



Prevalence of Rti Among Women of Reproductive Age (15-49 Years) in Urban Slums of Mumbai.

KEYWORDS

RTI, Associated Factors of RTI, Urban slum

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ABSTRACT

RTIs are a significant public health problem as they cause wide spread morbidity and mortality in men and women, especially of reproductive age. In developing countries, RTI/STIs are the second or third most common public health problem of young people. The present study was undertaken with the objectives to assess the prevalence of various reproductive tract infections among women aged 15-49 years and to understand the influence of various factors on reproductive tract infections in women. A epidemiological study was undertaken over a period of 6 months from September 2014 to February 2015 in an urban slum. Total 151 women of reproductive age group (15-49 years), residing in study area for more than 1 year, were selected. Information was collected on preformed, pre tested interview schedule by investigator. 38.41% of women in the study reported one or more RTI related symptoms, the various symptoms reported by women were Vaginal discharge (32.45%), Lower abdominal pain (2.65%), Genital skin condition 2.65%, Genital Ulcer (0.66%) .

INTRODUCTION:

Reproductive Tract Infections (RTIs) are being increasingly recognised as a global health problem with serious impacts on individual women and men, their families and communities. RTIs, generally seen as a 'silent' epidemic can have severe consequences including infertility, ectopic pregnancy, chronic pelvic pain, miscarriage, neonatal blindness, increased risk of HIV infection and even death. Untreated RTIs are responsible for 10-15 per cent of foetal wastage and 30-50 per cent of prenatal infection. While not all RTIs are curable, they are all preventable. The morbidity associated with RTIs affect economic productivity and the quality of life of many individual men, women and ultimately of whole communities.

The problem of morbidity and mortality in women due to reproductive tract infections is largely ignored because women themselves are reluctant to discuss the gynaecological problems with others. Social stigma attached to an illness is sometimes greater for a woman than a man and therefore a woman is more likely to hide her illness.

In India, there has been an alarming increase in the slum population mostly due to the migration of the rural poor. Most of the urban slum dwellers live in tropical countries; their health is also threatened by a variety of tropical diseases influenced by social and environmental determinants. Health equity can only be achieved by "levelling up" living conditions for the poor, and by reducing differential exposure and vulnerabilities among different groups in society.

It is clear that female slum dwellers have extremely limited opportunities for a decent lifestyle; they lack the foundation for healthy and fulfilling lives, and at the same time carries immense responsibilities for maintaining their homes and families. Global poverty is, in itself, a severe issue, and slum dwellers are undoubtedly particularly vulnerable to adverse social and medical outcomes.

Prevalence is a statistical concept referring to the number of cases of a disease that are present in a particular population at a given time, whereas incidence refers to the number of new cases that develop in a given period

of time. Globally, prevalence estimates of selected curable RTIs have a very high range. The studies conducted in India indicate high prevalence of RTIs. Different studies have shown the prevalence of RTIs in women of Reproductive age group to be in the range of 19-71%. Similar situation exists for the women in reproductive age group residing in slums. Marked variation has been found across all these studies in terms of pattern and level of morbidity which means no single set of estimates of RTIs, could apply in such a large and diverse country as India. Hence prevalence rates of RTIs for a particular geographical area need to be assessed so as to help the health administrators in providing better services for their treatment and control.

Study has been planned as there is dearth of studies on the prevalence of RTI in women living in the slums of Mumbai city.

MATERIALS AND METHOD USED

Research Area and Location

Shivaji Nagar slum is located in Govandi (west), a suburb of Mumbai, India. It has Mumbai's oldest and largest waste dumping ground. This densely populated slum houses many people from illegal immigrants from Bangladesh to people who came to Mumbai dreaming of a fortune, but their aspiration failing, resulting in settlement in the slum. More than 2,00,000 people live in this slum.

Image 1. Map of Shivaji Nagar, Govandi



A Community based epidemiological study was undertaken over a period of 6 months from September 2014 to February 2015 in an urban slum of Shivaji Nagar, Govandi, Mumbai. Total 151 women of reproductive age group (15-49 years), residing in study area for more than 1 year, were

selected by random sampling technique. Information was collected regarding socio-economic characteristics, marital history, personal hygiene behaviour, obstetric and contraceptive practices, sexual practices and behaviour, past and present clinical symptoms of reproductive tract, husband's past and present history of RTI etc. Based on responses to the questions regarding present complaints related to RTIs; the women were labelled as symptomatic or asymptomatic. An interview schedule was developed specifically for this study. This schedule was validated by experts in the field of Public Health. Later a pilot study was conducted. 20 women in the age group of 15-49 yrs were interviewed. Necessary changes were made in questionnaire after the pilot study. Statistical analysis is done by using SPSS 17 version.

RESULTS

Total study population is 151 women. Table 1 shows Most of the women i.e. 28.40% were in the age group of 25-30 yrs followed by 19.86% in the age group of 20-25 yrs and 30-35 yrs. Maximum number of participants was Muslims followed by Hindus. 92.5 % of the women were literates, out of which 51.66% had completed at least high school education. 70.86% of the women were unemployed, and 9.93% of the women were skilled worker like primary school teachers, tailors and flower merchants. 15.89% of the women were from poor class. 31.13% of the women had per capita income greater than 3308 ₹/month per person. 27.81% women had their per capita income 992-1653 ₹/month per person. 80.13% of the women were currently married, and 17.88% were unmarried girls. 1.32% was widowed. 1.65% of the women reported that their husband were unemployed, while 57.85% of the women reported that their husband were skilled worker like drivers, painters, power loom workers. 19.83% of the women reported that their husband were unskilled worker like daily wage labourers, security workers in malls, offices, workers at hotels, shops.

Table 1: Socio-Demographic Profile of Study Participants.

Socio-Demographic Characteristics		Frequency (Percentage)
Age Groups In Years	15-20	18 (11.90%)
	20-25	30 (19.86%)
	25-30	43 (28.40%)
	30-35	30 (19.86%)
	35-40	16 (10.59%)
	40-49	14 (9.27%)
Religion	Hindu	54 (35.76%)
	Muslim	97 (64.24%)

Table 3: Association of various variables with RTI in study population

Class Present	RTI		Chi- Square	P- Value	Association	
	Absent					
Age in Yrs	<=25 Yrs	16(33.33%)	32(66.67%)	2.845	0.241	Non-Significant
	25-35 Yrs	33(45.21%)	40(54.79%)			
	>35 Yrs	9 (30.00%)	21(70.00%)			
Religion	Hindu	11 (20.4%)	43 (79.6%)	11.564	0.001	Significant
	Muslim	47 (48.5%)	50 (51.5%)			
Education	Illiterates	9 (75%)	3 (25%)	7.653	0.022	Significant
	Up To 10 th Std.	40(36.36%)	70(63.64%)			
	>10 th Std	9 (31.03%)	20(68.97%)			

Education	Illiterates	12 (7.95%)
	Primary	28 (18.54%)
	Middle School	33 (21.85%)
	High School	49 (32.45%)
	Intermediate/ Diploma	17 (11.26%)
Occupation	Graduates	12 (7.95%)
	Unemployed	107 (70.86%)
	Unskilled Worker	6 (3.97%)
	Semi Skilled Worker	14 (9.27%)
	Skilled Worker	15 (9.93%)
Socio-Economic Status	Clerical/Shop Owner	9 (5.96%)
	High	47 (31.13%)
	Upper Middle Class	38 (25.17%)
Marital Status	Lower Middle Class	42 (27.81%)
	Poor	24 (15.89%)
	Currently Married	121 (80.13%)
Occupation of Spouse	Divorced	1 (0.66%)
	Widowed	2 (1.32%)
	Never Married	27 (17.88%)
Occupation of Spouse	Unemployed	2 (1.65%)
	Unskilled Worker	24 (19.83%)
	Semi Skilled Worker	16 (13.22%)
	Skilled Worker	70 (57.85%)
	Clerical/ Shop Owner	6 (4.96%)
	Semi Professional	3 (2.48%)

Prevalence of symptoms of RTI among the study population:-

Table 2 shows 46 (30.46%) women had at least one symptoms of RTI and 58 (38.41%) women had at least one symptoms of RTI in past one year. The most common symptoms being vaginal discharge.

Table 2: Prevalence of symptoms of suggestive RTIs

Symptoms	Point Prevalence	Prevalence In Last 1 Year
Vaginal Discharge	41 (27.15%)	49 (32.45%)
Genital Ulcer	0 (0%)	1 (0.66%)
Inguinal Buboos	0 (0%)	0 (0%)
Lower Abdomen Pain	3 (1.99%)	4 (2.65%)
Genital Skin Condition	2 (1.32%)	4 (2.65%)
None	105 (69.54%)	93 (61.59%)
Any Symptoms	46 (30.46%)	58 (38.41%)

Table 5 describes the significant association between prevalence of RTI and associated factors of RTI.

Occupation	Not gainfully employed	42(39.25%)	65(60.75%)	0.110	0.740	Non-Significant
	Gainfully employed	16(36.36%)	28(63.64%)			
Socio-Economic Status	High	21(44.68%)	26(55.32%)	4.009	0.260	Non-Significant
	Upper middle	15(39.47%)	23(60.53%)			
	Lower middle	11(26.19%)	31(73.81%)			
	Poor	11(45.84%)	13(54.16%)			
Marital Status	Currently Married	45(37.19%)	76(62.81%)	0.524	0.769	Non-Significant
	Divorced, Widow	1 (33.34%)	2 (66.66%)			
	Unmarried	12(44.44%)	15(55.56%)			
Age at first sex	<= 18 yrs	19(35.19%)	35(64.81%)	0.168	0.682	Non-Significant
	>18 yrs	26(38.81%)	41(61.19%)			
History of condom usage	Yes	15(57.69%)	11(42.31%)	5.959	0.015	Significant
	No	30(31.58%)	65(68.42%)			
History of Delivery in past 1 year	Yes	9 (26.47%)	25(73.53%)	2.267	0.132	Non-Significant
	No	37(41.11%)	53(58.89%)			
Frequency of bath	Bath at least 1 in a day	25(27.47%)	66(72.53%)	11.582	0.001	Significant
	Bath alternate days and more	33 (55%)	27 (45%)			
Material used during menstruation	Sanitary pad only	31(34.07%)	60(65.93%)	3.147	0.076	Non-Significant
	Cloths	26(49.06%)	27(50.94%)			
Frequency of bath during menstruation	Bath at least 1 in a day	23(28.40%)	58(71.60%)	9.619	0.002	Significant
	Bath alternate days and more	34(53.97%)	29(46.03%)			
Occupation of spouse	Not gainfully employed	2 (100%)	0 (0%)	Fisher's exact P =0.136		Non-Significant
	Gainfully employed	43 (36.13%)	76 (63.87%)			
History of Alcohol consumption of spouse	Yes	6 (60%)	4 (40%)	Fisher's exact p =0.171		Non-Significant
	No	39(35.14%)	72(64.86%)			
History of IUD usage	Yes	5 (71.43%)	2 (28.57%)	Fisher's exact p =0.1		Non-Significant
	No	40(35.09%)	74(64.91%)			
History of Abortion in past 1 year	Yes	4 (50%)	4 (50%)	Fisher's exact p =0.467		Non-Significant
	No	42(36.21%)	74(63.79%)			
Symptoms of RTI in the spouse	Yes	4 (57.14%)	3 (42.86%)	Fisher's exact p =0.422		Non-Significant
	No	41(35.96%)	73(64.04%)			

DISCUSSION

38.41% women had at least one symptoms of RTI in past one year, and vaginal discharge was the most common symptoms. Prevalence of the symptoms of reproductive tract infections in women age group of 25-35 yrs was highest i.e. 45.21% as that in age group below 25 yrs is 33.33%, and above 35 yrs age group it is 30%. Symptoms of RTI were found in 48.5% in Muslim women, this difference was significantly higher than Hindu women. Prevalence of RTI among illiterates was highest i.e. 75% and that among the women who had studied up to 10th std was 36.36% which was more than the women studied greater than 10th std. Prevalence of symptoms of RTI was more among the unemployed women (39.25%) than who were gainfully employed (36.36%). Prevalence of symptoms of RTI was higher i.e. 45.84% in poor class women

followed by 44.68% in high class women and 39.47% in upper middle class women among the study population. The prevalence was found to be 44.44% among unmarried girls which was higher than that among currently married and separated women. And prevalence was found to be 37.19% among currently married women which was higher than separated, divorced and widow women. Prevalence of symptoms of RTI was higher who had their first sex in >=18 yrs age group than below 18 yrs. Prevalence of symptoms of suggestive of RTI among women having unemployed husband was 100% against 36.13% among women having employed husband. Prevalence of symptoms in alcoholic spouses was 60% which was higher than 35.14% in non alcoholic spouses. Prevalence of symptoms of RTI was higher i.e. 55% among the women taking infrequent bath while it was 27.47% among those women who

bath every day. However there was significant association between frequency of bath and prevalence of symptoms of RTI. Prevalence of symptoms of RTI was higher i.e. 49.06% among the women using cloths while it was 34.07% among those women who used sanitary pads only. However there was no significant association between material used during menstruation and prevalence of symptoms of RTI. Prevalence of symptoms of RTI was higher i.e. 53.97% among the women taking infrequent bath during menstruation while it was 28.40% among those women who bath every day. 20.97% women among the ever married women used condoms as a family planning method followed by 20.16% women were tubectomised. Prevalence was highest among IUD users followed by condoms and OCP users. Prevalence is higher in condom users 57.69% than non users 31.58%. Prevalence is higher in IUD users 71.43% than non users 35.09%. Prevalence of symptoms of RTI was 26.47% among women who had delivery in past 1 year while it was 41.11% among their counterparts. Prevalence of symptoms of RTI was 50% among women who had abortion in past 1 year while it was 36.21% among all the ever married women who had not experience any abortion in last 1 year.

CONCLUSIONS AND RECOMMENDATIONS

This exploratory study provides preliminary information about RTIs among the slum dwelling women in Shivaji Nagar which is located in Govandi (west), a suburb of Mumbai, India. 38.41% women of the study population had at least one symptom of RTIs. Diagnosis of these cases will have to be confirmed by etiological approach ideally. But due to lack of resources at least clinical diagnosis would be appropriate. Later they should be given the treatment based on syndromic approach. Awareness regarding cause, spread, prevention, and treatment regarding RTIs can also be improved by health education sessions by the link workers. Education session should also focus on increasing the age at marriage for girls, sex education, menstrual and personal hygiene and use of condoms in prevention of RTIs.

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