Health-Seeking Behaviour and its Challenges for Reproductive Tract Infections Among Married Women of Reproductive Age Group Residing at Urban Slums of Agra: A Cross-Sectional Study

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Abstract:

Introduction: Reproductive tract infections continue to be a major public health issue, especially for urban low-income women of reproductive age. RTI burden is increased by delayed diagnosis and treatment due to poor health-seeking behaviour and other socioeconomic constraints. This study looks at the health-seeking habits and difficulties of married, reproductive-age women living in Agra's urban slums. **Objective:** 1. To assess the health-seeking behaviour for reproductive tract infections among married women of urban slum of Agra. 2. To explore the challenges they faced for the treatment of reproductive tract infections **Method:** A cross-sectional study among 500 married women in Agra's urban slums used the WHO syndromic approach for RTI/STI diagnosis. Multistage random sampling selected one ward and two slums. Interviews followed a random starting direction and the left-hand rule until the sample size was met. **Results:** The study found that 57.92% of females with RTI/STI symptoms sought treatment, while 42.07% did not, with barriers including perceived lack of importance, financial constraints, embarrassment, lack of family support, and time limitations. **Conclusion:** In Agra's urban slums, just over half of women sought treatment for RTI/STI symptoms, primarily at government facilities, while significant barriers prevented others. Perceived lack of seriousness, financial constraints, and embarrassment were key deterrents. A major reason for stopping the treatment was absence of symptoms. Interventions are needed to increase awareness, improve access, address financial issues and reduce stigma.

Keywords: Health Seeking Behaviour, Reproductive Health, Reproductive Tract Infections, Urban Slums

Introduction:

Health-seeking behaviour describes the actions of individuals, in response to a perceived health issue or condition, mainly that response refers to when and where they seek medical advice. The determinants of health-seeking behaviour among married women of reproductive age in urban slumsare vital to inform targeted interventions. Women may recognize the symptoms of RTIs and STIs, but may not always seek timely or appropriatecare, as indicated by several studies. Various socio-economic and cultural factors describe these barriers, including financial limitations, stigma, ignorance, andinadequate access to healthcare services, which lead to this delay in treatment. Moreover, studies suggest that health literacy is a strong determinant of health-seeking behaviour, especially among women from underprivileged communities.[1,2]

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In India, urban slums are characterized by overcrowded living conditions, inadequate sanitation, and limited access to healthcare services. These factors exacerbate the risk of RTIs and STIs among women, who may face additional barriers due to cultural norms, lack of social support, and limited access to education. A study by Singh et al.[1] highlighted that women in low-income urban areas often delay seeking treatment for reproductive health issues due to the fear of social stigma and embarrassment. Furthermore, the lack of healthcare infrastructure in these areas often leads to a reliance on informal healthcare providers, who may not offer evidence-based treatments. As a result, many women in urban slums do not receive timely or appropriate medical care, leading to prolonged suffering and an increased burden on the healthcare system.[3]

This study aims to explore the health-seeking behaviour and the challenges faced by married women of reproductive age residing in the urban slums of Agra concerning RTIs and STIs. It also seeks to identify the barriers that prevent women from seeking treatment for these conditions, with a focus on socio-economic, cultural, and healthcare access factors. Understanding these factors is critical for designing effective interventions that promote timely diagnosis and treatment of RTIs and STIs, as well as improving overall reproductive health in urban slum populations. Through a comprehensive analysis of health-seeking behaviour, this study hopes to contribute to the development of targeted public health policies and community-based programs to address the reproductive health needs of women in underserved urban areas.[4]

Objectives:

1. To assess the health seeking behaviour for reproductive tract infections among married women in the reproductive age group from urban slums of Agra, Uttar Pradesh.
2. To explore the challenges they faced for the treatment of reproductive tract infections

Method:

This cross-sectional study was conducted among women of reproductive age group residing in urban slums of Agra district of Uttar Pradesh during a period of February 2021 to January 2022. A total of 500 women of reproductive age group were studied and data collection was done using a house-to-house survey technique in selected urban slum of Agra. The study was approved by the Institutional Ethical Committee of S. N. Medical College, Agra (IEC/2021/46).

Inclusion criteria: Women of the reproductive age group (15-49 years) who were married (regardless of whether their husbands were currently residing with them), were present at the time of the house visit, and gave verbal consent to participate in the study.

Exclusion criteria: Women who are not currently married or are outside the reproductive age range (15-49 years). Also, those who aren't permanent residents of the selected urban slums or are unable to provide informed consent, ensuring data relevance and ethical compliance.

Sample size: A sample size of 475 was calculated with an estimated prevalence of 27%[5], precision of 15%, and confidence interval of 95%. The sample size was calculated by using the formula of $4pq/d^2$. On adding 5% for non-responders, it was raised to the round figure of 500.

Sampling Technique: A multistage random sampling technique was used for the study. Firstly a complete list of municipal wards with the name of slums was obtained from the Agra municipal cooperation office. Then, one ward was selected randomly using a random number table. In next stage, at least two slums were selected randomly from that ward. For the selection of study participants, central location of each selected slum was chosen and direction to start the interview was randomly decided by spinning a pencil where the direction of the pencil point faced was chosen and the nearest household was visited in that direction. All the available women of the reproductive age group were interviewed from each consecutive household. Every house was covered following left-hand principle until desired sample size was achieved from each slum on the basis of proportionate to sample size. All the participants were informed about the studys objectives, and their verbal consent was taken before the interview. The data was collected by principal researcher with the help of healthcare workers. As the topic is quite sensitive, the

research team requested all male household members to give some privacy for the interview. Confidentiality was assured and maintained throughout the study. Participants were asked about any RTI/STI symptoms they had experienced in the past six months. Those respondents who were found to have any reproductive health problems were asked about their health-seeking behaviour and barriers related to them. For this study, health-seeking behaviour was defined as a sequence of remedial actions taken by the person to rectify perceived ill health. Appropriate or desired health-seeking behaviour was defined as seeking treatment and health advice from trained doctors (both allopathic and AYUSH) from public or private health facilities (government hospital, private clinic)

Results:

The study demonstrates that among 500 study participants, 32.80% participants had the symptoms suggestive of reproductive tract infections. The sociodemographic detail of the present study shows that among five hundred married women in the reproductive age group residing in urban slum of Agra more than half (53.20%) were 30 years or below, 52.80% were Hindu by religion, 51.40% belonged to other backward caste and

Table 1: Association of Treatment Seeking Behaviour for RTI/STI with Sociodemographic Characteristics

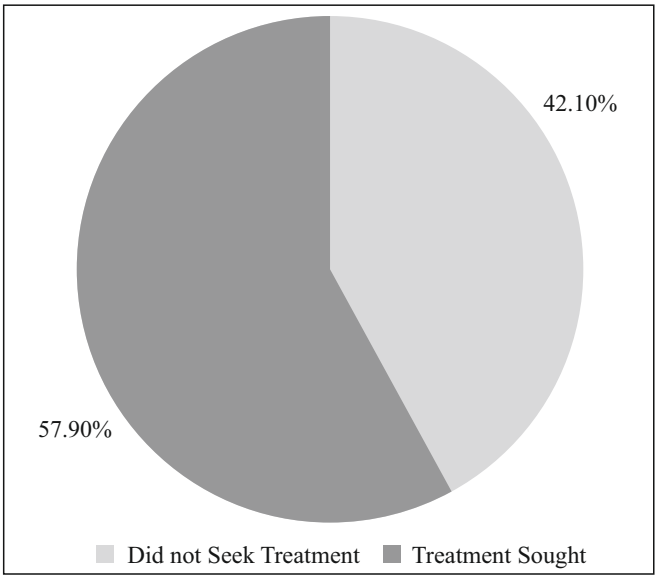
Sociodemographic Characteristics	RTI/STI Present n (%)	Treatment Taken n (%)	Treatment Not Taken n (%)	Odds Ratio (95% CI)	P value
Age (in years)					
15-30	99 (37.22)	59 (60)	40 (40)	1	0.59
31-49	65 (27.78)	36 (55)	29 (45)	0.75 (0.45, 1.25)	
Religion					
Hindu	68 (25.76)	43 (63)	25 (37)	1	0.24
Muslim	96 (40.68)	52 (54)	44 (46)	0.75 (0.45, 1.25)	
Caste					
General	15 (20)	8 (53)	7 (47)	1	0.89
OBC	98 (38.13)	58 (59)	40 (41)	1.34 (0.56, 3.20)	
SC	51 (30.36)	29 (57)	22 (43)	0.89 (0.45, 1.74)	
Type of Family					
Nuclear	93 (30.10)	67 (72)	26 (28)	2.10 (1.25, 3.53)	0.0001
Joint	71 (37.17)	28 (39)	43 (61)	1	
Age at Marriage					
Below 18 years	58 (30.21)	19 (33)	39 (67)	1	0.0001
≥18 years	106 (34.41)	76 (72)	30 (28)	5.19 (2.56,10.52)	
Educational Status					
Illiterate	70 (41.67)	22 (31)	48 (69)	1	<0.001
Up to Middle School	62 (33.51)	47 (76)	15 (24)	9.13 (4.22,19.74)	
Up to Intermediate	29 (25)	23 (79)	6 (21)	16.73 (5.51,50.75)	
Graduate & Postgraduate	3 (9.68)	3 (100)	0 (0)	Undefined[#]	
Occupational Status					
Working	29 (28.71)	14 (48)	15 (52)	1	0.24
Non-working	135 (33.83)	81 (60)	54 (40)	0.75 (0.39,1.44)	
Socioeconomic Status*					
Class I	0	0	0	Undefined[#]	<0.001
Class II	15 (9.14)	12 (80)	3 (20)	13.5 (3.56,51.24)	
Class III	46 (28)	34 (74)	12 (26)	9.41 (3.12,28.34)	
Class IV	76 (46)	43 (57)	33 (43)	4.7 (1.84,12.05)	
Class V	27 (16)	6 (22)	21 (78)	1	

Note. *Modified Kuppuswamy Classification-2021, [#]Undefined due to division by zero

Table 2: Distribution of study participants' reasons for not completing their course of treatment

Reasons for Not Completing Treatment	Number (n)	Percentage (%)
Participants left treatment when their symptoms subsided	17	44.73
Some participants dropped treatment due to fear of side effects	11	28.94
Left as they could not afford to buy the medicines	10	26.31
Total	38	100

Figure 1: Proportion of Symptomatic Females Seeking Treatment (N=164)



61.80% had a nuclear family. More than one-third (34.41%) of the women were reportedly married even before attaining the legal age of marriage. One-third (33.60%) were illiterate and 79.80% were unemployed or housewives. The majority (60.80%) of the study participants belonged to the lower socioeconomic class. Table 1 shows the association between treatment-seeking behaviour for RTI/STI and various sociodemographic factors. Participants aged 1530 years were more likely to seek treatment, while those in nuclear families and with higher educational levels had significantly higher odds of seeking treatment. Odds ratios highlights that the individual married at or above 18 years had greater treatment-seeking behaviour. Socioeconomic status also played a role, with higher classes showing increased treatment-seeking behaviour compared to lower classes. These findings underscore the influence of education, family type, and socioeconomic factors on health-seeking behaviours. The pie chart shows that 57.9% of symptomatic females sought treatment, while 42.1% did not. This indicates that although a majority sought care, a considerable portion still went untreated.

This study also illustrates that the primary reasons why the symptomatic participants did not seek treatment were because, at maximum (42.02%), they didn't think of the condition as a serious health issue, and at least 21.74% lacked enough money to do so. Additionally, 18.85% of symptomatic individuals reported feeling embarrassed to talk about it. However, 10.15% of symptomatic participants claimed that their families did not support them in receiving treatment, and only 7.24% of women said that they were too busy to get treatment. Our study depicts that of the participants who sought treatment for RTI/STI, over half (56.84%) went to a government doctor, 23.17% went to a private doctor, and the remaining 18.96% attempted a chemist shop or at-home remedy. Among the individuals who started treatment, 60% successfully completed it, while 40% did not. Despite still being on dosages when their symptoms reduced, almost half (44.73%) of women stopped taking treatment, and 28.94% quit because they were afraid of side effects. The inability to pay for the medications was mentioned by 26.31% of participants as another factor for discontinuing treatment (Table 2).

Discussion:

In the present study, more than half (57.92%) of the participants who had RTI/STI reportedly took treatment while rest 42.07% denied taking any treatment. Similar findings were observed by Ipsa et al.[6] in Odisha, Deepak et al.[7] in Karnataka, Thekdi et al.[8] in Gujarat, Hegde et al.[9] in Tamil Nadu and Preethi S et al.[10] in Ludhiana where 55.56%, 57.1%, 53.16%, 60% and 64.4% of women with RTI/STI got a treatment respectively. Whereas studies by Doley et al.[11] in New Delhi and by Anjana et al.[12] in Delhi found that a comparatively more proportion of women with RTI/STI i.e. 70.3% and 73% got treated than present study. The reason of higher

treatment seeking behaviour in their study could be due to easy accessibility and availability of health services in Delhi. This study also explains that treatment-seeking behaviour for RTI/STI is not significantly associated with socioeconomic characteristics such as age, caste, religion, and occupation. However, there is a presence of significant association between treatment-seeking behaviour for RTI/STI and sociodemographic details like family type, age at marriage, educational status, and socioeconomic status. Similar findings were observed in a study done by Shingade et al.[13] where educational status and socioeconomic status were significantly associated with treatment-seeking behaviour. Study done by Mani et al.[14] also shows a significant association between treatment-seeking behaviour for RTI/STI with type of family.

It was found in the present study that government hospitals were favoured for seeking treatment by more than half (54%) of the women suffering from RTI/STI in comparison to private doctors (22%) and others (18%) which is consistent with the findings of Doley et al.[11] in Delhi, Deepak et al.[7] in Karnataka and Thekdi et al.[8] in Gujarat. On the contrary, few others like study by Anjana et al.[12] in New Delhi, and Hegde et al.[9] in Tamil Nadu reported that majority i.e. 70% and 75% women preferred private healthcare facility for treatment of RTI/STI in comparison to government facility. Accessibility, availability, timings and attitude towards government healthcare facilities in the study area could be some of the possible reasons for this difference.

This study shows that poor access to healthcare, poor knowledge or awareness act as barriers for treatment, which contribute to increase in prevalence of RTI/STI among women in our area. The major barriers for not taking treatment in our study were: not consider it as an important health problem i.e. 42.02% followed by lack of money (21.74%). It was also observed that 18.85% women feel embarrassed to discuss about it, 10.15% did not get support from family and 7.24% were too busy for seeking treatment. Similar findings have been reported with regard to barrier for seeking treatment for RTI/STI by Deepak et al.[7] and Shingade et al.[13] in urban slum of Mumbai in which major barrier for not seeking treatment was: being not considered it as an important health problem whereas study done by Doley et al.[11] in Lucknow found that major barrier for not seeking treatment was: feel embarrassed to discuss about symptoms of RTI/STI.

The present study uniquely highlights a significant 42.07% of women with RTI/STI symptoms did not seek treatment, revealing a critical gap in care. The primary reasons were perceiving the condition as non-serious (42.02%) and lacking money (21.74%). Furthermore, 18.85% felt embarrassed and 10.15% lacked family support. These data strongly suggest that interventions must prioritize education on the severity of RTIs/STIs, alleviate financial burdens, and address social stigma within families and communities to encourage timely health-seeking behaviour. Similar findings were observed by Doley et al.[11] in Delhi where 59% of participants left their treatment once their symptoms subsided.

Conclusion:

In the present study, more than half of the participants who had RTI/STI sought treatment, while the remaining did not. Government hospitals were the preferred choice for treatment, followed by private doctors and other healthcare options. The major barriers to seeking treatment included not considering the condition as a significant health problem, financial constraints, embarrassment in discussing symptoms, lack of family support, and time constraints. Among those who discontinued treatment, the primary reason was stopping medication once symptoms subsided, followed by concerns about side effects and the inability to afford medicines. Poor access to healthcare, lack of awareness, and social stigma were identified as key factors contributing to the prevalence of RTI/STI among women in the study area.

Recommendations:

The present study highlights to raise awareness among women from underprivileged groups on prompt and appropriate treatment of symptoms suggestive of STIs and RTIs. This necessitates the need for repeated health education and counselling sessions at a community level by health care providers for RTI/STI

case management. Healthcare providers involved in reproductive health services should be more patient-friendly, sensitized and approachable so that women do not hesitate to seek treatment without fear of losing their privacy or any stigma.

Limitations:

Since it was a cross-sectional study, there was no follow-up done on the women who were seeking treatment for their reproductive tract infections. Male partners were not interviewed.

Declaration:

Funding: Nil

Conflicts of interest: Nil

References:

1. Singh S, Sharma R, Mishra S. Health-seeking behavior and barriers to healthcare access in urban slums of India: A community-based study. Indian J Public Health. 2021;65(1):23-9. doi: 10.4103/ijph.IJPH_144_20
2. Patel M, Desai P. Reproductive health issues in urban slums: Challenges and opportunities. J Family Med Prim Care. 2020;9(6):2887-92. doi: 10.4103/jfmpc.jfmpc_234_20
3. Gupta R, Gupta M. Prevalence and factors influencing reproductive tract infections among women in low-income urban areas of India. J Health Popul Nutr. 2019;38(1):2-8. doi: 10.1186/s41043-019-0161-1
4. World Health Organization. Reproductive tract infections [Internet]. Geneva: WHO; 2021 [cited 2025 Feb 19]. Available from: https://www.who.int/news-room/fact-sheets/reproductive-tract-infections.
5. Nandan D, Misra SK, Sharma A, Jain M. Estimation of prevalence of RTIs/STDs among women of reproductive age group in Distt. Agra. Indian J Community Med. 2002;27(3):110-3.
6. Mohapatra I, Mishra K, Kumari A, Das AS. Healthcare-seeking behavior for symptoms of reproductive tract infections among late adolescent girls in an urban slum of Bhubaneswar, Odisha. Int J Recent Sci Res. 2017;8(8):19449-52. doi: 10.24327/ijrsr.2017.0808.0695
7. Sharma D, Goel NK, Thakare MM. Healthcare-seeking behavior for reproductive tract infections in India: A study of married women. Indian J Sex Transm Dis AIDS. 2018 Jul-Dec;39(2):79-83. doi: 10.4103/ijstd.IJSTD_97_16
8. Thekdi KP, Mehta P, Thekdi PI. Awareness regarding reproductive tract infections among married women in the rural area of Surendranagar. Int J Reprod Contracept Obstet Gynecol. 2014;3(1):98-101.
9. Hegde SK, Agrawal T, Ramesh N, Sugara M, Joseph PM, Singh S, et al. Reproductive tract infections among women in a peri-urban underprivileged area in Bangalore, India: Knowledge, prevalence, and treatment-seeking behavior. Ann Trop Med Public Health. 2013;6(2):215-20. doi: 10.4103/1755-6783.115183
10. Philip PS, Benjamin AI, Sengupta P. Factors influencing health-seeking behavior for reproductive tract infections among women in India. Indian J Sex Transm Dis AIDS. 2013 Jul-Dec;34(2):83-8. doi: 10.4103/2589-0557.120537
11. Doley P, Yadav G, Gupta M, Muralidhar S. Knowledge, health-seeking behavior, and barriers for treatment of reproductive tract infections among married women of reproductive age in Delhi. Int J Reprod Contracept Obstet Gynecol. 2021;10(2):591-6. doi: 10.18203/2320-1770.ijrcog20210310
12. Verma A, Meena JK, Banerjee B. Reproductive tract infections among women in urban slums: Prevalence and healthcare utilization. Int J Reprod Med. 2015;2015:563031. doi: 10.1155/2015/563031
13. Shingade PP, Suryavanshi J, Kazi Y. Menstrual hygiene among married women: A hospital-based cross-sectional study in an urban slum of Mumbai, India. Int J Community Med Public Health. 2016;3(1):57-61. doi: 10.18203/2394-6040.ijcmph20151218
14. Mani G. Prevalence of reproductive tract infections among rural married women in Tamil Nadu, India: A community-based study. J Pioneer Med Sci. 2014;4(1):18-24.
15. Saleem SM. Modified Kuppuswamy socioeconomic scale updated for the year 2021. Indian J Forensic Community Med. 2021;8(1):1-3. doi: 10.18231/j.ijfcm.2021.001