

# **Determinants of RTIs/STIs Prevalence among Women in Haryana.**

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*An increase in HIV infection has contributed to the problem of RTIs/STIs in India. This paper finds a high prevalence of RTI/STI among the rural women in Haryana. Half of the rural women have no knowledge of the mode of transmission of RTIs and their sources. Relatives and friends are the best source of RTI/STI information. Logistic regression is used to understand the factors responsible for the prevalence of RTI/STI in Haryana.*

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Sexually Transmitted Disease (STD) is one of the determinants of HIV transmission. In India, it is estimated that 5 percent of the adult population has STD symptoms (NACP-3, 2006). Reproductive Tract Infections (RTIs) and Sexually Transmitted Infections (STIs) are affecting health, fertility, infant mortality, postorbital and puerperal sepsis, ectopia pregnancy, fatal and prenatal death, cervical cancer, infertility, chronic physical pain, emotional distress and social rejection in women.

Reproductive Tract Infections (RTIs) is defined as any infection of the reproductive system. They include Sexually Transmitted Infections (STIs) and other infections of the reproductive system that are not caused by sexual contact. These other infections may be the result of overgrowth of bacteria and other organisms that normally live in the vagina (WHO 2005). Reproductive Tract Infections also include infections that results from inadequate infection prevention practices by health care providers. Sexually Transmitted Infections are infections which pass from person to another person by sexual contact. Sexually Transmitted infections (STIs) are not part of a broader group of infections known as Reproductive tract Infections (RTIs). Infections of the genital tract (vaginitis, cervicitis and pelvic inflammatory diseases) contribute half of the morbidities that take place [WHO 1999]. It is also known that the presence of STIs increases the risk of HIV transmission by a factor of three to five [Adler M. et.al. 1996].

There are different socio-demographic economic, sexual, medical and behavioural factors related to RTIs/STIs. The less educated women are more likely to affect from RTIs/STIs due to lack of health care knowledge. Educated women are more capable to seek the source of treatment and they can use health care facilities more efficiently. 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. The probability of RTIs/STIs increases due to the weakness in women body. In India most of the deliveries take place at home and not being assisted by health practitioner. Morbidity during delivery often results into RTIs/STIs. Women from the rural areas and lower income groups are more likely to affect from RTIs/STIs.

Every woman has a right enjoyment of higher attainable standard of physical and mental health. It is necessary for every woman to have healthy sexual life without any fear of contracting diseases. With this approach the reproductive and child health programme place lot of emphasis on promoting and encouraging healthy sexual behaviour among women through various information, education and communication activities. Health worker are also expected to educate women about cause and methods of prevention of RTIs/STIs and encourage them to seek medical treatment.

### **Objectives of the study**

- The main objective of this study is to find the prevalence of RTIs/STIs among women in Haryana. This state is educationally and economically dominant in India. Therefore high RTIs/STIs prevalence is not expected among women in Haryana.
- The study plans to understand the level of knowledge and mode of RTIs/STIs transmission. The knowledge of transmission is very high among the urban women as compare to the rural women.
- There are various socio-economic and demographic factors responsible for RTIs/STIs among women. That is why this study is also planned to understand the socio-economic and demographic linkages of RTIs/STIs among women in Haryana.
- Present study also examines the health seeking behaviour of women in Haryana. In urban areas, women have more access to health care facilities as compared to women in rural areas.

### **Data and Methodology**

This paper is analysed based on data from the District Level Household Survey under RCH Programme (DHLS-RCH) of Haryana conducted during 2002-2004 by Indian Institute of Health Management Research (IIHMR), Jaipur in collaboration with International Institute of Population Sciences (IIPS), Mumbai. The fieldwork of round II

of Reproductive and Child Health Projects was done in two phases during 2002-2004. During phase-I half of the district were covered and remaining half were covered during phase-II.

In Haryana, 20,205 households were covered; from these surveys household 18,769 currently married women aged 15-44 and 13,200 of this household were interviewed. In this survey a systematic multistage stratified design was adopted. In each district 40 primary sampling unit (PSU – Village / Urban frame size) were selected with probability proportional to size (PPS) using the 1991 census data. All the villages were stratified according to population size and female literacy was used for implicit arrangements within each state. The number of PSU in rural and urban area was divided on the basis of percent of urban population in the districts. A minimum of 12 urban PSU's was selected in each district in case of the percent urban was set at 1000 complete residential household from 40-selected PSU. In the second stage within each PSU, 26 residential households were selected with Circular Systematic Random Sampling (CSRS) procedure after house listing. In order to take care of non-response due to various reason sample was inflated by 10 percent (i.e. 1,100 households).

In DHLS-RCH information was collected as the common symptoms of reproductive tract infections and sexually transmitted infections from women in the three months immediately preceding the survey.

### **Methods**

The currently married women from selected households were interviewed by administering the questionnaire specially designed for women to capture the information on awareness, knowledge and presence of any symptoms of RTIs/STIs in three months preceding the survey. Currently married women were asked about their awareness of RTIs/STIs, and if they were aware, they were further questioned about the source of information and mode of transmission of the diseases. The prevalence of reproductive tract infection and sexually transmitted tract infection is judged by their symptoms. All the respondents were asked about symptoms of RTIs/STIs and were also asked whether they had any of them. In case of the presence of at least one symptom, they were further asked whether they sought treatment for such problem and if they had sought treatment, details regarding the source of treatment also recorded. The topic of RTIs/STIs is quite

sensitive. An intensive training of the investigators was conducted together with this sensitive information and it was carefully edited before data entry analysis.

### **Socio- Economic profile of Haryana**

The study is mainly concentrated on Haryana state. Haryana is economically more developed state though it continues to be predominantly an agriculture state. Haryana has been transformed rapidly into an industrial economy. According to the provisional tables of census of 2001, Haryana had a population of 21,14,4564 accounting for 2.1 percent of total population of India.

The Schedule Caste population in the state is 4091110. The sex ratio of Haryana is 861 females per thousand males, which is lower than that of India's sex ratio (933). The population density of Haryana (478) is substantially higher than the density of the country as a whole (325). Haryana is one of the educationally forward states of India. According to 2001 census, the literacy rate among the population is 7 and above it was 67.9 percent compared with 64.8 percent for India as whole. The literacy rate was 79 percent for males and 56 percent for females in Haryana. The literacy rates in the state are higher than that in the country. Around 30 percent of population in Haryana is living in urban areas. For 1996-2001, life expectancy in Haryana is projected to be 63.9 years for males and 67.4 years for females.

### **Source of knowledge and mode of transmission**

The DLHS-RCH survey administered the questionnaire and collected information from currently married women about knowledge and symptoms of RTIs/STIs, source of information and its mode of transmission. Secondly, the data is also collected on treatment-seeking behaviour of women from various public and private facilities. The following table represents modes of transmission and source of knowledge about RTIs/STIs among women in Haryana.

### **Modes of Transmission of RTIs/STIs:**

There are different modes of transmissions of RTIs/STIs. Such modes are responsible for its transmission. The following table shows the detail about the various modes of RTIs/STIs transmissions.

**Table 1.1: Modes of RTIs/STIs transmission in Haryana**

Modes of Transmissions	Haryana		
	Rural	Urban	Total
Homosexual	1.7	3.1	2.2
Heterosexual	13.3	21.8	16.1
Lack of Personnel Hygiene	26.2	33.7	28.7
Others	21.2	21.3	21.2
Don't Know	47.6	38.7	44.7

2.2 percent of women in Haryana knew that RTIs/STIs could be transmitted through sexual route, particularly homosexual intercourse (Table 1.1). Around 16 percent of women in Haryana knew that transmission happens through heterosexual intercourse. Lack of personal hygiene is also contributes to RTIs/STIs transmission among women. In Haryana one third of women in urban area (33.7 percent) are reported that lack of personal hygiene leads to RTIs/STIs transmission. In rural area 26.2 percent women reported that lack of personal hygiene leads to RTIs/STIs transmission. In Haryana 47.6 percent rural women do not have knowledge about different modes of transmission of RTIs/STIs.

In Haryana 54.3 percent women have heard about the RTIs/STIs from different sources. The above table shows that the knowledge about RTIs/STIs from relatives and friends are 79.5 percent. Relatives and friends are the best source of knowledge for RTIs/STIs. In Haryana, information provided about RTIs/STIs by radio (4 percent) is very low. In urban area 28.8 percent women get knowledge from television. The women from rural area are reported low (16.7 percent) RTIs/STIs knowledge by television. News papers/books /magazines (27 percent) and slogan/pamphlets/posters/wall hoardings (8.3 percent) contributes more RTIs/STIs information in urban area. Doctor and health workers contribute 9.9 percent information about RTIs/STIs. In rural areas, the information of RTIs/STIs from doctors and health worker is very low. Community meeting contributes 5.9 percent RTIs/STIs information in Haryana. School teachers contribute only 3 percent RTIs/STIs information in the state.

**Table 1.2 Source of knowledge about RTIs/STIs**

<i>Source of Knowledge</i>	<i>Haryana</i>		
	Rural	Urban	Total
Ever heard about RTI/STI	51.3	61.6	54.3
Radio	3.8	4.6	4.0
Television	16.7	28.8	20.7
News Papers/ Books/Magazines	11.7	27	16.8
Slogan/Pamphlets/ Posters/Wall Hoardings	3.4	8.3	5.0
Doctor	5.8	7.8	6.4
Health Workers	3.9	2.5	3.5
School Teachers	3.2	2.5	3.0
Community meeting	6.1	5.4	5.9
Relatives/Friends	81.7	75.0	79.5
Others	10.5	9.4	10.1

### **Prevalence of STIs/RTIs in Haryana**

The DLHS-RCH data is collected on the RTIs/STIs by their symptoms in Haryana. The presence of different symptoms namely problems with pain in lower abdomen, low backache, pain during sexual intercourse, bleeding swelling in the groin, frequent / painful passage of urine, some mass coming out of vagina, any involuntary escape while coughing and sneezing, swelling / lump in breast etc. Women who had experience at least one or more reproductive health problems were considered either having or at risk of contracting RTIs/STIs. The RTIs/STIs prevalence is classified on the basis of different symptoms reported by the eligible women.

**Table 1.3 Prevalence of RTIs/STIs among Women in Haryana**

Prevalence of RTI/STI	<i>Haryana</i>		
	Rural	Urban	Total
Boils /Ulcers/Warts around Vulva	2.2	1.9	1.4
Pain in lower abdomen not related to menses	9.2	7.3	3.7
Low backache	13.9	12.2	5.9
Pain during sexual intercourse	5.2	3.8	3.1
Bleeding after sexual intercourse	0.9	0.7	0.4
Swelling in the groin	3.5	2.6	1.5
Frequent /Painful passage of urine	7.1	5.6	3.2
Fever	5	5.1	4.2
Some mass coming out of vagina	8.8	7.5	6.9
Any involuntary escape of urine while coughing or sneezing	2.4	2.2	1.9
Swelling /lump in breast	0.9	0.5	0.6
Any RTIs/STIs infection	30.2	26.9	29.2

The above table shows that 29.2 percent of women in Haryana are reported at least one symptom of RTIs/STIs. The RTIs/STIs prevalence is observed more (30.2 percent) among rural women. The prevalence reported by women was more about low backache (5.9 percent), some mass coming out of vagina (6.9 percent) in the state. In rural area more women reported low backache (13.9 percent), some mass coming out of vagina (8.8 percent), frequent/painful passage of urine (7.1 percent). The women who reported boils /ulcers/warts around vulva (1.4), bleeding after sexual intercourse (0.4), swelling /lump in

breast (0.6 percent), any involuntary escape of urine while coughing or sneezing (1.9) is very low in the state.

### **Socio-economic Characteristics of Women with RTIs/STIs**

It is clear that RTIs/STIs prevalence is high in the state. The prevalence is widespread between the different communities and classes. Table 1.4 classifies such prevalence according to various socio-economic and demographic backgrounds of the women in Haryana.

**Table 1.4 Socio-economic Characteristics of women who had RTIs/STIs**

Socio-Economic variables	Haryana	
	Percent	Total Eligible Women
<b>Rural</b>	73.1	4015
Urban	26.9	1477
<b>Age</b>		
Below 20	12.2	670
20-29	43.2	2371
30-39	36.7	2015
40+	12.4	683
<b>Religion</b>		
Hindu	89.7	4925
Muslim	5.2	287
Sikh	4.8	263
<b>Caste</b>		
Scheduled caste	24.2	1329
Other Backward Classes	31.6	1733
Others	44.2	2429
<b>Literacy Level</b>		
High School	45.7	2508
Higher Secondary school	7.7	425
<b>Number of Children</b>		
Child one	12.9	709
Children two	23.7	1302
Children three	51.7	2840
<b>Abortions</b>		
Abortion	20.5	1127
<b>Contraceptive Use</b>		
IUD	4.3	238
Condom/Nirodh	9.8	539



Oral Pills	2.5	137
<b>Place of Delivery</b>		
Delivery in health facility	11.1	612
<b>Delivery Conducted</b>		
Delivery conducted by health personal	8.2	450
<b>RTIs/STIs Knowledge</b>	53.9	2960
<b>Standard of Living Index (SLI)</b>		
Low SLI	16.1	882
Medium SLI	47.0	2582
High SLI	36.9	2028

Prevalence of RTIs/STIs in Haryana is very high (73.1) among rural women. It is lower among urban women (26.9). Such prevalence is very high (43.2 percent) in age group of 20-29 women in Haryana. The RTIs/STIs prevalence is similar among the age group of 40-44 (12.4) and below 20 age group women (12.2) in the state. The prevalence among 30-39 age group women is 36.7 percent. The RTIs/STIs prevalence is very high (90 percent) among Hindu women in Haryana. This is mainly because majority of Hindu population is living in the State. Among the Sikh women, the reported RTIs/STIs prevalence is very low (4.8 percent). The prevalence of RTIs/STIs is 24.2 percent among Scheduled Caste women. It is very high for Other Caste (44.2) and Other Backward Caste (31.6) women. Except sociological background of women, the educational differences are also found among the women who reported RTIs/STIs. The prevalence of RTIs/STIs is more (45.7) among the high school studied women than the higher secondary studied women (7.7). The prevalence of RTIs/STIs is 51.7 percent among the women, who had more than three children. Such prevalence increases with more number of children. The women with one child have less (12.9 percent) possibility of RTIs/STIs. The women who had experience of pregnancy wastages or history of abortions are more likely to report RTIs/STIs. There are 20.5 percent women reported RTIs/STIs who had abortions/pregnancy wastages. Condom/Nirodh is most bragged instrument in order to reduce the prevalence of RTIs/STIs. The prevalence of RTIs/STIs among condom users is 9.8 percent. But the lowest RTIs/STIs are reported among pills (2.5 percent) using women. Institutional deliveries help to reduce the prevalence of RTIs/STIs. In Haryana, around 11 percent women reported RTIs/STIs who had institutional deliveries. The

knowledge of RTIs/STIs plays an important role in order to reduce its transmission. In Haryana 53.9 percent women have knowledge about RTIs/STIs.

Household income is the better indicator of RTIs/STIs prevalence. Better the economic status of households; less is the incidence of RTIs/STIs. The values of standard of living Index lies between one and three. One standard of living Index being the poorest household and third being the richest household. The influence of family wealth/income on prevalence of RTIs/STIs can be assessed through this index. Around 16.1 percent women who reported RTIs/STIs in Haryana are found in lower standard of Index. Similarly, around 47 percent women were found in medium standard of living index. In Haryana, 36.9 percent of women who were reported to have RTIs/STIs were with high standard of living index. The percent of women with RTIs/STIs declines at higher standard of living index. From the above table we found that there is major socio-economic differences are observed about the prevalence of RTIs/STIs among women. It is difficult to find the significant relationships of various socio-economic and demographic variables with RTIs/STIs prevalence in the state.

#### **Logistic Regression results of RTIs/STIs Prevalence in Haryana**

We have used logistic regression (Greene 2003) in order to identify the various socio-economic, demographic reasons behind the prevalence of RTIs/STIs among women in Haryana. The dependent variable was either women suffered from any of the RTIs/STIs or not. The independent variables selected from the data and fall into different categories such as age, religion, caste, education, number of children, history of abortions/still births, contraceptive used, place of delivery, delivery conducted by health personal and standard of living index etc. Such selections of the independent variables are based on the detail review of literature and questionnaire. All the selected independent variables were either grouped or category in nature. The results are presented in the following table.

The prevalence of RTIs/STIs in Haryana is positively related to rural women. The rural women have 1.11 times more affected from RTIs/STIs. There is no any statistical relationship observed below 20 age group women. The RTIs/STIs prevalence is positively related in the age group of 30-39. The incidence is 1.19 times higher in this age group. In Haryana, the prevalence is positive and statistically significant for Muslim women. The odd ratio shows that the Muslim women are 2.12 times more affected from RTIs/STIs. This is because Muslim women wear more cloth and remains in the house for longer period of time. Due to lack of sunshine and cleanliness, the RTIs/STIs prevalence could be high among such women. If the women have high school education then the

RTIs/STIs is 1.13 times higher. If the women have one child then the probability of RTIs/STIs is less. The odds are 13-16 percent less and significant for women who have one or two children. If the women have spontaneous or induced abortions at more than one time, then the RTIs/STIs are 1.68 times higher.

**Table 1.5: - Logistic Regression Results of RTIs/STIs among Women**

Socio-economic Variables.	Haryana	
	Odds ratio	Significant
Rural	1.11*	0.00
Age<20	1.03	0.72
21-29	1.16	0.12
30-39	1.19***	0.09
40-50	0.97	0.81
Hindu	1.32	0.31
Muslim	2.01**	0.01
Sikh	1.00	0.99
Scheduled Caste	1.57	0.68
Other Backward Caste	1.36	0.78
Other	1.39	0.76
High school	1.13*	0.00
Higher secondary	0.92	0.29
Child one	0.87***	0.07
Children two	0.84**	0.01
Children three	0.99	0.94
Abortions	1.68*	0.00
IUD	1.02	0.87
Condom/Nirodh	0.93	0.22
Oral pills	0.73*	0.00
Place of delivery	0.86*	0.00
Delivery conducted by health personal	0.88**	0.04
Knowledge of RTIs/STIs	1.01	0.61
Low standard of living index	0.88**	0.01
High standard of living index	0.89*	0.00
Log likelihood = -11173.747 Pseudo R2 = 0.0159		
*Significant at 1%,**significant at 5%,*** significant at 10 %		

Those women who take oral pills as a contraceptive are less likely to affect from RTIs/STIs. The odds are 27 percent lower among such women. The place of delivery is negatively related to RTIs/STIs. If the women have institutional deliveries then there are

less RTIs/STIs. The odd ratio is 22 percent less for institutional deliveries. Knowledge about RTIs/STIs plays an important role in terms of RTIs/STIs transmission. In Haryana, knowledge about RTIs/STIs is not statistically significant. The standard of living index is a better measure of household wealth. The households with lower score of standard of living index have more probability of various diseases. But in our data, the reported RTIs/STIs are lower and significant at lower and higher standard of living index. In the lower and higher standard of living index, the difference of odd ratios is very low.

### **Policy Implication**

The DHLS-RCH survey of Haryana shows that various RTIs/STIs symptoms such as low backache, pain in lower abdomen not related menses, some mass coming out of vagina, fever are very high among women. Similarly the frequently/painful passage of urine, any involuntary escape of urine, pain during sexual intercourse, boil/ulcer/warts area vulva, swelling/ lump in breast, swelling/ lump in breast, swelling in the groin, bleeding after sexual intercourse is reported lower among women in Haryana. Around half of women have heard about RTIs/STIs and its modes of transmissions. The results of logistic regression shows that the prevalence of RTIs/STIs in Haryana is positively related to rural women, 30-39age group women, Muslim women, high school studied women and abortions/pregnancy wastages. The prevalence is less reported among mothers with one and two children, oral pills, institutional delivery, delivery conducted by health personal, lower and higher standard of living Index.

The RTI/STI infections have effects on fertility, infant mortality, postorbital and puerperal sepsis, ectopia pregnancy, fatal and prenatal death, cervical cancer, infertility, chronic physical pain among women. Therefore it is important to understand what sort of treatment is received by women in urban and rural area. The following table shows the treatment sought from various public and private sources.

**Table 1.6 RTIs/STIs Treatment Sought in Various Facilities**

Source of Treatment	Haryana		
	Rural	Urban	Total
Seek Treatment for RTI/STI problem	14.3	22.3	16.4
Government Hospital	18.8	19.2	19
Government Dispensary	1.0	2.3	1.4
UHC/UHP/UFWC	0.3	1.1	0.6
CHC/Rural Hospital	3.2	1.1	2.5
Primary Health Centre	6.2	4.0	5.4
Sub Centre	4.5	0.6	3.1
Out reach/ MCP clinic in village	0	0.6	0.2
NGO/ Trust Hospital/Clinic	0.3	1.1	0.6
Government ISM Hospital/Clinic	1.9	2.3	2.1
Private ISM Hospital/Clinic	12.0	12.4	12.2
Private Hospital/Clinic	48.1	53.7	50.1
Chemist/ Medical Shop	5.8	9.6	7.2
Home Remedy	2.6	3.4	2.9
Others	2.3	2.3	2.3

Table 1.6 shows that only 16.4 percent women have received RTIs/STIs treatment from either government or private hospital in Haryana. Total 19 percent of women have received treatment from municipal/government hospitals in Haryana. There is no much difference of RTIs/STIs treatment from municipal/government hospitals in urban and rural area. Around 50 percent of women received treatment from private hospitals /clinics. Nearly 12 percent women received RTIs/STIs treatment from private ISM hospital /clinic. The study of [Chellan Ramesh 2004] also finds that the women go for private treatment because they perceive available than public sector.

In Haryana, home remedies for RTIs/STIs are 2.9 percent and it is surprisingly higher in urban area (3.4 percent).The treatment received from government dispensary (1.4 percent), UHC/UHP /UFWC (0.6 percent), CHC/Rural hospital (2.5 percent), Sub-centre (3.1), outreach/MCP clinic in village (0.2), NGO/Trust hospital clinic (0.6), and government ISM hospital/Clinic (2.1) is very less. It means 85 percent of women have not received any sort of treatment for RTIs/STIs. Such lower availability of treatment can

augment the consequences of RTIs/STIs in the state. There is inequality of RTIs/STIs treatment received by women in various socio-economic groups. The women those reported high prevalence of RTIs/STIs is less likely to get the treatment from public and private sources. Therefore it is important to find the treatment received by women according to different socio-economic groups. We have used logistic regression model in order to find the inequality of RTIs/STIs treatment. The Table 1.7 shows the treatment received by women in different socio-economic groups.

The treatment of RTIs/STIs is found more among the rural women in Haryana. The treatment is 1.30 times more for rural women. The treatment of RTIs/STIs is positive and almost four times higher for Hindu and Sikh women. The women from scheduled caste, other backward caste and other caste have received three times more treatment of RTIs/STIs. Women who have studied up to high school and higher secondary are getting similar treatment. There is not much difference of odd ratio in the two educational categories. Those women who had only one child received more treatment in Haryana. The odds are 1.23 times higher for woman who had one child. The women using IUD's have also received 1.27 times more RTIs/STIs treatment. The RTIs/STIs treatment is higher among the women whose husbands are using condom. The odds are 1.54 times higher than the other contraceptive users. Mothers who have given birth in hospitals and clinics have reported more RTIs/STIs treatment in Haryana. The odds for delivery conducted by health personal are negative. It means that delivery conducted by health personal does not make much difference in terms of RTIs/STIs treatment. This is mainly because attaining delivery is a short term phenomena. The women those know about the RTIs/STIs have received more RTIs/STIs treatment. The odds are 1.90 times higher for the women who had knowledge about RTIs/STIs.

**Table 1.7: Treatment of RTIs/STIs among Women in Haryana**

Variables	Haryana	
	Odd ratio	Significant
Rural	1.30*	0.00
Age <20	1.04	0.75
20-29	1.10	0.54
30-39	1.23	0.26
40+	1.32	0.15
Hindu	4.74*	0.00
Muslim	1.60	0.43
Sikh	4.12**	0.01
Scheduled Caste	3.44*	0.00
Other Backward Caste	3.0*	0.00
Other	2.8*	0.00
High school	1.49*	0.00
Higher secondary	1.47*	0.00
Child one	1.23***	0.09
Child two	1.18	0.17
Child three	1.07	0.58
Abortions	0.99	0.93
IUD	1.27***	0.09
Condom/Nirodh	1.54*	0.00
Oral pills	0.75	0.11
Delivery in health facility	1.22**	0.04
Delivery conducted by health personal	0.82***	0.08
RTIs/STIs Knowledge	1.90*	0.00
Low Standard of Living Index	0.74**	0.00
High Standard of Living Index	0.93	0.32
Log likelihood = -3598.4801		Pseudo R2 = 0.0538
* Significant at 1percent, **significant at 5 percent,*** significant at 10 percent		

The RTIs/STIs treatment is negatively related to lower Standard of Living Index. The poor women are less likely to receive treatment from different sources. The odds are 26 percent lower and significant for lower standard of living index. There is no statistical relationship of RTIs/STIs treatment to women in higher standard of living Index.

## **Conclusion**

Around half the women from rural area do not have knowledge of different modes RTIs/STIs transmission and not heard about RTIs/STIs. The prevalence of RTIs/STIs is also observed high among rural women. The logistic regression results shows that RTIs/STIs prevalence is more observed among the Muslim women, high school studied and women who had abortions/pregnancy wastages. Almost fifty percent women received RTIs/STIs treatment from the private hospital and clinic. The logistic regression result shows that rural women, Hindu and Sikh women, Scheduled Caste, Other Backward Caste, Others, High school and Higher Secondary School studied women have received positive and significant RTIs/STIs treatment in Haryana. The RTIs/STIs prevalence is positive among Muslim women but reported less treatment. Mothers of more than two children reported less RTIs/STIs treatment. The women who had abortions/pregnancy wastages have more prevalence of RTIs/STIs but did not receive RTIs/STIs treatment. Mothers with one child, IUD, Condom users, delivery in health facility and knowledge about RTIs/STIs have reported more treatment. The women from lower standard of living index have reported lower RTIs/STIs prevalence and treatment. From the policy point of view, the variables such as Muslim women, mothers of two children and women who had abortion /pregnancy wastage are significant. Such women get less access to health care facilities due to high opportunity cost of time. Women often travel less due to high direct and indirect costs. Without proper treatment of RTIs/STIs, it leads to HIV/AIDS. Most of the women report to gynaecology department for treatment. But the services provided in the government facilities are less effective and time bound. There are less female doctors, counsellors and no privacy for women. Most of the women are rely on private medical care which is costlier. Those women who know about RTIs/STIs are more likely to get treatment from different sources. Therefore more information is required in urban and rural area through mass media (radio/television). At the same time more health care facilities at the door step of rural women is best-touted option. In order to make better maternal and child health, the health worker needs to provide knowledge and treatment to high-risk behaviour women. Similarly, behaviour and communication change and proper RTIs/STIs information are the best options to reduce the RTIs/STIs prevalence among women.



There is need for female counsellor at each health facility to discuss the RTIs/STIs problem among women. Most of the women hesitate to explain their RTIs/STIs symptoms. The female counsellor needs to understand their problems and explain correct treatment within a short period of time. Condom promotion is also considered as the best option in order to reduce the effect of Reproductive Tract Infections (RTIs) and Sexually Transmitted Infections (STIs). There is need of time bound efforts, effective management and best RTIs/STIs treatment for women in Haryana.

## **Appendix**

\* The standard of living index is calculated as by adding the following scores:

Source of drinking water: 3 for Tap (own), 2 for Tap (shared), 1 for hand pump and well, and 0 for others.

Type of house: 4 for pucca, 2 for semi-pucca, and 0 for kachcha.

Source of lighting: 2 for electricity, 1 for kerosene and 0 for other.

Fuel for cooking: 2 for LPG gas/electricity, 1 for kerosene and 0 for other.

Toilet facility: 4 for own flush toilet, 2 for own pit toilet, 2 for shared toilet and 0 for no toilet.

Ownership for items: 4 for car and tractor, 3 for television, telephone and motorcycle/scooter, and 2 each for fan, radio/transistor, sewing machine and bicycle.

The total of the scores may vary from the lowest of a 0 to maximum of 40. On the basis of total score; households are divided into three categories as:

- Low – If total score is less than or equal to 9.
- Medium – If total score is greater than 9 but less than or equal to 19
- High- If the total score is greater than 19.

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