. This was higher than the findings of the study of Suneela Garg (27.8%) [15], Phillip PS (35.6%) [14] and Dhanderi MN [8] (33.3%). The higher percentage of treatment seeking behavior in the present study may be due to good, consistent medical services provided by the UHTC and active involvement of the health workers in that particular locality.

Conclusion

The present study found high prevalence of self-perceived reproductive morbidity among women in the slum setting. In the study there was no scope of laboratory investigation and was based on recall of the event in preceding three months. Those factors may affect the actual prevalence of RTI/STI. Preventive strategies with regard to RTI/STI through IEC activities and promotion of care seeking behavior among the women will help in reducing the magnitude of the problem in the study area.

Figure - 1: Health care seeking of women according to their Reproductive health problems (N= 55).



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References

1. Park K. Park's textbook of preventive and social medicine. 22nd edition, Jabalpur, M/s Banarashidas Bhanot, 2013.
2. World Health Organization, The World Health Report (2000), Health Systems: Improving Performance. Available at http://www.who.int/whr/2000/en/whr00_dgmessage_en.pdf?ua=1 (last accessed on 17/5/2015).
3. Bhatia JC, Cleland J. Self-Reported Symptoms of Gynecological Morbidity and their Treatment in South India; *Studies in Family Planning*, 1995; 26(4): 203-16.
4. Hawkes S, Morrisson L, Foster S, Gausia K, Chakarabarty J, Weeling R. Reproductive Tract Infections in Women in Low Income Low Prevalence Situations: Assessment of Syndromic Management in Matlab, Bangladesh. *The Lancet*, 1999; 35(1992): 1776-81.
5. Latha K, Kanani SJ, Maitra N, Bhatt RV, Senapati SK, Bhattacharya S, et al. Prevalence of Clinically Detectable Gynaecological Morbidity in India: Result of Four Community Based Studies. *The Journal of Family Welfare*, 1997; 43(4): 8-16.
6. Singh J, Ramnaiah TB, Fernandez SD. Patterns of STDs in Madurai, India. *Genitourinary Med.*, 1985; 61(6): 399-403.
7. National AIDS control organization (NACO), Annual report 2014-15. New Delhi, India. NACO, 2015. p350. Available from http://naco.gov.in/sites/default/files/Annual%20Report%202015-16_NACO.pdf (last accessed on 23/8/ 2016)
8. Bhanderi MN, Kannan S. Untreated Reproductive Morbidities among Ever Married Women of Slums of Rajkot City, Gujarat: The Role of Class, Distance, Provider Attitudes, and Perceived Quality of Care *Journal of Urban Health*, 2010; 87(2): 254-63.
9. National Guidelines on Prevention, Management and Control of Reproductive Tract Infections Including Sexually Transmitted Infections. MOHFW, GOI. New Delhi: National AIDS Control Organization; 2007, p. 28.
10. Nandan D, Misra SK, Sharma A, Jain M. Estimation of prevalence of RTIs/ STDs among women of reproductive age group in district Agra. *Indian J Community Med.*, 2002; 27: 110-3.
11. Sri Devi B, Swarnalatha N. Prevalence of RTI/STI among reproductive age women (15-49 years) in urban slums of Tirupati Town, Andhra Pradesh. *Health Popul Perspect Issues*, 2007; 30(1): 56-70.
12. Panda SC, Sarangi L, Bebartta D, Parida S, Panigrahi OP. Prevalence of RTI/STI among women of reproductive age in district Sundergarh (Orissa). *Indian J Pract Doct.*, 2007; 4(1) Available from: <http://www.indmedica.com/journals.php?journalid=3 & issueid=94>. [Last accessed on 16/5/2015].
13. Bhawsar RD, Singh JP, Khanna A. Determinants of RTIs/STIs among women in Punjab and their health seeking behaviour. *Indian J Fam Welf*, 2005; 51(1): 24-34.
14. Philip PS, Benjamin AI, Sengupta P. Prevalence of symptoms suggestive of reproductive tract infections/sexually transmitted infections in women in an urban area of Ludhiana. *Indian J Sex Transm Dis.*, 2013; 34(2): 83-8.
15. Garg S, Meenakshi, Singh MMC, Mehra M. perceived reproductive morbidity and

Chakrabarti S, Chakrabarti A. Self-reported reproductive tract infection/ sexually transmitted infection and health care seeking behavior among the women living in a slum of Kolkata. IAIM, 2017; 4(4): 46-52.

health care seeking behaviour among
women in an urban slum Health and

Population - Perspectives and Issues,
2001; 24(4): 178-88.