A Study to Compare the Knowledge and Attitude of Urban and Rural Women regarding Reproductive Tract Infections in Selected Urban and Rural Areas of Guntur District, Andhra Pradesh

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Abstract

Introduction: Women’s health during the reproductive or fertile years is relevant not only to women themselves, but also its impact on the health and development of the next generation. Reproductive tract infections are a hidden epidemic leading to enormous health and economic consequences worldwide.

Materials and methods: A comparative descriptive study was conducted to assess the knowledge and attitude of urban and rural women regarding Reproductive Tract Infections (RTIs) in selected Urban and Rural areas Guntur Dist. Andhra Pradesh. The study was conducted among the women who are in the age group of 20 years to 60 years. Sample for this study was 75 women from urban area and 75 women from rural area, comprising a total size of 150 and the participants are selected by Simple random sampling technique. Structured Knowledge questionnaire and Likert 5 point attitude scale was used to collect the data. The responses are tabulated, organized, analyzed and interpreted by using descriptive and inferential statistics based on objectives of the study.

Results: Findings revealed that half (49.33%) of the respondents from urban area had moderately adequate knowledge and three fourth (84%) of the rural women had inadequate knowledge. Majority (66.66%) of the urban women had highly favorable attitude and most (97.33%) of the rural women had only favorable attitude regarding RTIs. The relationship between the knowledge and attitude level of the urban women (r=0.765) and rural women (r=0.514) revealed that there was strong positive correlation.

Conclusion: The study concluded that the knowledge and attitude of urban women was high compared to rural women. There is a need to educate the women on preventive strategies as women are less likely to seek treatment because of the stigma associated with it.

Keywords: Assess, Knowledge, Attitude, Urban, Rural, Women, Reproductive Tract Infections (RTIs)
global health problem with serious impacts on individual woman and their families and communities[2].

RTIs constitute a huge health and economic burden for developing countries and it accounts for 17% of economic losses because of ill health. It is generally seen as a ‘silent’ epidemic can have severe consequences including infertility, ectopic pregnancy, chronic pelvic pain, miscarriage, neonatal blindness and even death[3].

The burden of untreated reproductive tract infections is especially heavy for women because these infections are often asymptomatic[4]. Endogenous infections are probably the most common reproductive tract infections worldwide[2]. World Health Organization statistics indicate that the total number of new cases of reproductive tract infections in adults between the ages of 15 and 49 was estimated to be 498.9 million including lower genital tract infections[4].

Among them are 105.7 million cases of Chlamydia trachomatis, 106.1 million cases of Neisseria gonorrhoea and 276.4 million cases of Trichomonas vaginalis. According to Ministry of Health and Family Welfare (2007), the disease prevalence is estimated to be six (6%) in India and a total of 30 million people may be affected out of 499 million world over[4].

In view of previous studies and from investigators experience it was found that mainly in the rural areas the women have very low knowledge and unfavorable attitude towards reproductive tract infections compared to urban areas. Hence the investigator felt the need for assessing and comparing the existing knowledge and attitude of women with regard to reproductive tract infections in urban and rural areas.

Objectives

- To compare the knowledge regarding reproductive tract infections among urban and rural women.
- To compare the attitude regarding reproductive tract infections among urban and rural women.
- To correlate the knowledge and attitude regarding reproductive tract infections among urban and rural women.
- To associate the knowledge and attitude regarding reproductive tract infections among urban and rural women with their selected variables.

Review of Literature

The review of literature for the present study is gathered and organized under the following sections:

Section 1: Comparative studies related to Reproductive tract infections.

Section 2: Studies related to the knowledge and attitude of women regarding Reproductive tract infections.

Section 3: Studies related to risk factors, symptoms and prevalence of Reproductive tract infections.

Section 4: Studies related to health seeking behavior of women regarding Reproductive tract infections.

Materials and Methods

A quantitative approach with a comparative descriptive design was used to conduct the study. The study was conducted among urban and rural women, in the age group of 20 to 60 years, residing in urban area of Israel Pet and rural area of Pedaparimi, Guntur District, Andhra Pradesh. 150 women (75 women from urban area and 75 women from rural area) were selected for the study using simple random sampling technique. A structured questionnaire with part-A and part-B was developed and used for collecting the data from the subjects. Part-A consisted of eight items on demographic variables like age, religion, education, occupation, family monthly income, menstrual hygiene practices, past history of reproductive tract infections and source of information. Part-B comprised two sections: Section I consisted of 35 knowledge items on RTIs and Section II consisted of five-point Likert scale with 40 statements of attitudes regarding RTIs. The data collection was done by the investigator by personally administering the questionnaire to the study subjects during the month of December 2016 in the rural area and January 2017 in the urban area. The responses of the women were tabulated, organized, analyzed and interpreted by using descriptive and inferential statistics based on the objectives of the study.

Results

Section 1: Findings related to Sample Characteristics

Section I revealed that out of 75 women from urban area, nearly half (49.33%) were in the age group of 20–30 years, whereas out of 75 women from rural area, 41.33% were in the age group of 31–40 years. 40% of the women in urban area were Christians and 69.33% were Hindus. Nearly 38.66% of the urban respondents had Intermediate qualification and 33.33% of rural respondents knew how to read and write. Majority of the urban (53.33%) and rural (66.66%) women were housewives. As far as family monthly income was concerned, 38.66% in urban area were having Rs.5001/- to Rs.10,000/- and majority (66.66%) in rural area had their income below Rs.5000/- per month. Half (53.33%) of the urban women used sanitary pads and 48% of rural women used ordinary cloth during menstruation. Majority (85.33%) in urban (78.66%) in rural areas did not have any past history of RTIs. Nearly 40% of urban women received information from health personnel and 34.66% of rural women from friends.
Section II: Frequency and Percentage Distribution of Knowledge and Attitude Level of Urban and Rural Women regarding RTIs

![Percentage Distribution of Knowledge Scores of Urban and Rural Women regarding RTIs](image1)

![Percentage Distribution of Attitude Scores of Urban and Rural Women regarding RTIs](image2)

Table 1. Mean, Median and Standard Deviation of Knowledge and Attitude Score of Urban and Rural Women regarding RTIs

| Variable | Reference Group | Mean | Median | Standard Deviation (SD) |
|----------|-----------------|------|--------|-------------------------|
| Knowledge | Urban (n=75)    | 23.5 | 22     | 5.23                    |
|           | Rural (n=75)    | 13.3 | 14     | 3.69                    |
| Attitude | Urban (n=75)    | 157.3| 157    | 14.9                    |
|           | Rural (n=75)    | 129.9| 131    | 9.7                     |

The obtained urban respondents’ mean knowledge score and SD was 23.5±5.2 and the median was 22; for the rural respondents, mean and SD was 13.3±3.69 and the median was 14, which shows that the urban respondents had higher scores regarding knowledge on RTIs than the rural respondents.

The obtained urban respondents’ mean attitude score and SD was 157.3±14.9 and the median was 157; for the rural respondents, mean and SD was 129.9±9.7 and the median was 131, which shows that the urban respondents had higher scores regarding attitude on RTIs than the rural respondents.

Section III: Comparison of Knowledge and Attitude Score of Urban and Rural Women regarding RTIs

Table 2. Median Test Values of Knowledge and Attitude Scores of Urban and Rural Women regarding RTIs

| Variable | Reference Group | Median Score | Median Test Value (M) | Table Value |
|----------|-----------------|--------------|-----------------------|-------------|
| Knowledge | Urban respondents | 22           | 6.44*                 | 3.84        |
|           | Rural respondents | 14           | df=1                  |             |
| Attitude | Urban respondents | 157          | 29.41*                | P<0.05      |
|           | Rural respondents | 131          | df=1                  |             |

*significance at 0.05 level
The calculated, median value (M) for knowledge score was 6.44, indicating that there was a significant difference in knowledge scores of urban and rural respondents.

The median value for the attitude score was 29.41, indicating that there was a significant difference in attitude scores of urban and rural respondents.

**Section IV: Correlation Coefficient Values of Knowledge and Attitude Scores of Urban and Rural Women regarding RTIs**

| Reference Group | Variable | Mean | ‘r’ Value | Table Value | Level of Significance |
|-----------------|----------|------|-----------|-------------|-----------------------|
| Urban Respondents | Knowledge | 23.5 | 0.765* | 0.232 | p<0.05 |
| | Attitude | 157.3 | | | |
| Rural Respondents | Knowledge | 13.3 | 0.514* | | |
| | Attitude | 129.9 | | | |

*significance at 0.05 level; df (73)

The obtained ‘r’ value for knowledge and attitude of urban respondents was 0.765; it shows a strong positive correlation between knowledge and attitude of urban respondents. For rural respondents, the obtained ‘r’ value was 0.514, which shows a strong positive correlation between knowledge and attitude of rural respondents.

**Section: V**

There was significant association between the knowledge scores of urban women with their education ($\chi^2=24$), family monthly income ($\chi^2=21.6$), menstrual hygiene practices ($\chi^2=10.5$), and past history of RTIs ($\chi^2=7.22$); and of the rural women with menstrual hygiene practices ($\chi^2=12.94$). There was a significant association between attitude scores of rural women with source of information ($\chi^2=32.98$). And none of the selected variables was found to be having significant association between the attitude scores of urban women regarding RTIs.

**Discussion**

Arora et al. also reported in their study that 5% of urban and 23.6% rural women had previous history of RTIs.7

The study reflected that 49.33% of the urban women and 16% of the rural women had moderately adequate knowledge followed by less than half (37.33%) of the women with adequate knowledge, and 84% of the women had inadequate knowledge regarding RTIs. Haque et al. also reported in their study that majority (84%) of the rural women had inadequate knowledge, whereas about 75% of the urban women had adequate knowledge regarding RTIs.8 The results of the study conducted by Sankhe showed that 78.4% of the urban women had neutral attitude and 21.6% had positive attitude, whereas in rural, 68% had neutral attitude and 37.6% had negative attitude.9

The present study revealed that the Chi-square values computed for knowledge scores of urban women and their education ($\chi^2=24$), family monthly income ($\chi^2=21.6$), menstrual hygiene practices ($\chi^2=10.5$), and past history of RTIs ($\chi^2=7.27$) had significant association; whereas the knowledge scores of rural women and their menstrual hygiene practices ($\chi^2=12.94$) were found to be statistically significant. A similar study conducted by Suja et al. reported that there was a significant association with educational level of women ($\chi^2=8.984$).10

The Chi-square values computed for attitude scores of rural women and their source of information ($\chi^2=32.98$) were found to be statistically significant at 0.05 level. A similar study conducted by Kamble reported that there was a significant association between attitude of urban and rural married women and their religion ($\chi^2=25.136$) and source of information ($\chi^2=29.65$).11
Conclusion

The study results revealed that most of the urban women had adequate knowledge regarding RTIs when compared to rural women. Similarly, urban women had highly favorable attitude towards reproductive tract infections when compared to rural women.

There was a significant difference between knowledge and attitude scores of urban and rural respondents. There was a significant relationship between knowledge and attitude scores of urban and rural respondents.

The knowledge of the urban women with regard to RTIs were consistently influenced by their education, family monthly income, menstrual hygiene practices, and past history of RTIs, and in rural area by their occupation and menstrual hygiene practices. Similarly, the religion of the urban women and in rural area and source of information had influence over their attitude with regard to RTIs.

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Conflict of interest: None

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