



Health seeking behavior and barriers to accessing services for RTI/ STI among Reproductive Age Women of Dehradun, Uttarakhand

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Abstract

Background: *It has been established beyond doubt by different community based studies that prevalence of RTI is quite high among reproductive age group women but the care seeking behavior is quite poor. Hence it was imperative to study the prevalence of RTI/STI, health seeking behavior and barriers to care seeking in the reproductive age women. A cross sectional study was done for a period of 6 months in a tertiary care centre. A systematic random sampling using PPS was used for sampling and chi square test with $p < 0.05$ as significant at CI of 95% was considered.*

Keywords: *RTI/STI, Reproductive age women, Care Seeking behavior, barriers.*

Introduction

Women particularly are at high risk for several reproductive health problems especially RTI/STIs. Since they are preventable and most of them are curable, hence imperative that we study the prevalence and determinants of the health seeking behaviour. Some 340 million new cases of curable sexually transmitted infections (STIs) occur every year.^{(1),(2)}

Reproductive tract infections (RTIs) are caused by organisms normally present in the reproductive tract or introduced from the outside during sexual contact or medical procedures. These categories of RTI are called endogenous, sexually transmitted infections (STIs), and iatrogenic, based on how they spread.⁽³⁾

Apart from causing physical sufferings it also causes the mental and psychological trauma to the

person suffering from RTI/STI. Hence also called 'social disease'.⁽⁴⁾

The true incidence of RTI/STI are almost impossible to know due to under reporting of cases, stigma and the inadequacy to diagnose them by laboratory diagnosis. The morbidity due to RTI/STI are widespread, more than 1 million cases are acquired every day globally.⁽⁵⁾

Hence for a mix of biological and social reasons women are more likely to have RTIs, less likely to seek care, more difficult to diagnose & suffer more severe disease sequelae.⁽⁶⁾

Aims & Objectives

This study aims to find the prevalence, describe care seeking behaviour and barriers to accessing RTI/STI services among reproductive age women of Dehradun, Uttarakhand, India.

Materials & Methods

Type of study

A community-based cross-sectional study was conducted.

Study area

The field practice areas of Community Medicine Department, in a tertiary care centre of District Dehradun, Uttarakhand.

Study period

Jan2015-June2015

Sample size

It was calculated by the formula :

$$4pq/L^2$$

Where p is the prevalence of positive character
q is 100-p (L is allowable error)

The prevalence of self-reported RTI/STI symptoms among Indian women has been found to be 11% - 18% in nationally representative studies^(7,8) and 40% - 57% in various other studies⁽⁹⁾, while the prevalence of laboratory-diagnosed RTIs has ranged from 28% to 38%.

,so considering the prevalence of RTI/STI as 50% at 95 % CL , 10 % allowable error , sample size was calculated as :

$$4 \times 50 (100 - 50) / (10 \% \text{ of } 50)^2 = 400$$

non response rate as 20% of 400 , the sample size = 400+80=480

A total of 965 reproductive age women, 485 from Urban and 480 from Rural field practice areas were taken.

Sampling technique

Systematic random sampling was used. 485 individuals were taken from UHTC and 480 from RHTC, respectively. These individuals were interviewed from different localities and villages of UHTC and RHTC, respectively, by applying 'Probability Proportional to Size (PPS)'. In a household, if more than 1 female in reproductive age were consenting, then one of them was selected by lottery method.

Sampling unit

Households of rural and urban field practice areas of a tertiary care centre of Dehradun

Study unit

Married women of reproductive age group residing in the urban and rural field practice area are the study population.

Inclusion criteria

1. Married Females in the reproductive age group.
2. Residents of study area.
3. Ready to give consent.

Exclusion criteria

1. Post menopausal women
2. Females who had Hysterectomy

Study tool

Structured, pre designed and pre tested survey instruments was administered to study subjects. The socio-demographic profile of the study subjects was collected. In the reproductive health section questions related to Menstrual Hygiene practices, use of sanitary latrine was asked. The information was collected from subjects about clinical signs or symptoms of RTI/STI based on WHO syndromic approach, the source of treatment, care seeking behavior , and reasons for not seeking care when having RTI/STI symptoms were included. The section also included questions about source of RTI/STI information.

Data Management and Statistical Analysis

Generated data was collated and analyzed on the software's SPSS (Version 17), EPI-Info & Microsoft Excel. Rates, ratios, proportions were calculated and cross tables with variables to ascertain 'association,' were made. Chi square and Fisher Exact test were used as tests of significance. Value of $p < 0.05$ was considered to be significant and $p < 0.01$ as highly significant.

Results

The average age of subjects is 32 yrs and maximum (39.38%) are in age group of 30-40yrs followed by 31.46% in age of 40-49 yrs. Most of the subjects (48.39%) are educated up to Primary only even though majority of the subjects (37%) belong to Upper middle class. 46.42% of the household are going for Open Field Defecation. Only 23.83% of the females followed menstrual Hygiene which included Use of sanitary Napkin or Homemade single Use Napkin, Frequent change, Use of soap to clean hands after use of toilet and Cleaning of perineal area.

Prevalence of RTI/STI

Respondents' reproductive tract conditions are shown in Table 1. The majority of respondents (28.29%) reported having RTI/STI symptoms in the past three months. Among respondents who reported current RTI/STI symptoms, 22.79% reported having abnormal discharge, 20.31% lower abdominal pain, 18.65% complained of dyspareunia and 15.02% genital itching.

Health seeking behaviour for RTI/STI symptoms

The care seeking behavior of the study subjects are presented in Table 3a. More than half (63%) of the respondents had sought care for the symptoms of RTI/STI in the past three months, whereas 37% had not. Of those respondents who had sought care, 57.6% delayed more than one week out of which 10 % delayed more than two weeks. Those who had sought care used a range of healthcare agencies. About 15.11% had resorted to household treatment and majority, 33.15% had sought care from a pvt. hospital, and 25.59%

from a Govt. Hospital/PHC. 37% of the respondents with symptoms did not sought care. This finding is almost consistent in all the studies that most of the subjects of RTI/STIs preferred to seek care from Private hospitals/clinics. The reason may be that they preferred private services to Govt. due to less waiting period, convenient timings i.e. evening consultation possible and more privacy. Quacks/Jharphuk/'Bengali Doctor' were important source of treatment in significant (26.15%) number of study subjects.

Distribution of study population by first response/action in illness (table 3b)

The first response to symptom of RTI/STI in Maximum subjects, 24.91% is Traditional Healer/Quacks/'Bengali doctor'. Only 21.98% females went for a qualified practitioner's care as a first response. It was only after trying other measures that they sought specialist care.

The most common reason for seeking care from a particular provider was Faith (41.8%) and next was availability (22.30%). Other causes like Economic and Accessibility were 3rd and 4th reason for seeking care from a particular provider.

Source of Information (table 3c)

The most common Source of Information of RTI/STI was found to be neighbor (53.68%) followed by Relative (32.44%) and Health functionaries were responsible for dissemination of knowledge about RTI/STI in only 3.21% of respondents. Media played a very insignificant role (1%) in providing Health Education about RTI/STI.

Barriers to Care Seeking

Around 37% of symptomatic women had not sought any treatment; the reasons cited were 'Lack of privacy or couldn't open up' (43.56%) and another 43.56% subjects 'didn't feel the need to seek care'. The most common reason for discontinuing care was that they found it unnecessary/no benefit (84.89%) from the treatment. The explanation for this could be that they sought inappropriate or inadequate treatment (incomplete treatment). The economy as the reason

for discontinuing treatment was only in 7.55% females.

Treatment Seeking Behavior and The Distance Travelled, SES and Source of Treatment with Literacy Status

Seeking Treatment for RTI/STI and The Distance Travelled for it

*Upper means Upper and Upper Middle of Mod. B G Prasad Classification,*Lower means Lower, Upper lower and Lower middle

The care seeking behavior was found to significantly associated with distance travelled to seek care (Table 5.1)

It can be seen from the above table (Table.5.2) that statistically significant association existed between SES ('upper' and 'lower') of study subjects and their seeking treatment for RTI/STI

Source of treatment for RTI/STI and Literacy

It can be observed from table 5.3 that source of treatment for RTI/STI was significantly associated with status of literacy or education of the study subjects; 'Govt. facilities/providers' as sources of treatment was found to have strong significance of association (p<0.018).

Time of seeking treatment and SES

Distribution of study subjects according to time of seeking treatment and SES (table 6)

The time to seek care was found to be Highly significant statistically with Socio economic class. Hence SES has significant impact on willingness for Care Seeking.

Results from another study suggest that the main barriers to seeking health care among patients with RTI/STI symptoms were both structural (e.g. travel costs, clinic opening hours, and social stigma) and individual seek treatment from private pharmacies and their decision to seek care is compromised by high costs, long waiting time, and judgmental attitudes⁽¹⁰⁾

1. Sociodemographic characteristics of the study subjects

Characteristics	Mean Age	n = 965	%
Age group (years)	32		
15-20		07	0.7
20-30		236	24.46
30-40		380	39.38
40-49		342	35.46
Education			
No formal school		230	23.8
Primary school		467	48.39
Secondary or high school		335	34.71
Graduate and Above		43	4.20
Socio-economic Class			
Upper		202	20.9
Upper Middle		357	37
Lower Middle		232	24
Upper Lower		172	17.8
Lower		3	0.3
Type of Latrine Used			
Sanitary Latrine		517	53.57
Open Field		448	46.42
Menstrual Hygiene			
Followed		230	23.83
Not Followed		735	76.17

2. Respondents' Reproductive Tract Condition (N = 965)

Variable	n = 965	%
RTI/STI sign/symptoms currently or in last 3 months		
Yes	273	28.29
No	692	71.71
Current RTI/STI sign or symptoms*		
Vaginal Discharge	220	22.79
Genital itching	145	15.02
Lymph node Enlargement	16	1.65
Lower abdominal pain	196	20.31
Pain on intercourse	180	18.65
Pain on urination	160	16.58
Genital wart/ulcer	70	7.2

Table 3a: Care seeking behaviour among respondents RTI/STI symptomatic (n =273)

RTI/STI symptomatic currently or within last 3 months	n = 273	%
Sought care for RTI/STI symptoms		
Yes	172	63.0
No	101	37.0
Time delay until seeking care (days)		
(n=172)		
<7	73	42.4
7-14	82	47.6

≥ 15	17	10
Source of RTI/STI treatment the last time		
Place of Seeking Treatment		
Pvt. Hospital/Clinic	57	33.15
Govt. Hospital/ PHC/CHC	44	25.59
RMP/Quacks	45	26.15
Others/Household	26	15.11

3b. Distribution of study population by first response/action in illness

Response in illness	No. of Respondents 273	Percentage
Home remedy	44	16.12
Traditional healers	68	24.90
Qualified practitioners	60	21.98
No treatment	101	37
Reason for Treatment		
Faith	72	41.86
Economic	29	16.86
Easy availability	38	22.30
Accessible	17	9.84
Well Equipped	7	4.06
All Above	8	4.64
Other	1	0.54

3 c. Source of Information

Source of Information of STI	No. of Respondents (n=965)	Percentage
Neighbour	518	53.68
Relative	313	32.44
T.V	8	0.83
Radio	2	0.20
Health functionaries	31	3.21
Other	93	9.64

4. Barriers to Care Seeking

4.1 Reason for no Treatment	N=101	
Don't feel the need	44	43.56
Service not easily available	3	2.96
Service not easily accessible	2	1.98
Don't know where to go/too far	8	7.92
Couldn't open Up/lack of privacy	44	43.56

4.2 Reason for discontinuing Rx	N=172	%
Economic	13	7.55
Condition Improved	11	6.40
Unnecessary/No benefit	146	84.89
Any Other	2	1.16

5.1. Seeking Treatment for RTI/STI and the Distance Travelled for it

Distribution of study subjects according to Seeking treatment and Average distance Travelled

Average Distance Travelled for Seeking Treatment(kms)	Treatment Taken	Treatment not Taken
< 5	169(64.25%)	94(35.74%)
>5	3(30%)	7(70%)

$\chi^2 = 4.85$

p=0.032

5.2. Seeking T/t for RTI/STI and SES

Distribution of study subjects according to seeking treatment for RTI/STI and SES

Seeking treatment for RTI/STI	Socio-economic Status	
	*Upper (n=29)	*Lower (n=244)
Yes	12(41.37%)	160(65.57%)
No	17(58.62%)	84(34.43%)

$\chi^2 = 6.51$

p=0.01

5.3. Source of treatment for RTI/STI and Literacy

Distribution of study subjects according to source of treatment of RTI/STI and literacy

Source of treatment	Literacy		χ^2 , P
	Illiterate(n=110)	Literate(n=62)	
Pvt. facilities/ Providers	36(32.73%)	21(33.87%)	0.00, 0.97
Govt. facilities/ Providers	20(18.18%)	22(35.48%)	5.53, 0.018
RMP/Quack	34(30.91%)	11(17.74%)	1.5, 0.219
Others	20(18.18%)	6(9.68%)	1.62, 0.202

6. Time of seeking treatment and SES

Distribution of study subjects according to time of seeking treatment and SES

Time of seeking treatment	Socio-economic status(n =273)	
	Upper(n=29)	Lower(n=244)
<7 days	13(44.82%)	60(24.59%)
7-14 days	12(41.37%)	70(28.68%)
≥15 days	4(13.7%)	13(5.3%)
Do not report	0(0%)	101(41.39%)

$\chi^2 = 44.07$

p=0.00000000

Discussion

Distribution of study subjects with any or the other syndrome of RTI/STI & according to their seeking treatment (table no.3a) shows that, out of a total of 273(28.29%), 101(37.0%) of them did not do so. As regards respondents who did not seek any treatment and reasons thereof, 44(43.56%) each, either 'did not feel the need' to seek services or 'could not open -up' i.e. could not share their problems due to shyness.

The study respondents under discussion were found to have 'stigma' due to social sanction continues to be a barrier, cross-cutting different socio- demographic & epidemiological backdrops. The, 'first contact' for rural/ peri-urban people living in slums/settlements and seeking health counsel/medical help are usually the 'traditional healers' and 'RMPs' (Registered Medical Practitioners) who are essentially 'quacks' and not qualified in modern medicine (PSI, SMS-MCH). Knowledge and affordability are two primary factors affecting treatment seeking in such resource-poor settings.

Interestingly preference for qualified providers could be observed as an uniform population attribute across study setting including in the population under discussion- though, to the contrary, 'first contact'/'first response' in illness was largely with providers not qualified in modern medicine. This highlights 'unmet need' in care seeking and the constraints there of i.e, mainly affordability or economic hardship besides, of course, knowledge and rest of the four As- Availability, Accessibility, Affordability and Acceptability. Another corroborative study by Aggarwal P. et al in their study at Community Development Block of Doiwala, Dehradun observed that 56% of respondents first took treatment from quacks/traditional healers.⁽⁴⁾

Table 3c. reveals more than half the respondents i.e 518(53.68%) considered 'Neighbors' as their immediate source of health information; another 313(32.44%) sourcing information from their 'Relatives' and importantly, quite insignificant proportion of respondents citing either TV, Radio

or even Health functionaries as their sources of Health information.

It can be reasonably argued that an in-migrant/itinerant population with atypical livelihood pursuits would have very little conventional media exposure for recreation etc so that they could benefit from attendant health information as well.

Treatment seeking behavior for RTI was observed to be significantly associated with SES. Preferred source for seeking health as pvt institution was significantly associated with SES.

The distance travelled to preferred health facility was significantly associated with SES. The reason for discontinuation of treatment had significant association with SES.

Conclusions

The most common reason for not seeking treatment was that they did'nt feel the need (43.56%) and almost same number said they 'could not open up'. 84.89% females who started treatment discontinued it, as they felt it was untreatable. The reason for this could be that they opted care from Unqualified person leading to inappropriate and inadequate treatment.

The community however resource poor can be proactive in seeking desired services only when it will have identified its health need; to this end, community endorsed BCC i.e. appropriate materials and methods of communication must be the primary component of any health initiative so that the community becomes aware, sensitized and also understands its role as an important stakeholders. Education and outreach are needed to reduce the stigma, embarrassment and lack of knowledge related to RTIs. The low social status of women, appears to be a significant influence on their low rates of treatment.⁽¹¹⁾

Only an aware and informed community with desired capacity can proactively ensure appropriate service delivery for its own benefits.

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