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Original Research Article

Knowledge, health seeking behavior and barriers for treatment of reproductive tract infections among married women of reproductive age in Delhi

Preety Doley¹, Geeta Yadav^{1*}, Monika Gupta², Sumathi Muralidhar³

¹Department of Community Medicine, ²Department of Obstetrics and Gynaecology Vardhaman Mahavir Medical College and Safdarjung Hospital, New Delhi, India

³Department of Microbiology, Apex Regional STD Laboratory and State Reference Laboratory for HIV Vardhaman Mahavir Medical College and Safdarjung Hospital, New Delhi, India

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***Correspondence:**

Dr. Geeta Yadav,

E-mail: yadavgeeta07@gmail.com

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ABSTRACT

Background: Reproductive tract infections including sexually transmitted infections are an important public health problem among women of reproductive age group in developing countries. The perceptions or taboos related to RTIs act as an obstacle for seeking treatment ultimately leading to complications. The aim of the study was to assess the knowledge, health seeking behavior and barriers for treatment of reproductive tract infections among married women of reproductive age in Delhi.

Methods: A community based cross-sectional study was undertaken in an urban field practice area of department of Community Medicine of VMMC and Safdarjung Hospital, New Delhi from November 2017 to April 2019. Sample size of 270 was collected using predesigned and pre-tested questionnaire by systematic random sampling.

Results: Mere 16.6% of the women knew about symptoms of RTI/STIs. Out of 81 women having RTI/STI in past 3 months 30% did not seek treatment and out of 70% who took treatment for RTI, 30% did not complete treatment. Majority of the women who sought treatment preferred government hospital. The main barrier for seeking treatment was embarrassment, not considering it as an important health problem, lack of time.

Conclusions: The overall knowledge about symptoms, mode of spread of RTIs/STIs was very poor among the study participants. Women seeking treatment are not completing it. Thus, there is need to emphasize on spreading knowledge about symptoms, mode of spread, need for treatment and its completion and clearing barriers related to RTI/STI among women.

Keywords: Reproductive tract infections, knowledge, Barriers, Treatment seeking behavior

INTRODUCTION

Reproductive tract infections (RTIs) and sexually transmitted infections (STIs) are a major health concern among women of reproductive age group. According to WHO, it is estimated that more than one million STIs are acquired every day and annually about 376 million new infections with one of four curable STIs i.e Chlamydia, gonorrhoea, syphilis and trichomoniasis, are reported

worldwide.¹ Women particularly those living in low and middle income countries are highly vulnerable to RTIs/STIs due to poverty and gender inequity which act as an important barrier to access health care services.² In India, the prevalence of self-reported RTI symptoms among women varies from 11-72% and most of the women with symptoms of RTI either never seek treatment, or delay seeking treatment.³ Despite the availability of low cost and appropriate technologies for

management of RTIs/STIs, very few seek treatment either due to lack of knowledge about it or due to the existing taboos regarding sexual and reproductive health.⁴ This is an important aspect to be taken care of, as majority of RTIs/STIs have no symptoms, or mild symptoms, which if left untreated can lead to serious complications, like pelvic inflammatory disease, ectopic pregnancy, infertility, cervical cancer and can enhance the transmission of Human Immunodeficiency Virus (HIV).⁵ Along with the health consequences, women also go through lot of emotional distress due to gynecological morbidity which leads to social consequences.⁶

Limited decision making by women, inability to recognize symptoms as an important problem, embarrassment and health care facility related factors, such as lack of privacy, absence of female doctor etc have been reported as reasons for not availing treatment from healthcare facilities.³ It is well documented that knowledge about a health problem is an important precursor for recognizing it and taking steps to prevent it or treat it. Although we have programme for prevention and control of RTI/STI in our country but we are still far away from reaching our target, thus keeping this in mind the present community based study was carried out to assess the knowledge, health seeking behavior and barriers for treatment, among married women of reproductive age group (15- 49 years) in an urbanized village of Delhi.

METHODS

A community based cross-sectional study was undertaken in an urbanized village of Delhi, Aliganj, which is an urban field practice area of department of Community Medicine of VMMC and Safdarjung Hospital (VMMC and SJH), New Delhi from November 2017 to April 2019. Married women in the reproductive age group of 15 to 49 years, residing in the study area for more than 6 months were studied. Women suffering from any severe/debilitating illness and those who were pregnant at the time of the study were excluded.

Sample size of 270 was calculated using prevalence of RTI symptoms as 42% based on a previous study, confidence interval of 95%, and relative precision as 15%, non-response error as 10%, and using the formula $4pq/d^2$.⁷ Sampling unit was a household which was selected using systematic random sampling. Every 6th household was visited and the eligible women were selected till the minimum desired sample size was completed. Next sixth household was selected if there were no eligible women, house was locked or unavailability at the time of visit.

An attempt was made to visit the locked house at least three times. In the selected house with more than one eligible woman, only one eligible woman was chosen by lottery method. Data was collected using a predesigned, pretested, semi-structured, semi-open ended, interviewer

administered questionnaire to assess the socio-demographic factors, their knowledge of symptoms, mode of spread, delayed consequences of untreated RTIs/STIs, if RTIs/STIs are preventable or treatable etc. Participants were also questioned about their health seeking behaviors and barriers thereof, such as, whether they had suffered from RTI/STI in the past, whether treatment was taken and if not, reasons for not taking treatment.

The collected data was analyzed using licensed statistical Package for the Social Sciences (SPSS) software version 21.0 for frequencies and qualitative data was summarized as proportions, analyzed using Chi-Square/ Fisher exact test and quantitative data as mean with standard deviations. The p value of less than 0.05 was taken as statistically significant.

Ethical clearance for the study was obtained from Institutional Ethics Committee of VMMC and SJH and informed written consent was taken from each study participant. Strict confidentiality was maintained.

RESULTS

A total of 270 women were studied and the mean age of the study participants was 30.33 ± 5.52 years. Majority of them were Hindus and belonged to nuclear families, 44 % were illiterate and 88.9% women were homemakers while only 4.8% were unskilled workers and majority (80.7%) belonged to lower middle or upper-lower class as per Revised Kuppuswamy Scale 2017 (Table 1).

Prevalence of RTI/STI symptoms in the past 3 months

Out of 270 women, 81(30%) reported that they had symptoms of RTI/STI in the past three months. The most commonly reported symptom was vaginal discharge 74 (91.3%), followed by lower abdomen pain 37(45.6%) and low backache 34(41.9%). None of the women reported genital ulcer, swelling or lump or ulcer in the groin area.

Knowledge about RTI/STI

When assessed about the knowledge of RTI/STI, mere 16.6% of women were aware about the symptoms while only 38 % knew how it spreads. Very few (15.1%) women were aware that it can be treated; only 9.6% knew that it is preventable and only 12.2% knew about consequences if it left untreated (Table 2).

Of the 16.6% women knowing about symptoms of RTI/STI, almost 3/4th knew about vaginal discharge while 62.2% about pain in lower abdomen and 42.2% knew about lower backache, respectively. Relatively lesser number of women knew about other symptoms, such as burning sensation while passing urine, itching in the genital area and genital ulcer (Figure 1).

Table 1: General characteristics of the study participants (N= 270).

Age group* (in years)	Number (%)
≤20	3 (1.1)
21-30	171 (63.6)
31-40	88 (32.6)
41-49	8 (3.0)
*Mean age =30.33 years; S.D = ±5.52	
Religion	
Hindu	253 (93.7)
Muslim	12 (4.4)
Others (Christian and Sikh)	5 (1.8)
Type of family	
Nuclear	221 (81.9)
Joint	49 (18.1)
Educational qualification	
Illiterate	118 (43.7)
Primary school	57 (21.1)
Middle school	48 (17.8)
High school	25 (9.3)
Higher secondary school and above	22 (8.1)
Occupation	
Unskilled worker	13 (4.8)
Semi-skilled worker	7 (2.6)
Skilled worker	9 (3.3)
Semi professional	1 (0.4)
Home maker	240 (88.9)
Socio economic class*	
Upper-Middle (II)	45 (16.7)
Lower-Middle (III)	108 (40)
Upper-Lower (IV)	110 (40.7)
Lower (V)	7 (2.6)
*according to Revised Kuppaswamy Scale 2017	

Table 2: Distribution of study participants according to knowledge about RTI/STI (N=270).

Knowledge about RTI/STI	Number (%)
Symptoms	45 (16.6)
correct mode of spread	24 (38.09)
Consequences of untreated RTI/STI	33 (12.2)
RTI/STI are treatable	41 (15.1)
RTI/STI are preventable	26 (9.6)

Out of 38.09% women knowing how it spreads all knew about sexual transmission, while 41.2% thought that it can spread through dirty toilets and almost 21% thought it spreads through sharing same clothes.

About 61% felt that it can lead to poor maternal health while more than half knew about inability to conceive and 12% about increased susceptibility to HIV/AIDS as a consequence if it is left untreated.

Health care seeking behavior and barriers related to treatment

The health seeking behavior and barriers related to treatment of RTI/STI were assessed from those 81 study participants who had history of RTI/STI in the last three months. Out of 81 women having symptoms almost 30% did not seek treatment and out of 70% who did seek almost 30% did not take complete treatment. As can be seen 54.3% sought treatment from government doctors, 21.05% from private and almost one fourth from chemists or quacks (Table 3). Almost 59% women left treatment when their symptoms subsided even though doses were left, while 17.6% left as they could not afford to buy the medicines. Some of the reasons for not completing treatment were not getting medicines or fear of side effect. The main barrier for not seeking treatment that they were embarrassed to go to a doctor (45.8%) and did not consider it an important health problem (20.8%). It was nothing abnormal (16.6%) and even 8.3% women reported that they were too busy and had no time for seeking treatment (Figure 2).

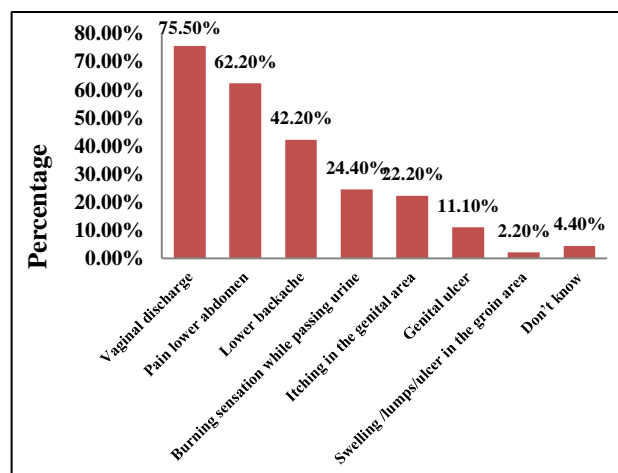


Figure 1: Knowledge about symptoms of RTI/STIs among study participants (n=45).

Table 3: Health care seeking behaviour among participants having symptoms of RTI/STI.

Variable	Number (%)
Taken treatment (n=81)	57 (70.3)
Did not take treatment (n=81)	24 (29.7)
Source of treatment(n=57)	
Government doctors	31 (54.3)
Private doctors	12 (21.1)
Others (Chemists ,Quack etc)	14 (24.6)
Complete treatment taken(n=57)	
Yes	40 (70.1)
No	17 (29.8)

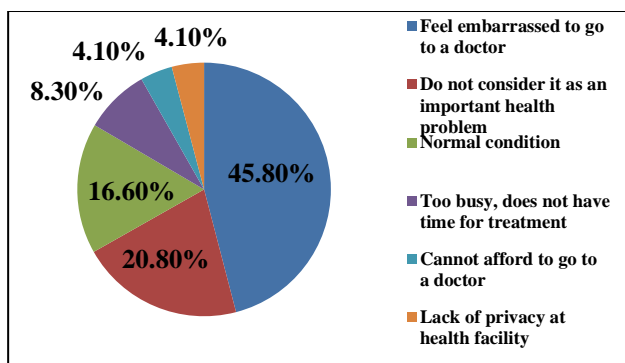


Figure 2: Distribution of the study participants according to barriers for not seeking treatment (n= 24).

DISCUSSION

For more than two decades we have a programme focusing on raising awareness, providing treatment for RTIs/STIs under RCH1, RCH 2 and subsequently under RMNCH and A but it still remain neglected. The overall knowledge was very poor among the study participants with only 16.6% knowing about symptoms of RTI/STIs which is consistent with previous studies.⁷⁻¹⁰ Most women knew about vaginal discharge (75%) and lower abdomen pain (62.2%) as symptoms of RTI/STIs, followed by lower backache (42.2%). In a study conducted in Nigeria, vaginal discharge was the most commonly perceived symptom of RTIs.⁹ The findings in the present study was in contradiction to a study in Vietnam, where 42.2% of the women had knowledge about symptoms of RTI, 39.8% knew about genital itching and 32.9% knew about vaginal discharge.²

Having knowledge that a disease is treatable can be an important factor in deciding to take complete treatment but only 15.1% women in our study were aware that RTI/STIs are treatable and only 38% knew about the correct mode of spread i.e. through sexual intercourse. In another study in India, 57% women knew sexual contact as a way of transmitting RTIs whereas in contrast only 27.3% of the participants mentioned sexual contact as mode of transmission in a study conducted in Lahore.^{11,12} This difference in findings could be as a result of different study settings or different socioeconomic characteristics of the study participants. Incorrect knowledge about mode of spread can act as hindrance in adopting preventive measure and in present study 41.2% of the women thought it spreads through toilet seats which are similar to reported by Rabiu et al.⁹

60.6% of the women reported poor maternal health as consequences of untreated RTI/STIs, followed by inability to conceive (54.5%), increased susceptibility to HIV/AIDs and 3.03% developing cancer, while Rabiu et al reported 57.5% women knowing infertility as the complication of RTIs, followed by cervical cancer (18.3%) and heavy menses (17.2%). Although the

proportion of women knowing about different complications differs but still in both the studies knowledge about complications is far from desirable.⁹

Out of 81 women having symptoms of RTI/STI in the past three months, 70.3% took treatment and 70% of those who took treatment completed the treatment. Earlier studies conducted in Delhi have also reported similar findings but in a study conducted in Bangalore only 29.1% of the symptomatic women took treatment, which is lower than in our study but the proportion of women completing treatment were comparable.^{7,13,14} We found that government hospitals were favored for seeking treatment by almost half of the women as compared to private doctors and others which is consistent with that reported by Sridevi et al while few other studies have reported women preferring private health facility.¹⁵ Accessibility, availability and timings of Government health facilities in the study area could be some of the possible reasons for this difference.^{9,10,16}

Studies have shown that poor access to healthcare, poor knowledge or awareness act as barriers for treatment, which contribute to increase in prevalence of RTI/STIs.^{15,17,18} The major barriers for not taking treatment in our study were embarrassment (45.8%) followed by not an important health problem (20.8%). Considering it as before not normal condition, being too busy, not being able to afford to go to a doctor and lack of privacy in the health facility were some of the other reasons why women were not seeking treatment. Similar findings have been reported with regard to treatment seeking behavior and barrier for seeking treatment for RTI/STI by various other studies in India.^{14,16} Mathew et al reported that factors such as, considering gynecological morbidity as normal, shyness, not knowing how to explain the symptoms, lack of money, high cost of service, distance of the health care facility, fear of complication etc were the barriers reported for seeking treatment, few of the barriers were different from that in our study.¹⁹ This difference could be attributed to difference in study settings, urbanized village compared to rural settings, and different level of education among the respondents.

Limitations

Use of quantitative research methodology is the main limitation of the study as qualitative research methods with key informant interviews and focus group discussions would have been more robust methods for exploring some of the barriers for seeking care for RTI/STI and exploring why after putting so much effort in improving knowledge and providing treatment for it women are still hesitating to come forward for it.

CONCLUSION

Overall, this study showed poor knowledge among study participants about the symptoms of RTI/STI. Moreover,

less than one-fourth of the women knew that RTI/STIs are either treatable or preventable. Not many women were aware of the correct mode of spread of RTI/STI, while some women had the wrong perception that RTI/STI spread through dirty clothes or by sharing clothes, which indicates the need for information, education and communication regarding the signs and symptoms of RTI/STI, to create awareness among the target population. Although higher proportion of women who had past history of RTI/STI took treatment, nearly one-fifth of the patients did not complete treatment. This emphasizes the need for involvement of health workers for RTI/STI case management, and counselling at community level, repeated health education sessions regarding benefits of treatment and organizing weekly clinics to reduce the burden of the disease and to make services more patient friendly and accessible so that women do not hesitate in taking treatment.

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