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## Research Article

# Knowledge about sexually transmitted disease (STD) among the women in a rural population of Uttar Pradesh

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### Abstract:

**Objective:** To assess the knowledge about sexually transmitted disease (STD) among the women in a rural population of Uttar Pradesh.

**Methods:** The study was carried out on married women in the age group 15-45 years in the villages in the area of Rural Health training Centre of Hind Institute of Medical Sciences, Atariya, Sitapur, UP. The women in the age group 15-45 years from each cluster were interviewed and information collected on a pretested questionnaire based on syndromic approach. The women were interviewed for their perception toward health seeking behaviour.

**Results:** One fourth of women were between 30-34 years (25%). The knowledge about STD among the women was 10.8%. The knowledge about STDs was higher in the age group of 25-29 years (31%) as compared to other age-groups. The knowledge about STDs was found to be higher amongst those belonging to Upper caste (22.2%) as compared to other castes. The knowledge about STDs was higher among educated women. Majority of the women viewed that the STDs occurred due to having unsafe sex with infected male partner (50%). The main source of the knowledge was Radio/Television and News Papers etc each constituted 42.3%.

**Conclusion:** The knowledge about STDs in India has been a topic of interest in population research because of its apparent direct relationship with the lack of health facilities and indirectly, with poverty. Women's education is also an imperative factor for the knowledge about STDs.

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**Keywords:** Sexually transmitted disease, Knowledge, Rural area, Women

### Introduction

Sexually transmitted diseases (STDs) are a very important health challenge for adolescents. Many national and international governmental and non-governmental health agencies are running programs to reduce the incidence of these diseases. The declining age of first sexual intercourse has been preferred as one possible explanation for the increase in numbers of STDs. According to data from different European countries, the average age of first sexual intercourse has decreased over the last three decades, with increasing proportions of adolescents reporting sexual activity before the age of 16 years (1).

WHO estimate shows more than 333 million new cases occur with four common STDs (chlamydia, syphilis, gonorrhea and trichomoniasis) each year (2, 3). Now-a-days there are at least 30 conditions transmissible through sexual contact (4, 5). Reproductive tract infections are extremely common in females (6).

Rai et al (7) on studying adolescence knowledge about STDs reported the of lack of knowledge (51.2%). This, also, is in accordance with other community based studies that revealed

awareness levels ranging from 35.8%-64.8% (9, 10). Sridawruang et al (11) who investigated the parental route as a source of sexual education and reported that parents have difficulties discussing sex with their children and consider discussing sexual matter to be a delicate issue.

The present study was conducted to assess the knowledge about sexually transmitted disease (STD) among the women in a rural population of Uttar Pradesh.

### Material and Methods

The study was carried out on married women in the age group 15-45 years in the villages in the area of Rural Health training Centre of Hind Institute of Medical Sciences, Atariya, Sitapur, UP.

### Study Population

The study was carried out in rural areas using 30 cluster sampling technique as suggested by WHO. The women in the age group 15-45 years from each cluster were interviewed and information collected on a pretested questionnaire based on syndromic approach. The women were interviewed for their

perception toward health seeking behaviour. They were asked if they had any problem such as vaginal discharge, genital ulcer, lower abdomen pain etc. using syndromic approach method.

**Sample Size**

Based on earlier studies elsewhere, it is estimated the nearly 60-70 percent of women suffer from one or the other infection of the reproductive tract, of which about 10 percent are due to STDs. Based on this prevalence, the sample size was calculated which came out to be 459 with a sampling error of 10 percent and 95 percent confidence interval. Thus, it was proposed to cover 16 women per cluster and thus a total of 480 women were included in the study.

**Sampling Technique**

A list of villages under RHTC was prepared along with their population. The sampling interval was calculated and accordingly 30 clusters were selected.

**Instruments**

An interview schedule was developed to collect various information from the women in the age 15-45 years. Another schedule was developed for the interview of medical practitioners. These schedules were pretested. In view of the experience gained from pretesting, certain modifications were incorporated and schedule was finalised.

**Data collection**

The data was collected by the investigators who were conversant with the techniques of interview and data collection. The schedules were checked by the corresponding authors on the date of interview and discrepancies if any were rectified and explained to the investigators.

**Analysis and Report Writing**

The data so collected was analysed using EPI-Info6 software package developed by WHO. The tables were generated to cover various aspects of the study and a report of the same was prepared in the form of present document.

**Results**

Table-1 presents the demographic profile of surveyed women. One fourth of women were between 30-34 years (25%). Majority of the women belonged to Hindi community (86.9%). More than one third of women belonged to backward class (44.8%) and majority were housewife (81%). More than half of women were illiterate.

**Table-1: Demographic profile of women**

Religion	(n=480)	
	No.	%
Age in years		
15-19	30	6.3

20-24	98	20.4
25-29	117	24.4
30-34	120	25.0
35-39	74	14.4
40-44	41	8.5
<b>Religion</b>		
Hindu	417	86.9
Muslim	63	13.1
<b>Caste</b>		
Upper	90	18.8
Backward	215	44.8
Scheduled	174	36.3
Scheduled Tribe	1	0.2
<b>Occupation</b>		
Housewife	389	81.0
Labour	69	14.4
Business	11	2.3
Service	7	1.5
Others	4	0.8
<b>Family income per month (Rs.)</b>		
4000 +	53	11.0
3001-4000	58	12.0
2001-3000	98	20.4
1001-2000	216	45.0
1000 and below	56	11.6
<b>Education</b>		
Illiterate	327	68.1
Primary	33	6.9
Middle	84	17.5
High School	27	5.6
Intermediate	9	1.9
Graduation & +	0	0.0

The knowledge about STD among the women was 10.8%. The knowledge about STDs was higher in the age group of 25-29 years (31%) as compared to other age-groups. The Hindu women had more knowledge about STDs (11.7%) than Muslims (4.8%). The knowledge about STDs was found to be higher amongst those belonging to Upper caste (22.2%) as compared to other castes. The knowledge about STDs was higher among educated women. Not much difference was found in the knowledge about STDs according to income (Table-2).

**Table-2: Knowledge about STDs by demographic profile**

Demographic profile	No. Inter viewed	With knowledge	
		No.	%
<b>Age group (Yrs.)</b>			
15-19	30	2	3.8
20-24	98	11	21.1
25-29	117	16	31.0
30-34	120	10	19.2
35-39	74	8	15.4
40-44	41	5	9.5
<b>Religion</b>			

Hindu	417	49	11.7
Muslim	63	3	4.8
<b>Caste</b>			
Upper	90	20	22.2
Backward	215	21	9.7
SC	174	11	6.3
ST	1	0	0.0
<b>Education</b>			
Illiterate	327	20	6.1
Primary	33	3	11.0
Middle	84	14	16.6
High School	27	9	33.3
Inter	9	6	66.7
Graduate +	0	0	0
<b>Occupation</b>			
Housewife	389	43	11.0
Labourer	69	4	5.8
Service/Domestic help	7	5	71.4
Petty Business	11	0	0.0
Others	4	0	0.0
Family income (Rs per month)			
4000+	53	6	11.3
3001-4000	58	7	12.0
2001-3000	98	12	12.2
1001-2000	216	21	9.7
1000 and below	56	6	10.7
<b>Total</b>	<b>480</b>	<b>52</b>	<b>10.8</b>

Majority of the women viewed that the STDs occurred due to having unsafe sex with infected male partner (50%) (Table-3).

**Table-3: Knowledge about cause of STDs**

Cause of STDs	(n=52)	
	No.	%
Unsafe sex by healthy women with infected male	26	50.0
Unsafe sex by healthy male with infected women	4	7.7
Through open wound in genital	3	5.8
Contact of semen, vaginal fluid with a cut/boil in the genital	2	3.8
Don't know	14	26.9
Can't say	3	5.8
No response	0	0.0
Others	0	0.0

The main source of the knowledge was Radio/ Television and News Papers etc each constituted 42.3% (Table-4).

**Table-4: Source of knowledge about STDs**

Source	(n=52)	
	No.	%
Radio/TV	22	42.3
News Paper/Magazine/ Bookish knowledge	22	42.3
Friends	4	7.6
Husband	4	7.8

**Discussion**

The power to demand better quality health services arises from informed individuals. Awareness about sexual health issues would raise participation and involvement with the understanding about individual and community rights. This would go a long way in improving the utilization of health services and demand for high quality health care.

In this study, 10% of women had experienced STIs in the study area. Many women and men suffer from reproductive tract infections including STDs. An estimated 340 million new cases of curable STIs occur each year with 151 million of them in South and Southeast Asia (12). Prevalence of STIs is detained by number of factors. An association between pelvic inflammatory diseases (PID) women and husband extramarital sexual relation has been well documented (13).

In the present study, among the respondents of this study, the majority were aged 15 to 29 years of age which was in agreement with some other studies (14, 15). Women of increasing age are exposed to new experiences relating to sexuality and reproduction (14). The 15-29 years age group have relatively good knowledge and awareness about STDs. This finding is to a study conducted in Bangladesh (16).

In this study, there was association between the knowledge and awareness about STDs with the level of education of women. Education positively contributes to the knowledge and awareness on STDs. This is in agreement with the study by Mosharaf et al (16).

As in the present study, the role of socioeconomic status in the development of STIs has been highlighted in a number of studies (17, 18). Low socio-economic status is associated with greater high risk sexual behaviour (19). This would lead to a higher incidence of STIs. In an Ethiopian study, it was shown that 51% of women who came to STI clinic with symptoms had a confirmed clinical diagnosis (20). Another study in India reported that 72% of women with STI symptoms had a clinically confirmed diagnosis. Despite these results it needs to be stressed that the presence of STI symptoms is not indicative of an STI diagnosis. Increasing age was found to protect against having STI symptoms. Sexually transmitted infections are diseases of young sexually active women so it is expected that older women would have fewer symptoms (21).

Mass media exposure, such as radio and TV is associated with the knowledge about STDs among the adolescents. The exposure to such media can communicate knowledge about STDs. This can profoundly influence the attitude and behaviour of people (14). The considerable contribution of the mass media was shown in a mass media project using a TV programme to provide adolescents in Zaire with knowledge about STDs (22). This is similar to the association found by Khan (14) and Goel & Pandey (23) in their study. The major source of information about STDs for in this study was the mas media.

Educated women can process health related information from mass media (Radio/Television). They can make good investment in terms of health. If the women have spontaneous and induced abortions, then maternal resources get deplete

through continuous pregnancies and lactation.

### Conclusion

The knowledge about STDs in India has been a topic of interest in population research because of its apparent direct relationship with the lack of health facilities and indirectly, with poverty. Women's education is also an imperative factor for the knowledge about STDs.

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