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## Perception of RTIs/STDs among Women of Reproductive Age Group in a District of Uttar Pradesh

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**Abstract**: A cross sectional study was conducted during May-June 2010 among woman of reproductive age group (15-45 years) in the urban and the rural areas of Bareilly District to asses the level of awareness regarding RTIs/STDs. The two stage cluster sampling technique was adopted. A structured questionnaire was used to interview the study participants during the house to house surveys. Each woman of reproductive age of selected household was interviewed in private about her reproductive history, current knowledge, source of information and modes of transmission of RTIs/STDs. Statistical analysis was done with Epi Info computer software. Standard Normal Variate (SNV) Test for comparison of two groups' proportion was done; z and p were calculated to know the significance of the proportions of two groups for comparison. Most of the women were aware of RTIs/STDs (80.32%) in urban areas whereas only 27.41% in rural areas were aware of these diseases. The television and radio was the main source of information in both rural (41.17% & 32.94%) and urban areas (TV-90.36%, Radio-48.19%).

Key-words: Perception, RTIs (Reproductive Tract Infections), STDs(Sexually transmitted Diseases)

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**INTRODUCTION:** In developing countries the mortality and morbidity due to reproductive tract infections/sexually transmitted infections (RTIs/STIs) are very high relative to those associated with other health problems <sup>1</sup>.

Women especially of reproductive age group are physically, mentally and socially more vulnerable to reproductive tract infections (RTIs) and sexually transmitted diseases (STDs). There are at least 25 RTIs/STDs with a range of different symptoms. These diseases may be spread through vaginal, anal and oral sex.

The consequences of RTIs/STDs are numerous and potentially devastating. These include post abortal and puerperal sepsis, ectopic pregnancy, fetal and perinatal death, cervical cancer, infertility, chronic physical pain, emotional distress and social rejection of women<sup>1</sup>. Several studies have shown that women suffer from reproductive morbidities for a long time because of prevailing culture of silence<sup>2,3</sup>.

The impact of RTIs on the transmission of HIV infection and the morbidity and mortality of HIV

adds substantially to the total health impact of RTIs<sup>1</sup>.

The exact magnitude of the STIs burden is frequently unknown. Although passive STIs surveillance systems exist in some countries, the data is not always reliable or complete. The quality and completeness of the available data and estimates depend on the quality of STIs services, the extent to which patients seek health care, the intensity of case finding and diagnosis and the quality of reporting<sup>4</sup>. As there were limited data available on RTIs/STDs among women of reproductive age group in UP especially western UP; the present study was carried out with the objectives to asses the level of awareness including current knowledge, source of information and modes of transmission of RTIs/STDs among Women of Reproductive Age Group of Rural and Urban areas in Bareilly district of western Uttar Pradesh.

MATERIAL AND METHODS: The present study was carried out during May-June 2010 in the urban and the rural areas of Bareilly. The study was a cross sectional study and the two stage cluster sampling technique was adopted to carry out this study in the

Bareilly district. Fifteen clusters were from the rural and 15 were from urban areas of Bareilly district to give proportionate allocation to rural and urban population of district. Rural areas of the district were divided into total 15 blocks. These blocks were divided into villages and finally one village was selected as cluster form each block using simple random sampling technique. Finally 15 villages were selected as clusters. Urban areas were divided into 70 wards and 15 wards were selected using simple random sampling technique as clusters. A structured questionnaire was used during the household surveys. A house to house survey was carried out in the selected clusters till 20 ever married women in the age group of 15-45 years per cluster and 30 ever married women in the age group of 15-45 years in the last cluster in both rural and urban area were interviewed about her reproductive history, current knowledge, source of information and modes of transmission of RTIs/STDs. No medical examination was carried out of these women during survey. The total sample size of 620 women was calculated for study area including 50% from rural and 50% from urban areas and was analyzed finally.

The study population contains all ever married women in their reproductive age group (15-45 years) in selected clusters. For cultural and social reasons exclusion criteria were adopted. These were (1) Unmarried Women and girls, (2) Women of age less than 15 years of age, (3) Women >45 years of age (4) All the pregnant and puerperal women. Each interviewed women explained about the objectives of the study and an informal verbal consent was taken before interview.

**RESULTS**: Most of the women were aware of RTIs/STDs (80.32%) in urban areas whereas in rural areas the scenario was reverse as in majority (72.58%) of the women were not aware about RTIs/STDs however only 27.41% women in rural areas were aware of these diseases as compared to 80.32% women in urban areas [Table1]. These results were found to be statistically significant (Chi square x2= 175, df=1, p=0.000).

Table 1: Women of Reproductive Age group (15-45 years) by their knowledge about RTIs/STDs

| Knowledge | Rura    | ıl    | Urban (N=310) |       |  |
|-----------|---------|-------|---------------|-------|--|
|           | (N=310) | )     |               |       |  |
|           | No.     | (%)   | No.           | (%)   |  |
| Yes       | 85      | 27.41 | 249           | 80.32 |  |
| No        | 225     | 72.58 | 61            | 19.67 |  |

Chi square (x2) = 175, df=1, p=0.000

In the rural areas the most important source of information among the women having the knowledge regarding RTIs/STDs was audiovisual media like television (TV) (41.17%) followed by Radio (32.94%) and newspaper/magazines (10.58%) but 11.76% still don't know about these diseases. As apparently observed in table 2 that most significant factor in rural area is TV but statistically was not as significant in comparison to second factor Radio which is more significant ( z=0.887, p=0.375) [Table2]. Similarly most significant factor in Urban area is again TV but it is statistically more significant in comparison to second factor that is Newspaper/Magazines (z=2.411, p=0.016) [Table2].

The most important source of information among the women having the knowledge regarding RTIs/STDs was also audiovisual media in urban area (TV-90.36%, Radio-48.19%), followed by news paper (71.08%). However slogans (32.93%), doctors (31.32%), friends & relatives (21.28%) and teachers (15.66%) had also played important role in creating awareness regarding these diseases in urban area. In the urban areas 33.73% among the women having the knowledge regarding RTIs/STDs don't know the exact source of their information [Table2].

The women of reproductive age group in the rural areas told that RTIs/STDs is transmitted through homosexual mode 52.94% followed by needles/blades/skin puncture (15.29%) heterosexual (11.76%) and 15.29% responded that they don't know the exact modes of transmission [Table3].

Table 2: Women of Reproductive Age group (15-45 years) by their source of information of RTIs/STDs

| Source of Information* | Rural (N=85) |       | Urban (N=249) |       | Sig between Urban & Rural<br>(SNV Test**) |       |
|------------------------|--------------|-------|---------------|-------|---|-------|
|                        | No.          | %     | No.           | %     | Z   | р     |
| Radio                  | 28           | 32.94 | 120           | 48.19 | 2.541                                     | 0.011 |
| T.V.                   | 35           | 41.17 | 225           | 90.36 | 8.696                                     | 0.000 |
| Newspaper/Magazines    | 9            | 10.58 | 177           | 71.08 | 13.738                                    | 0.000 |
| Internet               | 0            | 0     | 9             | 3.61  | 3.056                                     | 0.002 |
| Doctor                 | 4            | 4.7   | 78            | 31.32 | 7.136                                     | 0.000 |
| School teacher         | 3            | 3.52  | 39            | 15.66 | 3.976                                     | 0.000 |
| Health worker          | 7            | 8.23  | 15            | 6.02  | 0.662                                     | 0.508 |
| Community meetings     | 0            | 0     | 10            | 4.1   | 3.228                                     | 0.001 |
| Friends andRelatives   | 6            | 7.05  | 53            | 21.28 | 3.743                                     | 0.000 |
| Don't know             | 10           | 11.76 | 84            | 33.73 | 4.773                                     | 0.000 |
| Others                 | 2            | 2.35  | 3             | 1.2   | 0.644                                     | 0.520 |
| Slogans                | 2            | 2.35  | 82            | 32.93 | 8.989                                     | 0.000 |

<sup>\*\*</sup>Standard Normal Variate (SNV) Test for comparison of two groups proportion

Table 3: Knowledge of Women of Reproductive Age group (15-45 years) about modes of transmission of RTIs/STDs

| *Response for modes of transmission | Rural N=85 |       | Urban N=249 |       | Sig between Urban &<br>Rural (SNV Test) |       |
|-------------------------------------|------------|-------|-------------|-------|---|-------|
|                                     | No.        | %     | No.         | %     | Z                                       | р     |
| Homosexual inter course             | 45         | 52.94 | 11          | 4.41  | 8.714                                   | 0.000 |
| Heterosexual inter course           | 10         | 11.76 | 162         | 65.06 | 11.537                                  | 0.000 |
| Lack of Personal hygiene            | 4          | 4.7   | 109         | 43.77 | 10.034                                  | 0.000 |
| Needles/ Blades/ Skin Puncture      | 13         | 15.29 | 35          | 14.05 | 0.276                                   | 0.782 |
| Mother to child                     | 5          | 5.88  | 90          | 36.14 | 7.618                                   | 0.000 |
| Transfusion of infected Blood       | 5          | 5.88  | 38          | 15.26 | 2.741                                   | 0.006 |
| Others                              | 2          | 2.35  | 8           | 3.21  | 0.433                                   | 0.665 |
| Don't Know                          | 13         | 15.29 | 163         | 65.46 | 10.173                                  | 0.000 |

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The women of the urban areas told that RTIs/STDs are mainly transmitted through heterosexual (65.06%) and then through lack of hygiene (43.77%), mother to child (36.14%), blood transfusion (15.26%), needles/blades/skin puncture (14.05%). And 65.46% responded that they don't know the mode of transmission of RTIs/STDs [Table3].

**DISCUSSION:** In the present study about one third of the women were aware of RTIs/STDs in rural

(27.41%) and four fifth were aware in urban areas (80.32%). We can see the variability of results in the various studies like A "KAP" study was carried out by M. Mittal et al<sup>5</sup> and this study reveals the perception of women of a urban slum in Delhi, 34.3% women were aware about STDs and another study carried out in the urban slum of Lucknow by Martolia D S et al<sup>6</sup> among slum dwellers and it was observed that 73.3% know about these diaseases.

<sup>\*</sup>multiple response

A sexually transmitted infection (STI), also known as sexually transmitted disease (STD) or venereal disease (VD), is an illness that has a significant probability of transmission between humans by means of human sexual behavior, including vaginal intercourse, oral sex, and anal sex. While in the past, these illnesses have mostly been referred to as STDs or VDs, in recent years the term sexually transmitted infections (STIs) has been preferred, as it has a broader range of meaning; a person may be infected, and may potentially infect others, without showing signs of disease. Some STIs can transmitted via also the use drug needles after its use by an infected person, as well as through childbirth or breastfeeding. Sexually transmitted infections have been well known for hundreds of years<sup>7</sup>.

In the present study the most important source of information regarding RTIs/STDs was audiovisual media (TV, Radio) in both rural and urban areas. In the present study, TV was reported as the main source of information about RTIs/STDs followed by radio. The findings were in consonance with others<sup>8,9</sup>.

**CONCLUSION:** The women in urban areas are having greater exposure to mass media had more and better perception regarding RTIs/STDs as compared to their rural counterparts.

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## **REFERENCES:**

- Garg S, Sharma N, Bhalla P, Sahay R, Saha R, Raina U, et al . Reproductive morbidity in an urban slum: Need for action. Sex Transm Infect. 2002;78:68-69. http://sti.bmj.com/content/78/ 1/68.full [accessed on 13 August 2010]
- 2. Luthra UK, Mehta S, Bhargava NC. Reproductive tract infections in India: The need for comprehensive reproductive health policy and programs. In: Germain A, Holmes KK, Piot P (editors) Reproductive Tract Infections. Plenum press, New York, 1992;317-42.

- 3. Chopra SK. Reproductive tract infections in India: A sociological overview. Proceedings of International workshop on reproductive tract infections. Kunming, China 1995;13-17.
- 4. Department of HIV/AIDS, World Health Organization, Global Prevalence and Incidence of Selected Curable Sexually Transmitted Infections. http://www.who.int/docstore/hiv/GRSTI/001.htm [accessed on 22 July, 2010]
- Mittal M, Garg S, Sehgal Kand Bansal R D (1995). A study of "KAP" regarding STDs and HIV/AIDS amongst women of an urban slum health issues in Delhi. Indian J Community Med 2003; 24:14-16.
- Martolia D S, Srivastava V K, Mohan U, Gupta S C, Srivastava V K Nigam S. STDs amongst slum dwellers of Lucknow "A KAP Study". Indian J Community Health 2003; 15:36-42.
- Sexually Transmitted Diseases. Wikipedia the free encyclopedia. March 2009. http://en.wikipedia.org/wiki/Sexually\_transmitt ed\_disease [accessed on 25 July 2010].
- 8. Tibdewal SS, Wadhva SK, Gupta SC, Awani SD: AIDS Awareness among Hospital Employees; Indian J Community Health 1997; 3:34-37.
- 9. Paul D, Krishnan S G: Knowledge of CDPOs about STDs including HIV/AIDS; Indian J Community Med 2001; 26:141-44

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