



AWARENESS ABOUT REPRODUCTIVE TRACT INFECTION AND TREATMENT SEEKING BEHAVIOR AMONG MARRIED WOMEN OF AGE 15-44 YEARS IN A RURAL AREA OF BUNDELKHAND REGION OF UTTAR PRADESH, INDIA

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ABSTRACT

Objective: The present study was designed to evaluate the awareness about reproductive tract infection (RTI) among the married women of age 15-44 years in a rural area of Bundelkhand region of Uttar Pradesh.

Methods: This was a cross-sectional study design conducted among married women of reproductive age group (15-44) in the rural area. 296 married women were included in the study. The simple random sampling was used for the selection of study subjects.

Results: Nearly half (48%) of the women were aware about at least one of the symptom of RTI. However, 28.7% were aware ≥ 2 symptoms of RTI. Most (66.2%) of the women perceived that they were aware about RTI through their relatives/friends and 48.6% of the women did conversation with the partner regarding RTI. The prevalence of RTI was 35% (RR=0.65, 95%CI=0.82-1.36, $p=0.69$) lower among the women who were aware about RTI than those who did not aware. There was increasing trend in the level of awareness with increase in age. The awareness was also significantly ($p=0.0001$) higher among higher SES level. The educated women and husband had significantly ($p<0.01$) higher awareness than illiterate women. The problem of RTI was faced by 66.9% and 75.8% of them sought treatment. Only 12.7% received treatment from government hospitals.

Conclusion: As in this study, the care seeking at health facility is lower, there is a need to enhance the health facilities to make aware to the population about the quality of health facilities run by the government in this area.

KEYWORDS : Reproductive Tract Infection, Rural, Awareness, Care seeking

INTRODUCTION

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 reproductive tract infection/sexually transmitted infections (RTI/STIs), while these account for only 12% in the developed world¹. In rural areas, the lack of awareness and health facilities in turn lead to a high incidence of STDs/RTIs.

An analysis of "District Level Household Survey - 3" (DLHS - 3) data showed that awareness of RTI / STD was 28%. The women were informed about this from friends, T.V and Radio. Among them 19% of these women reported the symptoms of RTI / STDs and vaginal discharge was the most common symptom (14 percent). The number of reporting women was higher among Muslim than Jains. The Punjab showed a low prevalence of RTI / STDs among currently married women but high knowledge and treatment seeking behaviour². A substantial number of women in northern Vietnam who reported RTI symptoms did not seek care³. RTI / STDs rank second as a cause of healthy life lost among women in the reproductive age group, in developing countries.

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^{4,5}.

The present study was designed to evaluate the awareness about RTI among the married women of age 15-44 years in a rural area of Bundelkhand region of Uttar Pradesh.

MATERIAL AND METHODS

This was a cross-sectional study design conducted in the rural field practice area of Department of Community Medicine and Public Health, MLB Medical College, Jhansi, UP. Married women of reproductive age group (15-44) residing in the study area for a period of at least 6 month preceding the study were included in the study. The calculated sample size was 267 on the basis of the prevalence of RTI/STI being 22.4% (Patnaik et al, 2007) with 80% power and 5% significance level. A total of 303 married women were enrolled in the study. Out of these, 296 had complete information, thus, the results were analyzed for 296 married women.

The simple random sampling was used for the selection of study subjects. A central location in each village was fixed and the direction to start the interview was randomly decided by spinning the pencil. The direction towards which the pencil point faced was chosen and the first household in that direction was selected and enquired for the availability of any married women of age 15-44 years in the house. If no married women was found in the house, the next household was taken and enquired the same. Every household was covered following left hand principle until desired sample size was achieved from each village. Their awareness was recorded and care seeking pattern was noted who faced the problem of RTI in last one year preceding the interview.

The data was analyzed by using EPI INFO Windows version and descriptive statistics has been reported. The results are presented in proportions. The odds ratio of chi-square trend was calculated and the p -value < 0.05 was considered significant.

RESULTS

Nearly half (48%) of the women were aware about at least one of the symptom of RTI. However, 28.7% were aware ≥ 2 symptoms of RTI. More than half (66.2%) of the women perceived that they were aware about RTI through their relatives/friends and 19.7% received awareness by AWW/HW. About one tenth (10.6%) got information regarding RTI from books/newspapers. The awareness about spread of disease was found among 29.1% of the women. About half (48.6%) of the women did conversation with the partner regarding RTI. The prevalence of RTI was 35% (RR=0.65, 95%CI=0.82-1.36, $p=0.69$) lower among the women who were aware about RTI than those who did not aware. However, this was statistically insignificant. The prevalence was also insignificantly ($p=0.45$) lower among those who knew ≥ 2 symptoms of RTI (41.2%). The prevalence was almost similar among the different source of awareness. The prevalence was 38.4% and 44.4% who were aware about spread of disease and made conversation with the partner respectively (Table-1).

Table-2 depicts awareness about RTI in relation to socio-demographic profile the women. There was increasing trend in the level of awareness about RTI with increase in age. The awareness was about two fold significantly ($p=0.01$) higher among the women of age 30-34 (53.2%, OR=2.11), 35-39 (54.7%, OR=2.24) and 40-44 (57.1%, OR=2.48) than 15-19 (35%, OR=1.00) years. The awareness was also significantly ($p=0.0001$) higher among higher SES level compared with lower SES. The educated women and husband had significantly ($p<0.01$) higher awareness than illiterate women. The service class women and husband had higher awareness than others, however, this was statistically not significant ($p>0.05$). The awareness was lower who get married below the age of 18 years, however, this was not

statistically significant ($p > 0.05$).

All the women were asked about the problem of RTI they faced preceding one year of the study. Out of the total women interviewed, 66.9% of them faced any one of the symptom of RTI and 75.8% of them sought treatment. Out of those who sought treatment, 26% received from private doctors and 20.7% from quacks. However, 19.3% received treatment at PHC and 16% at Sub-centre. The treatment from the government hospitals was taken by 12.7% of the women. Only 5.3% of the women took medicines from the medical shops (Table-3).

DISCUSSION

This study highlights the level of awareness about RTI and treatment seeking behavior among rural married women age 15-44 years in Bundelkhand region of Uttar Pradesh. Awareness about RTIs among married is low in India and level of awareness of RTI is even lower than in other developing countries including many African countries^{6,7}.

In the present study, older women had better awareness about RTI than younger women. This was consistent with the study conducted by Prusty and Unisa⁸ in which younger women had low knowledge about RTI than older women. Many studies in south-east Asia had also reported low understanding of RTI/STIs among women. For instance, a study in rural Bangladesh reported that only 12% of the study population had the basic understanding of RTIs⁸. The study explained this great disparity in the proportion of the various populations who were aware of RTIs could be explained from the rural nature of India and Bangladesh where most of the respondents were illiterates, when compared to the urban settings of Nigeria and Kenya where the literacy level is higher⁹. In a study in the district of Bareilly, Uttar Pradesh, the women never had/unaware about RTIs were 74.19% in rural area⁹. In this study, the awareness was also significantly ($p = 0.0001$) higher among higher SES level compared with lower SES. The educated women and husband had significantly ($p < 0.01$) higher awareness than illiterate women. The service class women and husband had higher awareness than others, however, this was statistically not significant ($p > 0.05$). The awareness was lower who get married below the age of 18 years, however, this was not statistically significant ($p > 0.05$).

DLHS-3 data revealed that 29% of ever married women have heard of RTIs/STIs and it is higher among urban women (39.4 percent), recently married (marital duration 0-4 months) women (31.7 percent), more educated women (56.2 percent) and women married to more educated husbands (38.4 percent) as compared to rural women (26.9 percent), older marriage cohort (27.2 percent), non-literate women (21.7 percent) and those married to non-literate husbands (22 percent). This also showed that women have heard about RTIs/STIs from multiple sources, 68.4, 29.8, 24.4, 11.5, 9.2 and 3.9 percent from relatives/friends, television (TV), radio; print media, health personnel and husbands respectively, but only 0.7 percent from school/adult education programmes¹⁰. In the present study, 66.2% of the women perceived that they were aware about RTI through their relatives/friends and 19.7% received awareness by AWW/HW. About one tenth (10.6%) got information regarding RTI from books/newspapers. Only 9.9% and 8.5% received information from husband and doctor respectively.

In this study, 66.9% of the women faced any one of the symptom of RTI and 75.8% of them sought treatment. In a study in Bareilly district of Uttar Pradesh, 25.81% women suffered from STDs/RTIs in rural areas during period starting from at age of marriage to till date of survey in the study areas. It has been reported that 40% of women sought treatment in Uttar Pradesh¹⁰. In this study, 26% received treatment from private doctors, 19.3% at PHC, 12.7% at government hospital and 20.7% from quacks. In a study, it was observed that out of the 144 women who experienced one or more reproductive health problems only 40 (27.8%) consulted a health facility for treatment¹¹. According to a study carried out by National AIDS Control Organisation¹² (1999-2000), it was observed that in spite of the availability of low cost and appropriate technologies to manage RTIs and STDs in the primary health care setting most of the sexually transmitted infections remain hidden and unrecorded and a very small proportion of people (5-10%) suffering from the disease attend government health facilities. In another study, 62.9% sought private health care facility. Only 32.6% of the women sought Government health care facility for such symptoms¹³. Samanta et al reported that 46.3% of women sought Government health facilities in a study from rural West Bengal¹⁴.

In this study, 48.6% of the women did conversation with the partner regarding RTI. This finding is lower than the reported figure for Uttar Pradesh in which 72.4% discussed RTIs/STIs related problems with their husbands those having RTIs/STIs symptoms¹⁰. This difference may be due that the literacy rate in Bundelkhand region is lower than other parts of Uttar Pradesh.

With respect to geography, women from northern region and north-eastern women have less probability to seek treatment than their southern counterparts. Those who are not aware of RTI/STI symptoms are less likely to seek treatment. Thus, here is need to focus on rural and poor women with a special focus on strengthening their knowledge about RTI/STI infections.

CONCLUSION

As in this study, the care seeking at health facility is lower, there is a need to enhance the health facilities to make aware to the population about the quality of health facilities run by the government in this area.

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Conflict of interest: None

Table-1: Awareness about RTI and its association with prevalence of RTI

	Awareness (n=296)		Prevalence of RTI		
	No.	%	No.	%	RR (95%CI), p-value
Awareness about RTI in general	142	48.0	65	45.8	0.65 (0.82-1.36), 0.69
Knew about ≥ 2 symptoms	85	28.7	35	41.2	0.90 (0.67-1.20), 0.45
Source of awareness#	n=142				
AWW/HW	28	19.7	15	53.6	0.81 (0.56-1.15), 0.18
Doctor	12	8.5	6	50.0	0.76 (0.43-1.35), 0.27
Husband	14	9.9	6	42.9	0.65 (0.35-1.19), 0.07
Books/newspaper	15	10.6	6	40.0	0.60 (0.32-1.12), 0.04*
Relatives/Friends	94	66.2	41	43.6	0.54 (0.42-0.69), 0.001*
Awareness about spread of disease	86	29.1	33	38.4	0.81 (0.60-1.10), 0.16
Conversation with partner regarding RTI	144	48.6	64	44.4	0.99 (0.77-1.28), 0.95

RR-Relative risk, CI-Confidence interval, #Multiple response, *Significant, AWW-Anganwadi Worker, HW-Health Worker

Table-2: Awareness about RTI in relation to socio-demographic profile the women

Demographic profile	No. of women		Women with awareness		Odds ratio
	No.	%	No.	%	
Age in years					
15-19	20	6.8	7	35.0	1.00 (Ref.)
20-24	77	26	29	37.7	1.12
25-29	71	24	36	50.7	1.91
30-34	47	15.9	25	53.2	2.11
35-39	53	17.9	29	54.7	2.24
40-44	28	9.5	16	57.1	2.48
Chi-square for trend, p-value					5.97, 0.01*
SES					
I	34	11.5	9	26.5	1.00 (Ref.)
II	51	17.2	15	29.4	1.16
III	60	20.3	30	50.0	2.78
IV	114	38.5	63	55.3	3.43
V	37	12.5	25	67.6	5.79
Chi-square for trend, p-value					20.29, 0.0001*
Education of women					
Illiterate	146	49.3	55	37.7	1.00 (Ref.)

Upto junior high school	91	30.7	46	50.5	1.69
Upto intermediate	43	14.5	29	67.4	3.43
Graduate & above	16	5.4	12	75.0	4.96
Chi-square for trend, p-value	17.39, 0.0001*				
Education of husband					
Illiterate	41	13.9	11	26.8	1.00 (Ref.)
Upto junior high school	90	30.4	40	44.4	2.18
Upto intermediate	133	44.9	72	54.1	3.22
Graduate & above	32	10.8	19	59.4	3.99
Chi-square for trend, p-value	10.61, 0.001*				
Occupation of women					
Housewife	263	88.9	126	47.9	1.00 (Ref.)
Labor	23	7.8	9	39.1	0.70
Service	10	3.3	7	70.0	2.54
Chi-square for trend, p-value	0.40, 0.53				
Occupation of husband					
Agriculture	82	27.7	30	36.6	1.00 (Ref.)
Skilled labor	40	13.5	15	37.5	1.04
Unskilled labor	106	35.8	65	61.3	2.75
Business	29	9.8	12	41.4	1.22
Service	20	6.8	14	70.0	4.04
No occupation	19	6.4	6	35.3	0.80
Chi-square for trend, p-value	2.65, 0.10				
Age (in years) at marriage					
<18	195	65.9	87	44.6	1.00 (Ref.)
≥18	101	34.1	55	54.5	0.67
Chi-square, p-value	2.58, 0.10				

*Significant

Table-3: Pattern of care seeking of RTI preceding one year of the study, if faced problem of RTI

	No. (n=296)	%
Faced problem of RTI		
Yes	198	66.9
No	98	33.1
Sought treatment		
	n=198	
Yes	150	75.8
No	48	24.2
Treatment sought from		
	n=150	
Govt. hospital	19	12.7
PHCs	29	19.3
Sub-centre	24	16.0
Private doctor	39	26.0
Drug from medical shop	8	5.3
Quacks	31	20.7

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