



Original Article:

Healthcare Seeking Behaviour for Symptoms of Reproductive Tract Infections among Rural Married Women in Tamil Nadu - A Community Based Study

Authors

Geetha Mani, Kalaivani Annadurai, Raja Danasekaran,
Assistant Professors, Department of Community Medicine, Shri Sathya Sai Medical College and Research Institute,
Kancheepuram District, Tamil Nadu, India.

Address for Correspondence

Dr. Geetha Mani,

Assistant Professor, Department of Community Medicine,
Shri Sathya Sai Medical College and Research Institute,
Ammapettai village, Thirupporur-Guduvancherry Main Road,
Sembakkam Post, Kancheepuram District-603108.
Tamil Nadu, India.

E-mail: drgeethamm@gmail.com

Citation

Mani G, Annadurai K, Danasekaran R. Healthcare Seeking Behaviour for Symptoms of Reproductive Tract Infections among Rural Married Women in Tamil Nadu - A Community Based Study. *Online J Health Allied Scs.* 2013;12(3):3. Available at URL:<http://www.ojhas.org/issue47/2013-3-3.html>

Open Access Archives

<http://cogprints.org/view/subjects/OJHAS.html>

<http://openmed.nic.in/view/subjects/ojhas.html>

Submitted: Sep 7, 2013; Accepted: Oct 23, 2013; Published: Nov 15, 2013

Abstract: Introduction: Reproductive tract infections including sexually transmitted infections (RTI/STIs) are problems of public health priority compromising the reproductive health of women especially in developing countries. The problem is compounded by the poor health care seeking behaviour among women due to lack of awareness and sociocultural factors. Objectives: This study is an attempt to assess the health care seeking behaviour of women reporting RTI symptoms in a rural area of Tamil Nadu state of India and to examine the association of background sociodemographic characteristics with Health care seeking behaviour. Methodology: This was a cross sectional, descriptive study conducted between March to November 2011, among married women aged 18-45 years in a rural area of Kancheepuram district, Tamil Nadu in India. The required sample size was chosen by simple random sampling. The participants were administered a standardized, semi-structured schedule. Results: 520 women participated in the study. 173 women (33.3%) of women reported experiencing symptoms of RTI/STI in the past 12 months. Only 51.45% of those who had RTI/STI symptoms sought health care. Private health care facility was preferred by nearly two-thirds. The health care seeking behaviour showed significant association with age group of women, religion, occupational status, type of family and socioeconomic status. Conclusion: There is a need for increasing awareness among women regarding RTI/STIs and their sequelae. Targeted health education programmes should be necessary to improve health care seeking among women.

Key Words: Reproductive tract infections; Married women; Health care seeking

Introduction:

Reproductive health of women has several components such as fertility control, safe motherhood and prevention and control of reproductive tract infections including sexually transmitted infections (RTI/STIs). Prevention and treatment of RTI/STIs are integral to the promotion of reproductive health.(1)

In poor and developing countries, over one-third of healthy life-years lost among women of reproductive age group are due to reproductive health problems including RTI/STIs, while these account for only 12% in the developed world.(2) According to National Family Health Survey (NFHS) 2 (1998-99) estimates nearly 4 out of 10 currently married women in India reported at least one reproductive health problem that could be symptomatic of a more serious RTI. But only 3 out of 10 women suffering from RTI/STI symptoms sought health care. The prevalence of RTI/STIs in Tamil Nadu was 27.8% (urban 53%; rural 50%). Among these one half (51%) have not sought any treatment.(3,4) According to District Level Household and Facility Survey (DLHS) - 3 (2008-2009) report, only 41% of those who had RTI/STI symptoms sought health care. These figures show that the health seeking behaviour among women for RTI/STI symptoms has changed very little over the years.(5)

The Piot and Fransen model of RTI/STI management sums up the problems in treatment of RTI and STI. This model illustrates the obstacles in RTI/STI control. The bottom bar represents all women with RTI/STI in a community and the bars above show how many women are identified at each step. The difference in each step describes the lost opportunities in stopping RTI/STI transmission.(6)

Symptoms of RTI/STIs are often considered to be not serious, or self-limiting or simply a normal consequence of marriage and child bearing, and therefore not severe enough

to warrant attention. Further women often feel embarrassed to discuss such symptoms and do not seek health care for fear of social stigma associated, violation of confidentiality. Lack of economic independence, restriction to physical mobility of women in most communities, poor quality of care, inaccessibility of services, non-availability of female physicians at health care facility and high costs are other obstacles to health care seeking for RTI/STIs.(7,8)

In the past few decades, Government of India has launched several initiatives with a focus on reproductive health of women. There has been a dearth of studies which assess the impact of these initiatives on health care seeking behaviour for RTI/STI among women in Tamil Nadu. This study is an attempt to assess the health care seeking behaviour of women reporting RTI symptoms in a rural area of Tamil Nadu state of India and to examine the association of background sociodemographic characteristics with Health care seeking behaviour.

Methodology:

This community-based, descriptive, cross-sectional study was carried out in Karanai Puducheri village of Kancheepuram District, Tamil Nadu during the period March to November 2011. Based on a study by Chellan R in rural South India (1998-99) where the prevalence of women who sought health care for RTI symptoms was 34.6%, the required sample size was calculated to be 497, with an allowable error of 12%. (9) Assuming 10% non-response, the final sample size arrived at was 547.

All married women in the age group 18 to 45 years constituted the sampling frame. There were 1733 married women in the age group 18 to 45 years based on the voter's list. Using this as the sampling frame, 547 women were chosen by simple random sampling using computer generated random numbers.

A semi-structured interview schedule based on Ever-married women's questionnaire used in DLHS-3 (5) was devised in English, translated into Tamil and back translated into English to check for accuracy and consistency. The schedule was divided into three sections namely, sociodemographic characteristics, perceived symptoms of RTI/STI and health care seeking behaviour for RTI/STI symptoms. The Tamil Schedule was pretested for clarity and reliability.

Ethical considerations: Institutional Ethics Committee approval was obtained for the study. The participants were explained about the study purpose. Participation was voluntary. A written informed consent was received from all the participants. Utmost care was taken to maintain privacy and confidentiality of participants.

A participant was said to have RTI/STI symptoms if she had experienced one of the following symptoms in the past 12 months: abnormal vaginal discharge, ulcers or boils in and around the genital region, pain in lower abdomen which was not related to menses, pain or burning sensation during urination, swelling in the groin and painful blister like lesions in and around vagina. Among currently married women, pain during sexual intercourse and spotting after sexual intercourse was also taken to be indicative of RTI.

The participant was defined to have sought health care, if she has approached health care system on experiencing RTI/STI symptoms, with the purpose of finding a cure.

Data was entered in Microsoft Office Excel 2007 and statistical analysis was performed using Statistical Package for Social Sciences, version 12.0. The background sociodemographic variables, proportion of women experiencing symptoms and the proportion of women who sought health care were expressed in percentages. Cross tabulations were done to compare the health seeking behaviour with background sociodemographic characteristics. Chi-square test was used to analyse the significance of associations. Fisher's Exact P value was used

if any of the cells contained value less than 5. In order to estimate the net effect of each variable on health care seeking behaviour logistic regression model was used. A P value of less than 0.05 was considered significant.

Results:

A total of 520 women participated in the study. 173 women reported one or more symptoms of RTI/STI in the past 12 months. Table 1 gives a description of basic sociodemographic characteristics of the study population and those with RTI/STI symptoms.

Variable	Total (N=520)*	Participants with RTI symptoms (N=173)*
Age group		
25 or less	190 (36.5%)	65 (37.5%)
26-35 years	223 (42.9%)	70 (40.5%)
36 and more	107 (20.6%)	38 (22%)
Educational status		
Illiterate	42 (8.1%)	15 (8.7%)
1-5 years	81 (15.6%)	26 (15%)
6-10 years	209 (40.2%)	75 (43.4%)
Higher secondary	89 (17.1%)	30 (17.3%)
College	99 (19%)	27 (15.6%)
Religion		
Hindu	442 (85%)	148 (85.5%)
Muslim	35 (6.7%)	13 (7.5%)
Christian	43 (8.3%)	12 (7%)
Occupational status		
Not working	420 (80.8%)	144 (83.2%)
Working	100 (19.2%)	29 (16.8%)
Type of family		
Nuclear family	352 (67.7%)	119 (68.8%)
Joint family	168 (32.3%)	54 (31.2%)
Socioeconomic status**		
Class I (> 2830)	117 (22.5%)	41 (23.7%)
Class II (1415-2829)	183 (35.2%)	54 (31.2%)
Class III (850-1414)	138 (26.5%)	48 (27.7%)
Class IV (425-849)	78 (15%)	27 (15.7%)
Class V (< 425)	4 (0.8%)	3 (1.7%)
* Percentage in parentheses		
** Based on Modified BG Prasad classification (Per capita income in Indian National Rupee in parentheses)		

Symptoms of RTI/STI	Frequency*
Abnormal vaginal discharge	133
Genital ulcer	4
Painful urination	28
Blisters in genitalia	22
Pain during sexual intercourse	18
Spotting during sexual intercourse	8
Any symptom	173
Single symptom	140
2 symptoms	26
3 symptoms	7
* More than one symptoms reported	

Figure 1 depicts the process of health care seeking among those with RTI/STI symptoms.

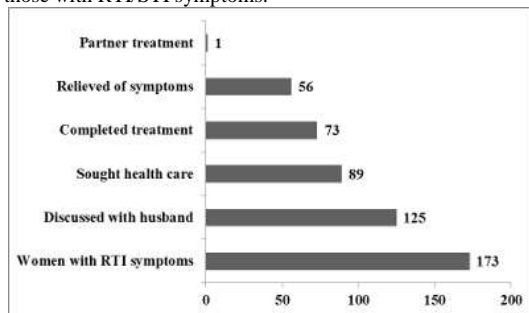


Figure 1: Process of health care seeking behaviour for RTI/STI symptoms

Out of the 89 women (51.45%) who ever sought health care for RTI/STI symptoms, two-thirds (62.9%, 56 out of 89) sought private health care facility, followed by Government health care facility (29, 32.6%) and Indian systems of Medicine (4, 4.5%).

Table 3: Differentials in seeking health care for RTI symptoms by selected background characteristics of women

Variable	Sought health care		Total	P value
	Yes (89)	No (84)		
Age group				
25 or less	32 (49.2%)	33 (50.8%)	65	0.016*
26-35 years	44 (62.9%)	26 (37.1%)	70	
36 and more	13 (34.2%)	25 (65.8%)	38	
Educational status of participant				
Illiterate	4 (26.7%)	11 (73.3%)	15	0.0659
1-5 years	11 (42.3%)	15 (57.7%)	26	
6-10 years	37 (49.3%)	38 (50.7%)	75	
Higher secondary	19 (63.3%)	11 (36.7%)	30	
College	18 (66.7%)	9 (33.3%)	27	
Religion				
Hindu	69 (46.6%)	79 (53.4%)	148	0.0078*
Muslim	10 (76.9%)	3 (23.1%)	13	
Christian	10 (83.3%)	2 (16.7%)	12	
Occupational status				
Not working	69 (47.9%)	75 (52.1%)	144	0.039*
Working	20 (69%)	9 (31%)	29	
Type of family				
Nuclear family	54 (45.4%)	65 (54.6%)	119	0.018*
Joint family	35 (64.8%)	19 (35.2%)	54	
Socioeconomic status				
Class I (>2830)	29 (70.7%)	12 (29.3%)	41	0.0257*
Class II (1415-2829)	26 (48.1%)	28 (51.9%)	54	
Class III (850-1414)	21 (43.8%)	27 (56.3%)	48	
Class IV (425-849)	13 (48.1%)	14 (51.9%)	27	
Class V (< 425)	0	3 (100%)	3	

* P value less than 0.05

The regression results revealed that christian and muslim women, women who were working, those belonging to joint families and higher socioeconomic status were significantly more likely to seek health care for RTI/STI symptoms.

Discussion:

A total of 520 women participated in the study with a response rate of 95.1%. Of the study population, 33.3% (173 out of 520) reported one or more symptoms of RTI/STI. Only 51.4% of the women with RTI symptoms sought health care. This proportion is higher than that reported by Kumar S (30.6%), Prasad JH et al (35%) and Garg S (27.8%).(10-12) But almost half of the women (48.6%) with symptoms have not sought treatment. Only 42.2% of those with symptoms (73 out of 173) have completed treatment and 32.4% (56 out

of 173) have been relieved of the symptoms. So 67.6% of the women with reported RTI/STI symptoms still suffer from symptoms due to lack or of incomplete treatment. This proportion is in agreement with that reported by Bhanderi et al in Gujarat. (8) This high proportion of untreated RTIs suggest that they are retaining their infections for longer durations and are more likely to suffer from severe sequelae.

Two thirds of women (62.9%) sought private health care facility. Only 32.6% of the women sought Government health care facility for such symptoms. Samanta et al reported that 46.3% of women sought Government health facilities in a study from rural West Bengal.(13) Our figures are higher than that reported by Prasad JH et al in a study from rural Tamil Nadu. But the pattern of health facility sought is similar in most studies (Prasad JH, Bhanderi MN)) and in national surveys where majority prefer private health care facility for RTI/STI symptoms despite the cost.(8, 11) This scenario persists despite Government adopting syndromic approach for management of RTI/STIs, which ensures easier diagnosis and complete treatment. The main reasons for not seeking health care reported in many studies were stigma & embarrassment, lack of privacy and lack of female doctors at facility.(8,14-17) So there is an urgent need to overcome these barriers especially with reference to Government health facilities to promote utilization of Government health care facilities and completion of treatment.

The health care seeking behaviour was significantly associated with age group, educational status of participant, religion, occupational status of participants, type of family and socioeconomic status. Higher proportion of women in age group 26 to 35 years were found to seek healthcare for RTI symptoms compared to those younger or older. This could be due to the fact that this is the age group which would seek health care for antenatal, postnatal and child care services more frequently and thereby are in a position to seek care for them as well. Education is positively associated with health care seeking behaviour though not statistically significant. Increase in educational status is associated with increase in health care seeking behaviour. Similar association with educational status has been reported by Bhanderi et al, Chellan R, Rani et al and Durr E Nayab. (8,9,18,19) Comparing health care seeking behaviour between religions, the proportion was less among Hindus compared with Christians and Muslims. But women from other religions constituted less than 15% in our study. A higher proportion of working women sought health care for RTI/STIs compared to non-working women and this association was significant. This confirms the knowledge revealed by similar studies that employment is associated with economic independence and an increased power in decision making and thereby improving their health care seeking behaviour.(8,20) Joint families typical of Indian culture appear to be a promoting factor in health care seeking for RTI/STI symptoms and this association was statistically significant. Lesser women belonging to lower socioeconomic status sought health care compared to those higher up in social strata. Similar association has been reported by Bhanderi et al, Rani et al and Guo et al. (8,18,21)

Conclusion:

Despite a higher proportion of women presenting with RTI/STI symptoms, only one third of the study women sought health care and underwent complete treatment. Health education sessions as part of antenatal and postnatal care services should promote awareness about RTI/STIs and the need to seek health care. Accurate information has to be delivered with focus on sequelae associated with untreated or incompletely treated RTI/STIs. Self help groups women can be trained to impart knowledge among women and assist them in seeking health care. Women should be encouraged to

share their health problems and experiences with husbands and senior female members of the family. Involving both the spouses in Information, Education and Communication (IEC) sessions will contribute to improving the health seeking behaviour of women for RTI/STIs. Women empowerment is the need of the hour.

Our study has a few limitations. The recall period of one year was long. Our study was conducted in a selected village of Tamil Nadu. Tamil Nadu is one of the states with better health indicators. So the observations of this study could not be generalised to the rural areas in other parts of the country. But our study has an advantage of being community based with a high response rate. The poor health seeking behaviour in a population with 91.9% literacy, the type of health facility chosen and the association with certain sociodemographic factors would add to the current knowledge and aid in planning appropriate health care services.

There is a need for rigorous exploratory studies to identify factors which impede women from seeking appropriate treatment for RTI/STIs. These studies would contribute towards designing more appropriate and acceptable health services.

Competing interests: The authors declare that they have no competing interest.

Acknowledgements:

We acknowledge the assistance by volunteers, Ms. Keerthana and Ms. Viji who offered their valuable time for our study. We are grateful to the women who participated in the study.

References:

1. Annual Report to the People on Health, Government of India, Ministry of Health and Family Welfare, September 2010. Available at <http://mohfw.nic.in/showfile.php?lid=121>
2. General Assembly Special Session on ICPD+5, Address of Director- General, WHO, 30 June-2 July, 1999. Available at http://www.who.int/director-general/speeches/1999/english/19990630_icpd+5.html
3. Kanitkar T, Radkar A. Self-reported Symptoms of Reproductive Health Problems of Women in India. *Demography India*. July-December 2004;33(2):231-248.
4. International Institute for Population Sciences (IIPS). District Level Household Survey (DLHS-3), 2007-08:India. Mumbai; IIPS. Available at <http://www.jsk.gov.in/dlhs3/India.pdf>
5. International Institute for Population Sciences (IIPS) and Macro International. 2000. National Family Health Survey (NFHS-2), 1998-99: India. Mumbai; IIPS
6. Training Modules for the Syndromic management of Sexually Transmitted Infections 2nd edition. Module 2 Introducing STI Syndromic Case Management. WHO Press World Health Organisation 2007
7. Jejeebhoy S, Koenig M. The social context of gynaecological morbidity. In: Jejeebhoy S, Koenig M, Elias C. Eds. Research approaches to the study of reproductive tract infections and other gynaecological disorders. Cambridge University Press, Cambridge. 2002.
8. Bhandari 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: Bulletin of the New York Academy of Medicine* 2010;87(2):254-263 doi:10.1007/s11524-009-9423-y.
9. Chellan, R. Socio-demographic Determinants of Reproductive Tract Infection and Treatment Seeking Behaviour in Rural Indian Women. 2004. Accessed on July 14, 2012. Retrieved from <http://paa2007.princeton.edu/papers/70668>

10. Kumar S, Gupta SD, Kumar D, Singh JP, Bhawsar R. Reproductive tract infections and their associated risk factors among the women in Bundi district of Rajasthan. *Journal of Human Ecology*. 2002;13(4):307-310.
11. Prasad JH, Abraham S, Kurz KM, George V, Lalitha MK, John R et al. Reproductive tract infections among young married women in Tamil Nadu, India. *International Family Planning Perspectives*. 2005;31(2):73-82.
12. Garg S, Meenakshi, Singh MMC, Mehra M. Perceived reproductive morbidity and health care seeking behaviour among women in an urban slum. *Health and Population- Perspectives and Issues* 2001;24(4):178-188.
13. Samanta A, Ghosh S, Mukherjee S. Prevalence and health-seeking behaviour of reproductive tract infection/sexually transmitted infections symptomatic: A cross sectional study of a rural community in the Hooghly district of West Bengal. *Indian Journal of Public Health* 2011;55:38-41.
14. Barua A, Kurz K, Reproductive health-seeking by married adolescent girls in Maharashtra, India. *Reproductive Health Matters*. 2001;9(17):53-62.
15. Jejeebhoy S. Adolescent sexual and reproductive behavior: a review of the evidence from India. *Social Science & Medicine*. 1998;46(10):1275-1290.
16. Santow G. Social roles and physical health: the case of female disadvantage in poor countries. *Social Science & Medicine*. 1995;40(2):147-161.
17. Bandopadhyay M, MacPherson S. Women and Health: Tradition and Culture in Rural India. Brookfield, VT, USA; Ashgate Publishing. 1998.
18. Rani M, Bonu S. Rural Indian women's care-seeking behavior and choice of provider for gynecological symptoms. *Stud Fam Plann*. 2003;34(3):173-185.
19. Durr-E-Nayab. Health-seeking behaviour of women reporting symptoms of reproductive tract infections. *Pakistan Development Review*. Published on March 22, 2005. ISSN: 0030-9729
20. Go VF, Quan VM, Chung A, Zenilman JM, Moulton LH, Celentano DD. Barriers to reproductive tract infection (RTI) care among Vietnamese women: implications for RTI control programs. *Sex Transm Dis*. 2002;29:201-206.
21. Guo S, Wang L, Yan R. Health service needs of women with reproductive tract infections in selected areas of China. *Chin Med J (Engl)*. 2002;115(8):1253-1256.