

A study on prevalence of reproductive tract infections and health seeking behaviour among the women in an urban slum area of Karimnagar

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ABSTRACT

Introduction: Reproductive tract infections (RTIs) are recognized as public health problem and rank second after maternal morbidity and mortality because of loss of healthy life among women of reproductive age. National family Health Survey-4 (2015-2016) has reported that 23.5% of the women were suffering from reproductive tract infections. RTIs are considered not just a medical problem but also seen as a symptom of wider social pathology in the community.

Objectives: To study the prevalence of reproductive tract infections and its socio-demographic determinants among the women of reproductive age group (15-49 years) in urban slums. To assess the health seeking behavior among the women suffering from reproductive tract infections.

Methodology: A cross-sectional study was conducted among the women of reproductive age group (15-49 yrs) residing in slums of urban field practice area of tertiary care teaching hospital during the period from June 2017 to October 2018. A total of 300 women were selected by simple random sampling technique. A pre designed and pre tested semi-structured questionnaire was used for collecting the data. The data was analyzed using SPSS 20.0 Software.

Results and Conclusion: The prevalence of RTIs among the women was 22.3%. Vaginal discharge, 57(85%) and pain abdomen 39 (58.2%) were the most common symptoms. The socio demographic factors significantly associated with RTIs were illiteracy and low socio economic status. Women using cloth during menstruation and having dysmenorrhea were found to be associated risk factors for RTIs. Women having ≥ 3 children, 26(29.2%) and using IUCD, 16(50%) as a method of contraception were found to be at risk of RTIs. Health seeking behavior of the women suffering from RTI was found to be poor, 13(19.4%).

Keywords: Reproductive tract infections, prevalence, determinants, health seeking behavior, women, urban slums.

INTRODUCTION

Reproductive tract infections (RTIs) represent a major public health problem and is more prevalent in developing countries and the consequences of RTIs are potentially devastating.¹ Reproductive tract infections are the most neglected health problem affecting health and social well-being of women in their productive age.² National family Health Survey-4 (2015-2016) has reported that 23.5% of women in India have one or more reproductive tract infections.³

The social factors such as cultural barriers, poor understanding of symptoms, lack of privacy, lack of a female doctor at the health facility, the cost of treatment, social stigma, and fear of internal check-up lead to delay in seeking treatment.⁴ Despite of availability of health services, majority of the symptomatic women bears silence because of shyness and social stigma and continue to suffer from RTIs especially in rural & urban slum areas.⁵ Low level of awareness regarding sexual and reproductive health⁶ as well as low female literacy, cultural factors and taboos withhold the women from seeking health care for RTIs.⁷

In view of this the present study was conducted to assess the prevalence of RTIs and health seeking behavior among the women suffering from reproductive tract infections.

OBJECTIVES:

- 1) To assess the prevalence of reproductive tract infections among the women of reproductive age group (15-49 years) in urban slums.
- 2) To determine the socio-demographic factors associated with reproductive tract infections.
- 3) To assess the health seeking behavior among the women suffering from reproductive tract infections.

MATERIALS AND METHODS:

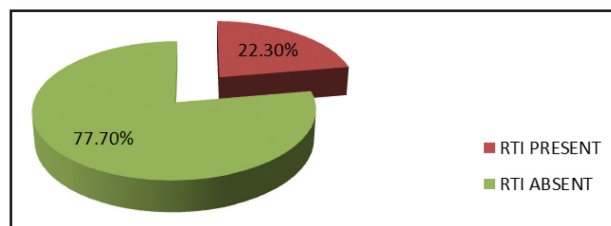
A cross-sectional study was conducted among the women of reproductive age group (15-49 yrs) residing in slums of urban field practice area of a tertiary care teaching institution from June 2017 to October 2018. A list of all the houses in the study area were obtained from the household survey registers maintained at the urban health centre. Out of total 420 houses, 300 houses were selected by simple random sampling technique using random number table. Only one woman of age between 15-49 yrs from each of the selected houses was included in the study. In case if more than one woman was found in the house belonging to the same age group then the women was selected randomly by lottery method. If the selected house was found to be locked or the woman was unavailable due to any reason immediate next house was selected. A predesigned and pretested semi structured proforma was used for data collection. The data was collected by verbal interview technique. A written informed consent was taken before conducting the interview. An institutional ethical

committee approval was obtained before conducting the study.

Statistical analysis: The data was analyzed by calculating the proportions and chi square test was used for significance of difference between proportions. A probability (p value) of < 0.05 was considered as statistically significant. The SPSS 20.0 Soft ware was used for data entry and analysis.

RESULTS:

A total of 300 women were studied and the results obtained were as follows:

FIG 1: PREVALENCE OF RTIs

Based on the symptoms stated by women, it was observed that 67(22.3%) of the women were suffering from RTI (Fig 1).

TABLE 1: SYMPTOMS RELATED TO RTIs

| SYMPTOMS * | NUMBER (%) (n =67) |
|----------------------|--------------------|
| Vaginal discharge | 57 (85%) |
| Lower abdominal pain | 39 (58.2%) |
| Itching of genitals | 27 (40.2%) |
| Burning Micturation | 9 (13.4%) |
| Genital ulcer | 4 (5.9%) |

Most common symptom related to RTI, were vaginal discharge in 57(85%) of the women, lower abdominal pain in 39(58.2%) of the women and itching of genitals in 27(40.2%) of the women(Table 1).Among 67(22.3%) of the women suffering from RTI, 23(34.3%) of the women had recurrence of RTI. Out of which 12(52.2%) of the women took treatment in the past.

TABLE 2: SOCIO DEMOGRAPHIC FACTORS AND RTI

| SI.No. | VARIABLE | RTI (n = 300) | | TOTAL | χ^2 | P - value |
|--------|------------------------------|---------------|------------|-------|----------|-----------|
| | | YES | NO | | | |
| 1 | AGE GROUP | | | | 0.74 | 0.68 |
| | Less than 20 | 10(21.7%) | 36(78.3%) | 46 | | |
| | 21-30 | 30(24.8%) | 91(75.2%) | 121 | | |
| | Above 30 | 27(20.3%) | 106(79.7%) | 133 | | |
| 2 | EDUCATION | | | | 13.44 | 0.02 |
| | Illiterate | 18(34.6%) | 34(65.4%) | 52 | | |
| | Schooling | 25(22%) | 89(78%) | 114 | | |
| | Intermediate & above | 24(18%) | 110(82%) | 134 | | |
| 3 | SOCIO ECONOMIC STATUS | | | | 12.25 | 0.016 |
| | I | 7(24.1%) | 22(75.9%) | 29 | | |
| | II | 6(13.6%) | 38(86.4%) | 44 | | |
| | III | 13(19.1%) | 55(80.9%) | 68 | | |
| | IV | 23(19.8%) | 93(80.2%) | 116 | | |
| | V | 18(41.9%) | 25(58.1%) | 43 | | |
| 4 | MARITAL STATUS | | | | 3.18 | 0.037 |
| | Unmarried | 6(12.5%) | 42(87.5%) | 48 | | |
| | Married | 61(24.2%) | 191(75.8%) | 252 | | |

It was observed that majority of the women suffering with RTI, 30(24.8%) were in the age group 21-30 years. RTI cases were observed to be higher among illiterate women, 18 (34.6%) compared to those who were educated up to intermediate and above 24 (18%) ($p = 0.02$). Majority of the women 18(41.9%)

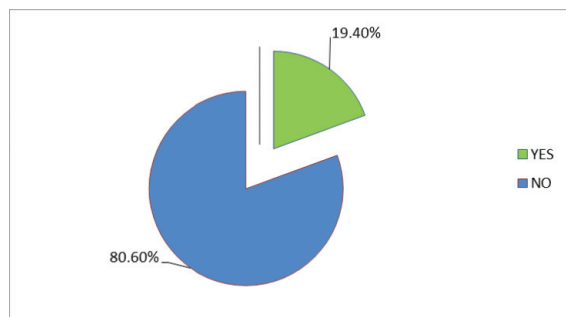
who belonged to socio economic class V, were found to be suffering from RTIs as compared to class I and II, 7(24.1%) and 6(13.6%) respectively ($p=0.016$). Most of the married women 61, (24.2%) were found to be suffering from RTIs as compared to unmarried women, 6 (12.5%) ($p=0.037$) (Table 2).

Table 3: ASSOCIATION BETWEEN RTIs AND ITS RISK FACTORS

| Sl.No. | RISK FACTORS | RTI | | TOTAL | χ^2 | P - value |
|--------|--------------------------------------|------------|------------|-------|----------|-----------|
| | | YES | NO | | | |
| 1 | MENSTRUAL PRACTICE(n=300) | | | | 9.135 | 0.01 |
| | Sanitary pad | 34(17.3%) | 163(82.7%) | 197 | | |
| | Fresh cloth | 18(35.3%) | 33(64.7%) | 51 | | |
| | Reused cloth | 15 (28.8%) | 37(71.2%) | 52 | | |
| 2 | DYSMENORRHOEA(n=300) | | | | 9.078 | 0.002 |
| | Present | 28(34.1%) | 54(65.9%) | 82 | | |
| | Absent | 39(17.9%) | 179(82.1%) | 218 | | |
| 3 | PARITY (n= 252) | | | | 11.81 | 0.03 |
| | Nulliparous | 5(20.8%) | 19(79.2%) | 24 | | |
| | 1-2 children | 30(21.6%) | 109(78.4%) | 139 | | |
| | ≥ 3 children | 26(29.2%) | 63(70.8%) | 89 | | |
| | CONTRACEPTIVE METHODS (n=252) | | | | 15.54 | 0.003 |
| | Barrier/condom | 0(0%) | 2(100%) | 2 | | |
| | IUCD | 16(50%) | 16(50%) | 32 | | |
| | Oral pills/Injectable | 3(37.5%) | 5(62.5%) | 8 | | |
| | Tubectomy | 5(15.2%) | 28(84.8%) | 33 | | |
| | None | 37(20.9%) | 140(79.1%) | 177 | | |
| | ABORTION (n=252) | | | | 4.22 | 0.121 |
| | Yes | 9(37.5%) | 15(62.5%) | 24 | | |
| | No | 52(22.8%) | 176(77.2%) | 228 | | |
| | MTP(n=252) | | | | 0.64 | 0.72 |
| | Yes | 3(21.4%) | 11(78.6%) | 14 | | |
| | No | 58(24.4%) | 180(75.6%) | 238 | | |
| | INFERTILITY (n = 252) | | | | 0.02 | 0.88 |
| | Yes | 2 (22.2%) | 7(77.8%) | 9 | | |
| | No | 59(24.3%) | 184(75.7%) | 243 | | |

Majority of the women, 18(35.3%) who were using fresh cloth and 15(28.8%) of women who used reused cloth were having RTIs than women who were using sanitary pad, 34(17.3%) ($p=0.01$). Out of total 82 women who were suffering from dysmenorrhoea, 28(34.1%) were having RTIs compared to women not having dysmenorrhoea, 39(17.9%) ($p=0.002$). Majority of the women, 26(29.2%) who were having = 3

children were found to be suffering from RTIs. A statistically significant difference was observed between parity and RTIs ($p=0.03$). Half of the women, 16(50%) who were using IUCD as a method of contraception were having symptoms of RTIs ($p=0.003$). (Table 3)

FIG 2: HEALTH SEEKING BEHAVIOUR AMONG THE WOMEN SUFFERING FROM RTI

Out of 67(22.3%) of women suffering from RTI, only 13(19.4%) took treatment for RTI but majority, 54(80.6%) did not take treatment for present complaints (Fig 2).

TABLE 4: REASONS FOR NOT SEEKING TREATMENT FOR RTI

| REASONS FOR NOT TAKING TREATMENT | NUMBER (%) (n=54) |
|--|-------------------|
| Did not think it to be serious problem | 25 (46.3%) |
| Felt shy to discuss problem | 12 (22.2%) |
| No time from household work | 17 (31.5%) |

Out of 54(80.6%) women who did not seek treatment for RTI, Majority 25(46.3%) did not consider it to be a serious problem and 17(31.5%) said they did not have time from house hold work. 12(22.2%) felt shy to discuss the problem (Table 4).

DISCUSSION

In the current study, the prevalence of RTIs was found to be 67 (22.3%) which was near to the finding of National family Health Survey-4 (2015-2016), 23.5%.³ In similar studies, the prevalence of RTI was found to be 26.8% & 29.15%.^{8, 2} Vaginal discharge was the most commonly observed symptom, 57(85%) followed by lower abdominal pain 39 (58.2%) and itching of genitals, 27(40.2%). Similar were the findings reported by Nandan D. et al in their study where commonest symptom of RTIs were vaginal discharge (94%) followed by lower abdominal pain (55%)⁹ Where as in a study by Kanchana B. Gawande et al vaginal discharge was found in 53.9% of the women.¹⁰

The prevalence of RTIs was found to be more in the women who were belonging to 21-30 years of age group, 30(24.8%). Similar were the findings in other studies were the prevalence of RTI was maximum in the age group, 20-30yrs, (41.8%)¹¹ and in the age group of 26-30 years, (33.9%).¹² RTIs cases were seen to be significantly higher in illiterate women, 18(34.6%), comparatively less cases were observed among the women who were educated up to intermediate and above, 24(18%) ($p = 0.02$). A similar study conducted in Andhra Pradesh also observed higher prevalence of RTIs in illiterate women, (34.1%) as compared to degree and above group,

(21.4%).⁷ In a study done in Rajasthan, it was observed that 29.5% of the women with RTIs were illiterate and 22.8% of the women were educated up to primary school.¹³ The present study revealed that the prevalence of RTIs decrease with an increase in the level of education. In this study, 18(41.9%) of the women who were belonging to class V were found to be suffering from RTIs as compared to class I, 7(24.1%). Sreelatha C.Y et al and Jyoti Pawanarkar&Kusum Chopra, in their study reported that women belonging to low income group have high prevalence of RTI, (52.5%) & (36%) respectively.^{1,2} Most of the married women, 61(24.2%) were found to be suffering from RTIs compared to 6(12.5%) of unmarried women ($p=0.037$). Similar observations were found in other study were 27.9% of married women had RTIs and only 1% of unmarried women were found to be having symptoms of RTI ($p<0.0001$).¹³

High prevalence of RTIs was seen in women who used fresh cloth, 18(35.3%) or reused cloth, 15(28.8%) than women who used sanitary pad, 34(17.3%) and the difference was found to be significant ($p=0.01$). Similar study conducted in Haryana reported high prevalence of RTI, (53.8%) in women using dirty clothes during menstruation.³ The RTIs symptoms were more among women who had dysmenorrhoea, 28 (34.1%) than women who were not having dysmenorrhoea, 39(17.9%) ($p=0.002$). A study done in Chennai revealed that RTI symptoms were 4.2 times more common in women who had dysmenorrhoea ($P = 0.001$).⁴

RTIs was present in 26 (29.2%) of the women who were having = 3 children as compared to women having 1-2 children, 30(21.6%) and nulliparous women, 5(20.8%) ($p=0.03$). Similar results were found in other study were the prevalence of RTIs was found to be more in the women who had 1-2 children (54.1%) as compared with women who had no children, (22.5%) ($p=0.04$).¹ About 16(50%) of the women who were using IUCD as a method of contraception were having RTIs as compared to the women who were using other contraceptive method. Higher prevalence of RTI was also observed among the women using IUCD in the studies conducted in Rajasthan and Haryana 37.6% & 38.8% respectively.¹³

It was observed that, 9(37.5%) of women who were having history of abortion were suffering from RTIs. In a study done by Dr. Anitha et al it was observed that 24(53.3%) of the women who had history of one or more abortion were suffering from RTIs.¹⁴

The present study observed that, 3(21.4%) of the women who had undergone MTP were having symptoms of RTIs. In a study by Gayatri S. Desai and R.M Patel RTI symptoms were seen in 1.6% of the women who had undergone MTP.¹⁵ Among the women who were suffering from infertility, 2(22.2%) of the women had RTIs. In a study conducted in New Delhi, 58 (29%) of the infertile women were symptomatic for RTI.²

The present study shows that among 67(22.3%) of the women suffering from RTI, only 13(19.4%) took treatment for RTI. In a similar study, comparatively more number of women sought treatment for RTI symptoms, 46.2%.¹⁴

In this study it was observed that out of 54(80.6%) women who did not seek treatment for RTI, 25(46.3%) of the women did not consider it to be a serious problem, 17(31.5%) said they did not have time from household work and 12(22.2%) felt shy to discuss the problem. In a study conducted in Bangalore the reasons stated for not seeking treatment for RTI were 57.3% of the women said these symptoms were common and normal for women, other reasons were feeling shy to discuss the problem and too busy in routine work or lack of time.²

CONCLUSIONS:

The prevalence of RTIs among the women was 22.3%. The socio demographic factors significantly associated with RTIs were illiteracy and low socio economic status. High prevalence of RTIs was seen in women who used fresh cloth and reused cloth as compared to the women who were using sanitary pad. The prevalence of RTIs was found to be more in the women who were using IUCD, 16(50%) as a method of contraception. Very few women, 13(19.4%) sought treatment for RTIs and none of the partner was found to be simultaneously treated for RTIs.

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