Prevalence of Reproductive Tract Infections and its Association with Sociodemographic Profile among Women in Reproductive Age

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Research Article

Abstract: **Background** Reproductive tract infections (RTIs) cause considerable morbidity among women of reproductive age worldwide. Any morbidity in this age group will interfere with overall socio economic development of community. There is a higher prevalence of reproductive infections in rural areas compared to urban areas in our country. **Objectives:** This study was conducted to determine the prevalence of RTIs in married women age 18- 49 years and to determine its association with socio demographic profile, obstetric factors and menstrual hygiene practices. **Material and Methods:** This was across sectional study done for 2 months in Obstetrics and Gynecology department in a tertiary care hospital, to know the prevalence of RTIs in married women of age 18-49 year and to determine its association with social, demographic, obstetric factors and menstrual hygiene practices. **Result and Discussion:** Of the 306 women who participated in our study ,33%were found to have symptoms associated RTIs The age–specific prevalence was highest in the 36-44 years age group (32%) ,with most common symptoms being abnormal white discharge per vagina. **Conclusion:** prevalence of suggestive symptoms of RTI in women was found to be high (33%) and among them knowledge regarding RTI was poor. The high prevalence of symptoms of RTI and their association with risk factors such as contraception, personal hygiene factors suggest scope for intervention through health education programmers among women. Therefore, enhancing awareness and organizing screening camps are absolutely necessary to be held at frequent intervals which will reduce the morbidity and mortality due to cervical malignancies.

Keywords: reproductive tract infections, symptoms, knowledge, white discharge per vagina.

Introduction

Globally, reproductive tract infections (RTIs) are a major cause of acute and chronic illness with severe consequences. Women are at a greater risk than men and are less likely to seek early treatment because of the associated social stigma in the society.[(1)]As we know that reproductive health of women has got implications on women's health, health of their children, family members and socioeconomic development of society. Reproductive tracts infections (RTIs) and their complications are among the most important causes of chronic illness and even death in women mainlyin underdeveloped and developing regions of the world[(2)] The problem is more pronounced where there women often have unwanted pregnancies, unsafe abortions, problems from contraception practices, different sociocultural background and socio economic status which further increase the incidence of RTI[(2,3)].According to the second National Family Health Survey, nearly 4 out of 10 currently married women in India report at least one symptomatic reproductive health problem[(4)] the most recent District Level Household and Facility Survey found a prevalence of 18.2% of RTI symptoms among ever-married women. The prevalence of RTI was higher in the rural (19.6%) compared to urban areas (15.0%)[(5)]. although the prevalence of RTIs shows a declining trend, RTIs continue to be a significant health problem among women in terms of morbidity and mortality. Prevalence's of STIs are significantly higher among women than among men in developing countries[(6)] RTIs are generally seen as a 'silent' epidemic and significantly contributing to gynecological morbidity and maternal mortalityin developing countries like India[(7)] In India, women do not seek treatment due to inhibitions regarding sexual and reproductive health problems.[(8,9)] Untreated reproductive tract infections result in Pelvic Inflammatory Diseases (PID), ectopic pregnancy, infertility, cervical cancer, fetal loss, health problems of new born, and increased risk of HIV transmission. They also experience social consequences in terms of emotional distress related to gynecological morbidity[(10)]. As most of these illnesses progresses to a chronic state and remain with women for the rest of their lives, the importance of early detection and management becomes much more evident. Therefore, the present study focuses on knowledge and prevalence of reproductive tract infection among married adolescent women using a national level large scale data with a special attention on different categories of infection and

treatment seeking behavior. More importantly, this study attempts to group the symptoms by factor analysis and to examine the factors associated with symptomatic clusters.

Materials and Methods

The present study is a cross sectional study conducted intertiary level hospital. Ethical clearance was sought from the institutional ethical committee. The study period was a period of 2 months. In the present study a total number of 306 women in reproductive age group attended the Gynecology OPD and they were screened for symptoms suggestive of reproductive tract infection. Inclusion criteria consisted of women of 18-49 years of age .The exclusion criteria were pregnant women, women within 6 weeks following delivery or abortion, women with already detected cancer cervix revealed from history or records, and women refusing consent. A relevant obstetrical and gynecological history was taken from patients who are attending the Gynecology OPD of our hospital. Patients to be screened were explained and written or informed consent was taken. The data collected were analyzed and the results were tabulated.

Observations and Results

After screening, it was found out that 102 women(33%)in the above mentioned age group had symptoms of reproductive tract infections. About 39(38%) of these women had abnormal vaginal discharge and 24 women had chronic lower abdominal pain as symptom suggestive of reproductive tract infections. In the study, 34 women (33%) belong to age group of 36- 40 years 25(26%) belong to age group of 31-35 years. Of the 102 women with symptoms suggestive of RTI, it is worthy to note that 83%of them were multiparous. Based on socio–economic status, 38% of women belong to low socio economic status [class IV] and 30% of cases were belong to class III socio economic status. It was found to be the majority of the study populations were from surround ingrural areas. Nearly 42% of the symptomatic women were to be illiterate. From this study it was found that, the entire study group was absolutely unaware about the clinical signs and symptoms of reproductive tract infections and its consequences in later life if it is untreated.

Table 1: Socio-Demographic Variable of the Study Population

Age	No (%) (n=102)
21-25	11(11%)
26-30	17(17%)
31-35	25(25%)
36-40	33(33%)
41-45	14(14%)
Monthly Income	
<1000	86(86%)
1000-2000	10(10%)
2000-3000	6(6%)
>3000	-
Education	
Uneducated	42(42%)
Primary	4(4%)
Middle school	23(23%)
High school	17(17%)
Higher secondary	12(12%)
Graduate	4(4%)
Occupation	
Coolie	7(7%)
House wife	80(80%)
Others skilled workers	15(15%)
Total	**102**

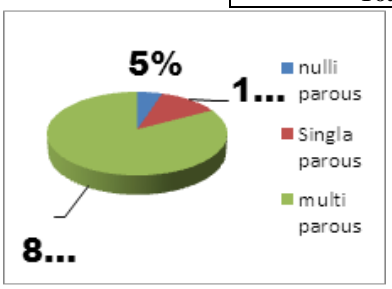
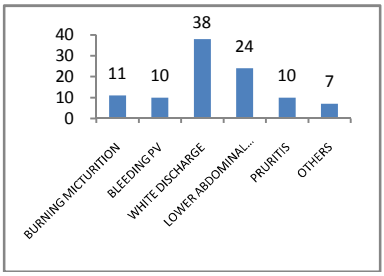


Figure1: Relation of reproductive tract infections with parity



Figur2: Prevalence of reproductive tract symptoms

Discussion

The present study revealed that prevalence of the symptoms suggestive of RTI among women of reproductive age group was 33%. There was varied prevalence of RTI as reported by researchers among rural and urban India. About 33% belongs to the a 36-40 years of age, 25% in 31-35 age group, 17% in 26-30 years ,11% of study population in 21-25 years and ,14% in 41-45 age group. In another study, the age distribution was around 42.8%(<25 years), 63.6% (25-34 years), 48.3% (≥35 years)[14] In our study 83% of women in reproductive age group were found to be multiparous and 12% were having single child. 5% were recorded as nulliparous. Some similar study shows that 28% of women were nulliparous 33% were single parous while nearly 46-54% were found to be multiparous.[15]In the present study out of the 102 symptomatic women, 38% were found to be suffering from abnormal whitish discharge per vagina. The study by Yasmin *et al* [16] in rural West Bengal also showed 48.8% of cases with same symptoms. From our study we have found that 24% was suffering from lower abdominal pain. In another similar study, it was found that 43.7% had complaints of abnormal white discharge pervagina and 37.5% had lower abdominal pain[1] In our study it is found that most women were from lower socio economic status that is 38% belongs to IV class (according to Kuppusamy grading) and 30% in class III, 12% in class I and 22% in class II in the study population. In another similar study it was also shown that 14% belong to socio economic class I, 22% in class II, 33% in class III and 40% in class IV[9] In both studies, it was found that majority of RTI were associated with lower socio economic status including class III and IV. Illiteracy accounts to 42% of the women with reproductive tract infections. Out of 102 symptomatic RTI cases it was worthwhile to document that the entire study group were not aware of Pap smear screening procedures in detecting early stages of malignancy.

Conclusion

In the present study all the symptoms were recorded which could be subjected to bias or conscious falsification. From the study we could able to conclude that one third of women in reproductive age group from rural area were having symptoms suggestive of reproductive tract infections. Multiparty, poor menstrual hygiene, low socioeconomic status and poor literacy level are all attributed to reproductive tract infections. This type of chronic reproductive tract infections may lead to cervical dysplastic changes or frank malignancy in later life. Early diagnosis and prompt treatment of reproductive tract infections may reduce the morbidity due to malignancy. The symptomatic women in our study undergone routine pap smear screening and cytological study of these pap smears were on processing. Early diagnosis and management of the symptoms of reproductive tract infections with regular pap smear screening help to reduce premalignant lesions like cervical dysplasia and frank carcinoma Educational programs can be targeted to healthcare workers to play an active role in educating patients on the importance of RTI and its consequences in later life. Community health awareness campaigns and organized cost effective cervical screening are recommended for women in the reproductive age group especially in developing countries like India.

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