



## Prevalence and Incidence of Reproductive Tract Infections Among Married Women in India

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Article History	Abstract
Received: 06 June 2023 Revised: 05 Sept 2023 Accepted: 25 Nov 2023	<p><i>Reproductive tract infections (RTI) are the infections which affects any organ related to genital tract. Reproductive tract infections are also known to act one of the risk factor for transmission of HIV, and are common yet neglected health problem affecting health and social wellbeing of women in their most productive age. The annual incidence of Reproductive tract infections and sexually transmitted infections in India is estimated at 5% or approximately 40 million every year. Although early detection and treatment of Reproductive tract infections can prevent complications and minimize the severity of long-term sequels, still RTI remains undiagnosed and untreated. Reproductive tract infections may also present as symptomatic among women who cause wide spread of disease in the community and also responsible for severe morbidity. Women show less interest on health seeking and have minimal knowledge on RTI/STI. This article provides a summary overview based on the data related to literature shows that age group of women, education, occupation, and standard of living were major factors affecting awareness on reproductive tract infections. Women who were illiterates do not seek treatment due to existing inhibitions regarding reproductive health; need targeted interventions for reproductive health messages. Need to make them aware of simple and the best confirmatory evidence of reproductive tract infections.</i></p>
CC License CC-BY-NC-SA 4.0	<p><b>Keywords:</b> <i>Reproductive tract infections, migration, migrants, women health, adolescents, prevalence</i></p>

### 1. Introduction

Reproductive tract infections are generally seen as a silent epidemic and is one of the major public health problems significantly contributing to gynecological morbidity and maternal mortality in India and in other developing countries because, these infections are often asymptomatic or the symptoms are not recognizable in India. Due to early marriage adolescent women become sexually active at an early age and face tremendous social and familial pressure for child bearing soon after marriage which brings unfamiliar problems related to reproductive health.

Reproductive tract infections (RTI'S) including sexually transmitted diseases (STI'S) endogenous genital tract infections (eg bacterial vaginosis and candidiasis and iatrogenic infections (during IUD insertion) are a global health problem for women. (Wassehait et al., 1989) also stated that RTIs can result in pelvic inflammatory disease, infertility, adverse pregnancy outcomes, carcinoma and increased susceptibility to HIV particularly in settings where diagnosis and treatment are suboptimal. Many of them lack knowledge about proper use of family planning methods and safe abortions. This improper use of contraception intrauterine devices (IUD), insertion in the presence of infections, female sterilization in unsterile condition and unsafe abortion also increases the risks of RTI'S. More over in more India, women with self-reported symptoms of reproductive morbidity do not seek treatment due to existing taboos and inhibitions regarding sexual and reproductive health. They hesitate to discuss their reproductive health problems due to shame and embarrassment.

RTI'S often cause discomfort and lost economic productivity. An estimated 340 million new cases of curable STI'S occur each year, with 151 million of them in south and south east Asia. STI's are among the top five disease categories for which adults in developing countries seek health care and about one third of STI'S globally occur among people younger than 25 years of age (WHO, 1997-2001)

Dealing with RTI'S becomes more important because of their relation with HIV infection. Men and women with same RTI'S are a greater risk of acquiring and transmitting HIV infection. RTI'S that cause genital ulceration such as chancroid, syphilis and herpes can increase the risk of getting HIV infection by 3-9 times, while the inflammation causing RTI'S like gonorrhea, Chlamydia, trichomoniasis increases in by 3-5 times. Ulcerative RTI'S have a higher probability of transmission because of the direct contact of bodily fluids through the open ulcers that allow for a greater contact and access to the virus. This is also a two-way relation as the presence of HIV makes the person more susceptible for RTI'S and the infections are more difficult to cure (Population Council, 2001)

Reproductive tract infections its prevalence and risk factors in rural Bangladesh (Sarah Hoawkeet.al., 2002) concluded that a low prevalence of reproductive tract infections coupled with a high level of reported risk behavior, indicated the need for primary programmes that would prevent an increase in the incidence of reproductive tract infections, sexually transmitted infections and HIV infections.

Reproductive tract infections continue to be major and growing public health issue in many parts of the world and are particularly widespread in resource poor settings without early diagnosis and appropriate therapy. Complications of RTI'S severely compromise women's health like fertility and productivity, infant health and survival and also the effectiveness of family planning programs. Interventions that truly decrease the burden of RTI'S will involve the coordination of efforts among several interrelated health initiatives and will include changes in the outlook, knowledge skills and resources of all levels of the health care system (Divya et al 2003)

Prevalence of RTIS was significantly associated with age, married life, gravida status, invasive contraceptives, gynecological, surgical interventions and type of family (monika Rathore et al., 2003).

They concluded that there was a moderately high prevalence of self-reported morbidity of reproductive tract, whereas treatment seeking behavior was low. Many factors found to be associated with RTIS with increasing age women experience more sexual life, pregnancies, gynecological surgery, deliveries, invasive contraceptive all these which make women vulnerable for RTI'S. Also, operative procedure of tubal ligation and introduction of foreign body (IUCD) in uterine cavity make women more prone for ascending infection from lower genital tract.

Hence, gynecological examination should have been done in every married woman to find out the total load of RTI'S (WHO) but Indian norms, Values, Taboos and illiteracy do not allow them to come forward to participate in such type of examinations. Because of this only 46% of symptomatic women could be examined gynecologically. Though microbiological investigations are the best confirmatory evidence of reproductive tract infections but it is not feasible in field-based studies there is a dearth of information regarding the epidemiology of RTI in India (Desai et.al, 2003). For many reasons the situation may still be worse in tribal areas where there is hardly any access to the health delivery system due to difficult terrain.

In India, research and programmatic attention to women's experience of reproductive tract infections including STI'S has increased considerably. Several policies and programs included in the national population policy 2000, National health policy 2002, National rural health mission 2005 and National AIDS control programmed phase III have stressed the need for expanding access women's access to service for prevention, screening and management of RTIS. Moreover, several small and large studies have documented a high prevalence of RTI'S among women and shown that significant proportions of symptomatic women do not seek treatment (MOHFW, 2005). The prevalence of reproductive tract infections in south Asia was studied by Jasmine Helen Prasad (2005). The youngest married women (16-12) years were included for the preset study and found that respondents reported abnormal gynecological symptoms, clinically diagnosed pelvic inflammatory diseases and small percent to STI.

The study included that the respondent has lack of knowledge related to RTI and also observed low rates treatment for these conditions, and also fail to utilize the health care centers.

To reduce the stigma associated with RTI symptoms, health education messages targeting non- sexually transmitted infections should be disseminated. At the same time efforts should be made to provide primary health care providers with information on diagnosing and treating women with non-sexually transmitted RTI's to ensure that RTIS women receive appropriate and satisfactory care (Vivian F go et al (2006).

An attempt has been made vikasrao et.al, (2006) to know the prevalence of RTIS in tribal women of Madhya Pradesh state in central India. The study high lights a need to strengthen the RTI/STI control program particularly in tribal areas.

Routine screening and treatment of STI/RTI in the antenatal care setting should be offered to reduce the occurrence of RTI/STI among pregnant women. Testing services should be expanded in anti-retroviral and therapy care clinics. (Sia EMSuyaet.al., (2009).

Community based study of RTIS and STIs among rural population of Punjab (Neeraja Jindal et. al, 2009) and concluded that there is a dire need to have cost effective strategies for the early diagnosis and treatment of STIs and for their prevention through information education and behavior change would go a long way in controlling the spread of RTIs/ STIs and in reducing reproductive morbidity among the sexually active population of India.

The prevalence of RTI/STI among women in urban and rural areas of Surat by kosambiyaet.al.,(2009) and analyzed the influence of socioeconomic, socio demographic and other determinants possible related to RTI/STI. It is a community based cross sectional study and the sample consists of 102 women, whose age 19 years, interviewed and underwent gynecological laboratory analysis for different types of RTI (lab diagnosis, gram staining, wet mount, gram staining nugents criteria, VDRL etc) this study raised an awareness regarding high vulnerability of women in urban areas of sutra for HIV infection. The study reveals that the prevalence of RTI/STI among housewives of reproductive age is quiet, high in urban areas. This may be attributed to the fact that the size of the urban population has been steadily increasing and the pace of metro politicization is accelerant knowledge about the symptoms of RTI/STI was not adequate among both rural and urban women. The most common reported symptoms of RTI are vaginal discharge. Reproductive health need of women of urban areas should be addressed with greater importance.

Young women in Indian appraised that small proportions of Indian women report seeking treatment for symptoms suggestive of reproductive tract infections (Shagunsabarwal and sadhya. K.G (2012) suggested that low levels of management seeking among young women in India highlight the need, to sensitize health care provider about the special need's heterogeneity and vulnerability of unmarried and marred women.

Amjanaverma, JitenetrakumarMeena and BratatiBanrejee (2015) conducted a comparative study of prevalence of RTI symptoms and treatment seeking behavior among married women in urban and rural areas of Delhi. Stated that the prevalence of RTI symptoms is high is both urban and rural areas (42.3% and 42%) prevalence of symptoms was found to be higher among study subject, who were not using any contraceptive method, had history of abortion and were with lower education status in both urban and rural areas.

Prevalence of reproductive tract infections in women attending a tertiary care center in Northern India was examined by Nisha Chowdary et. al (2019). The study conducted on 318 women of reproductive age of 18-45 years attending RTI infection clinic, and evaluated for the prevalence of RTI and their correlation with clinical features and associated risk factors. Results stated that illiteracy and unemployment factors were found to be significantly associated with RTI. Genital discharge and lower abdominal pain were the most common among the women.

Anmol Gupta et. al. (2020) studied the socio demographic correlates of RTI amongst women of 410 through Random sampling method in shimla by rural field work by department of community medicine, Indira Gandhi Medical College from July 2018 to Sep. 2018.

#### **4. Conclusion**

From reviews, have identified few priority areas for public health intervention among women population

- Need to learn self-awareness of their bodies to be able to recognize any changes in order that symptoms are detected as being different from their normal state.
- Need to understand that is possible to have an RTI despite having no symptoms
- The feasibility of “Self-administrated swabs” are relatively cheap and simple diagnostic tests for endogenous infections may make this a reasonable way of identifying infections in symptomatic women.
- Education and outreach are needed to reduce the stigma & embarrassment
- Behavior and communication changes and proper sexual and reproductive health information are the best options to reduce the prevalence of RTI and need to explain correct treatment with in short period of time.
- Testing care should be expanded in antenatal and antiretroviral care clinics.

- Need for expanding women's access to service for prevention, screening and management of RTI at an early step.

Concludes that, improving literacy and increasing awareness level among married women about reproductive health is needed to reduce the incidence of RTI among urban as well as in rural population.

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