

A cross-sectional study on health-seeking behavior in relation to reproductive tract infection among ever-married rural women in Kancheepuram district, Tamil Nadu

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ABSTRACT

Introduction: Reproductive tract infection (RTI) is the infection of the reproductive tract. Due to the hesitation in reporting the symptoms and receiving the treatment from the health centers, there is a significant dropout. The health care-seeking actions of the women reflects the attentiveness of the disease in that community and the inadequacy of the health care facility. Since the women from the rural area belongs to high-risk group for RTI, this study was conducted with the objective to assess the health care-seeking behavior about reproductive tract infection among rural women in the reproductive age group in Kancheepuram district, Tamil Nadu. Primary care physicians play a vital role in improving health care system, assessing the health-seeking practice helps in improvement and decision making and implementing. **Methods and Material:** A community-based cross-sectional study was conducted in the rural field practice area of Chettinad hospital. A sample size of 330 was arrived by multi-stage random sampling and population proportion to size method. Data was collected using a standardized questionnaire of DLHS- 4 on RTI/STI. Data entered in MS-EXCEL and analyzed using SPSS version 21 and results interpreted. **Results:** The prevalence of RTI was found to be 50.3%. 60.8% of the affected females received treatment with majority of them in the group following home remedies. Significant association was noted between treatment seeking behavior, age, and the socioeconomic status ($P < 0.05$). **Conclusions:** The women in the reproductive age group in the rural areas should be provided with regular health education regarding the symptoms of the RTI and also motivate them to seek appropriate treatment.

Keywords: Reproductive age group, Reproductive tract infection, treatment seeking behaviour

Introduction

Reproductive tract infection (RTI) is the infection of the reproductive tract, including three types of infection stated as follows: (1) Sexually transmitted infections such as Chlamydia, gonorrhoea, chancroid,

and human immunodeficiency virus, (2) Endogenous infection because of the overgrowth of the normal flora of the reproductive tract, and (3) Iatrogenic infection, mainly because of the improper procedures like unsafe abortion, unhygienic delivery practices, etc.^[1]

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Due to the hesitation of the people to come over with the symptoms and proceed with the treatment from the health

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centers, there is a significant dropout in the national health finances as well as the individual household profits.^[2]

RTI affects both individual as well as the family level by its impact over the economic status in the developing countries.^[3] In spite of increased complications and consequences of the disease, the condition is still neglected leading to chronic infections. Though it can be cured with early diagnosis, it still remains undiagnosed and untreated.^[4] Keeping in mind the complications and the sequelae, the prevention, control, and management of RTI was given a high precedence in the national programs such as Reproductive and Child health II and National AIDS Control Program (NACP –IV).^[5]

The health care seeking actions of the women reflects the attentiveness of the disease in that community and the inadequacy of the health care facility. Most of the women in the community have a negligent attitude toward the symptoms in the early phase till the appearance of complications, sometimes even till the morbid circumstances.^[6] This is due to the stigma toward the RTI.^[6] To aid the health-seeking behavior among the females, there is a necessity for the health education program,^[7] which is majorly provided by the primary care physicians as they are the one those who provide health care services at the ground level and emphasize the needs that helps to avail the health care services to decrease the consequences^[8] because any delay in treatment seeking and obtaining diagnosis and treatment can lead to continuous transmission of diseases and the complications.^[9] Considering all these issues, WHO (World Health Organization) recommended the Syndromic Management of the sexually transmitted/RTIs in 1990.^[4]

Since health-seeking behavior is the outcome of the health education, it is essential to know about the health-seeking behavior as it imparts about the access and the barrier involved in the treatment modality for health ailments and also helps to know the mode of patient choice so that the decision making and planning of health services can be guided by the outcomes observed in regard to the utilization,^[8] hence it is important to know the health-seeking practice of the community at the level of primary care and primary care physicians are those who play a vital role in implanting as well as sensitizing health care practice according to the target in the sustainable development goal that can be achieved by delivering health services via primary care system.^[10]

Since the women from the rural area belongs to high-risk group for RTI, this study was mainly focused among rural women, with the objective to assess the health care seeking behavior about RTI among rural women in the reproductive age group in Kancheepuram district, Tamil Nadu.

This study will be useful in assessing the health-seeking practice in the community specifically for the primary care physicians it helps to know the treatment practice among the rural women.

Aims and Objectives

To assess the health care seeking behavior about the RTI among the ever-married rural women of reproductive age group in Kancheepuram district, Tamil Nadu.

Subjects and Methods

A cross-sectional study was conducted in the rural field practice area of Chettinad hospital and research institute for a period of 6 months. The total population of rural field practice area was 39,545, among which 19,065 were females. About 5,062 women were in the reproductive age category, and samples were selected by line listing. Antenatal, postnatal, and postmenopausal women were excluded from the study. After reviewing several articles, the sample size was estimated to 292 and to account for nonresponse rate (among 15%) due to non-cooperation and non-availability of the participants, a total of 330 subjects were enrolled. Multistage random sampling was followed in sample selection and samples were selected on the basis of population proportion to size. A structured validated questionnaire (DLHS-4 Survey questionnaire) eliciting the symptoms including menstrual hygiene as well as the health-seeking behavior was used as the study tool. The data collected was entered in Microsoft Excel and coding done for further statistical analysis. The statistical analysis was done using the SPSS software version 21.0. Chi-square test was applied for significance. *P* value < 0.05 was considered significant.

Results

Among 330 study participants, 166 (50.3%) presented with either one of the symptoms of RTI. Of the 166 women, 103 (60.8%) received treatment for their symptoms from various health care facilities and 65 (39.2%) did not receive any treatment in spite of presence of symptoms.

Table 1 describes the sociodemographic profile of the study participants. Among the subjects who perceived treatment, majority of them were in the age group 28–37 years (45.6%) and most of the participants who received treatment for their symptoms were completed their middle school level of education (46.8%). Most of the participants (42.7%) belong to the upper lower class. Majority of the participants (33%) belong to Hindu religion, and 32.9% were living in a nuclear family.

Table 2 describes the distribution of study subjects based on their treatment seeking attitude. Among the study subjects, 27.9% had any of the menstrual disturbances including the RTI symptoms and 31.2% of them followed a specific mode of treatment, among which majority preferred following home remedies as a treatment option.

Table 3 describes the association between the sociodemographic factors and the treatment seeking behavior. Significant association was noted between age and the treatment seeking

Table 1: Frequency distribution of demographic variables

Socio demographic variables	Frequency	Percent
Age		
18-27 Yrs	75	22.7
28-37 Yrs	156	47.3
38-49 Yrs	99	30.0
Education		
Primary	56	17.0
Middle School	32	9.7
High School	79	23.9
Higher Secondary	54	16.4
Graduate	58	17.6
Illiterate	51	15.5
Family Type		
Nuclear	194	58.8
Joint	81	24.5
Three Generation	55	16.7
SES		
Upper	9	2.7
Upper Middle	49	14.8
Lower Middle	134	40.6
Upper Lower	103	31.2
Lower	35	10.6
Religion		
Hindu	233	70.6
Christian	66	20.0
Muslim	31	9.4
Marital Status		
Married	299	90.6
Widow	18	5.5
Divorce	13	3.9

Table 2: Distribution of population based on their treatment behaviour

Characteristics	Frequency	Percentage
Sanitary Facility		
Yes	320	97.0
No	10	3.0
Any Menstrual Problems		
Yes	92	27.9
No	238	72.1
Heard of RTI		
Yes	300	90.9
No	30	9.1
Seek Treatment		
Yes	103	31.2
No	227	68.8
Place of Treatment		
Hospital	20	6.1
Private Clinic	28	8.5
PHC	25	7.6
Home Remedy	45	13.6
No	212	64.2

behavior as well as socioeconomic status of the study participants (*P*- value < 0.05).

Figure 1 represents the preferred mode of treatment by the study subjects who received treatment for any symptom of the RTI. It is noted that most of the participants followed home

Table 3: Association between the socio demographic factors and the treatment seeking attitude

Characteristics	Received treatment		Chi square	<i>p</i> -value
	Yes	No		
Age				
18-27	34 (72.8%)	41 (28.2%)	10.778	0.005
28-37	47 (45.6%)	109 (44.4%)		
38-49	22 (21.3%)	77 (78.7%)		
Educational status				
Primary	17 (30.3%)	39 (69.7%)	6.134	0.293
Middle school	15 (46.8%)	17 (53.2%)		
High school	20 (25.3%)	59 (74.7%)		
Higher secondary	18 (33.3%)	36 (66.7%)		
Graduate	20 (34.4%)	38 (65.6%)		
Illiterate	13 (25.4%)	38 (74.6%)		
SES				
Class I	1 (11.1%)	8 (89.9%)	10.978	0.027
Class II	11 (22.4%)	38 (75.6%)		
Class III	36 (26.8%)	98 (73.2%)		
Class IV	44 (42.7%)	59 (57.3%)		
Class V	11 (31.4%)	24 (68.6%)		
Family				
Nuclear	64 (32.9%)	130 (67.1%)	0.700	0.705
Joint family	23 (28.3%)	58 (71.7%)		
Three generation	16 (29%)	39 (71%)		
Religion				
Hindu	77 (33%)	156 (67%)	1.344	0.509
Christian	17 (25.7%)	49 (74.3%)		
Muslim	9 (29%)	22 (71%)		
Marital status				
Living with husband	94 (31.5%)	204 (68.5%)	2.898	0.408
Widow	4 (22.2%)	14 (77.8%)		
Divorce	4 (30.7%)	9 (69.3%)		

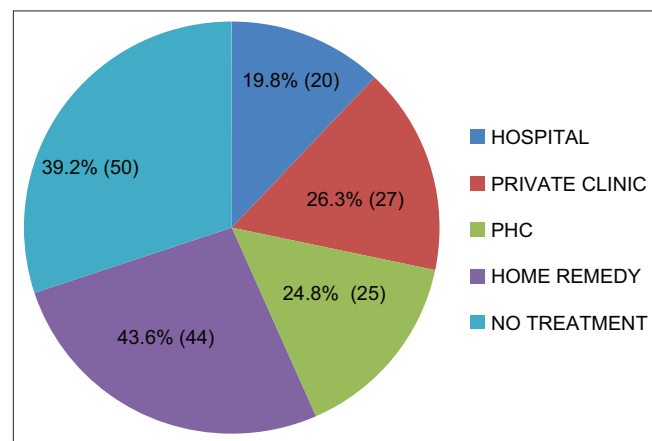


Figure 1: Treatment seeking behavior about RTI

remedies (43.6%) as major treatment option, whereas general hospitals are given least preference in their choice of place of treatment with 19.8% due to the lack of awareness about the health care facilities available at the primary care level.

Discussion

Among the females who presented with the any one of the symptom of RTI, only half of them, that is, 60.8% received the

treatment and majority (43.6%) of them who received treatment followed home remedies for their relief. A study which was conducted in the Chennai basis areas showed the prevalence of RTI as 45.5% and the treatment seeking behavior was based on the educational status of the population and there was a significant association between the two. The treatment seeking behavior was 46.2% and 80% of the symptomatics avail treatment from the private centers.^[11] In a study conducted in Punjab, it was observed that the prevalence was 45% with common symptom being low back ache 45% followed by vaginal discharge and the vulval itching. The health-seeking behavior was notably linked with family income and it is been affected by increase in age and sexual history.^[12] The study conducted by Shingade and Kazi *et al.* reported the most commonly affected age group is 26–30 years with 34.4% prevalence. Among the infected people, 52.4% had not received any treatment and 48% received treatment. They also concluded that there is no association between the prevalence of infection, religion, and the type of family.^[13] In a study done among the tribal women of Himachal Pradesh, India Knowledge, care seeking and prevalence of RTI, revealed the prevalence of infection to be 22.7% with the presenting complaint of lower abdominal pain with 37.10% followed by vaginal discharge 31.6%, 40% of the affected women sought treatment.^[14] In the study conducted among the rural women in Telangana by P. Mani. C. reddy *et al.*, it was found that 60.5% of the participants availed treatment from the registered medical practitioner.^[8]

Since majority of the study participants from the study followed home remedies as their first choice, it is essential to take necessary measures to identify the needs and emphasise about the available facilities.

Summary

More than half of the study participants presented with any of the symptoms suggestive of RTI/STI of which more than half of them had received the treatment.

It is found that the majority of the study participants followed home remedies for their relief which emphasises the lack of adequate knowledge about the health care facilities available which can be delivered via health education programs that can be organised by the primary level care physicians.

Association between age and socioeconomic status with the health-seeking behavior for treatment as well as choice of place of treatment was found to be statistically significant.

However, there was no association between the choice of place of treatment to education status, religion, and marital status.

Conclusion

In conclusion, RTI was common among the females of reproductive age group in the rural community with a prevalence of 50.3%. This is mainly because of the reason that symptomatic

patients do not seek treatment for their complaint which is due to several reasons like lack of awareness about the symptom of the diseases, stigma associated with the disease, poor menstrual hygiene and the personal hygiene practices, and also due to lack of the female physicians in the government sectors which makes them to follow mainly the home remedies or else visit the private practitioner. To overcome all these reasons, the females in the reproductive age group in the rural areas should be provided with regular health education regarding the symptoms of the RTI and also motivate them to seek required treatment for that particular complaint. Health education in the area of menstrual hygiene and personal hygiene should be provided not only to the females in the reproductive age group but also to the females of the adolescent age group which helps in reduction in the prevalence of RTI. During the treatment of RTI, it should be made sure that the partner is also treated for that particular infection in order to prevent the recurrence of the infection. The present study suggests that the health education should focus more among the females of low socioeconomic class and the early adults to overcome the symptoms of RTI and this might be an immediately feasible method to decrease the burden of the RTI/STI in the community.

Recommendations

1. Health education using the various study material (IEC).
2. Appointment of female health personnel in the STI/RTI clinic.
3. Dissemination of information regarding the services available at the STI/RTI clinics and Utilization of these services.

Ethical approval

The study was conducted after obtaining the ethical approval from the institutional ethical committee. Informed consent was obtained from the participants.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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