



Original Research Article

Knowledge Regarding STI RTI Services among Interns in Government Vellore Medical College March to June 2017

Authors

Dharmambal C.^{1*}, Somasundaram A.², Balachander J.³

Corresponding Author

Dharmambal C.

Abstract

Introduction: Sexually Transmitted Infection and Reproductive Tract Infection (STIs/RTIs) is one of the important public health problems in India. NFHS 3 survey found 11% of women and 5% of men in 15-49 years had STI/RTIs. Untreated STI/RTI infections result in complications such as infertility, reproductive morbidity etc. Prevention and management of STIs is the responsibility of medical personnel. We conducted a study to describe the knowledge on STI/RTI control among interns.

Methods: We conducted a cross sectional descriptive study among 135 medical interns in Government Vellore Medical College between March 2017 and June 2017 with closed ended questionnaire. The data was compiled and analysed using open epi software.

Results: All the participants were aware of STIs and RTI. While 89% of the participants were able to mention the organisms causing STI only 74% could tell the organisms causing RTI. Less than 50% of the participants had knowledge on the importance of syndromic approach and the standardized prepackaged drug kits. Knowledge on partner treatment was less than 50%. There was lack of knowledge on syndromic management.

Conclusion: Medical interns need training in all the programmatic guidelines on STI before they come out of the medical Institutions. The doctors need to be mandatorily posted in STD department of the medical colleges and hands on training to be imparted to improve the quality of services provided by them.

Introduction

Every year 357 million new cases of sexually transmitted infections occur in 15-49 years population in the world^{1,2,3}.

Sexually Transmitted Infection and Reproductive Tract Infection (STIs/RTIs) is one of the important public health problems in India. A community based surveillance in 2003 found that 6% of the adult population in India suffer to have annual episode of one or the other STI/RTI.

NFHS 3 survey found 11% of women and 5% of men in the age group of 15-49 years had complained of symptoms suggestive of STI/RTIs in the 12 months preceding the survey⁴.

Various studies have shown that there is rise in the sero prevalence of syphilis in India and other countries. This is either due to actual increase in the disease burden or as a result of increased awareness and surveillance system.

STIs have a profound impact on sexual and reproductive health. Individuals with STIs like

herpes and syphilis are at three times higher risk for acquiring HIV infection. Appropriate and adequate management of STIs reduces the potentiality of HIV transmission by reducing the amount of HIV in genital secretions.

STI/RTI infections, if not identified and treated early can also result in complications such as infertility, reproductive morbidity etc. Syphilis in pregnant mother can be transmitted to newborn child as Congenital Syphilis, if not promptly identified and treated. Controlling STI/RTIs will decrease reproductive tract morbidity and other complications.

Prevention & Control of Sexually Transmitted Infections/Reproductive Tract Infections (STI/RTI) is a key strategic component in Package of services under NACP IV. Prevention and management of STIs is the responsibility of Health care provider's especially medical personnel.

Similarly Quality supervision and monitoring of STI/RTI services at all health facilities is essential to provide better services. STI prevention and management services are provided through elaborated programme strategy implemented in all health facilities.

To implement the effective strategies, knowledge of common STIs, their clinical manifestations and Case Management among health care professionals is needed. Many studies have been conducted among medical practitioners. Similarly it is essential to understand the level of knowledge on STI/RTI control and prevention strategies among interns who will be future doctors. We conducted a study to describe the knowledge regarding certain programme guidelines in STI RTI control among interns.

Methods

We conducted a cross sectional descriptive study. The participants were M.B.B.S. graduates who are on mandatory one year internship in Government Vellore Medical College. We enrolled 135 participants and conducted the interview during March 2017 to June 2017. We obtained informed

consent from the participants and administered a closed ended questionnaire. The questionnaire included the knowledge on types of STD, causative organisms, modes of transmission, high risk groups, symptomatology, programme aspects like syndromic approach, diagnostic facilities, STD care facilities, etc. The questionnaire was in English and the participants filled the questionnaire with confidentiality. The data was compiled and analysed using openepi software. After the questionnaire session the correct responses were informed to the participants so as provide appropriate information and guidelines for their future practice.

Results

Total participants in the study were 135. All the participants were aware of STIs and RTI (Figure 1). Only 67% could tell the difference between STI and RTI (Figure1). While 89% of the participants were able to mention the organisms causing STI only 74% could tell the organisms causing RTI (Figure 3).

While 90% could enumerate the symptoms of STI (Figure 2), only 57% could mention the correct complications of STI. Less than 50% of the participants were having knowledge on the importance of syndromic approach and the standardized prepackaged dispensation of RTI STI drugs (Figure 4)

Almost all were aware of the high risk groups and usefulness of condoms in preventing STI. Only half of the participants knew the importance of partner treatment in symptomatic STI patients.

More than 80% could tell the tests available for STI as well as the drug of choice for syphilis as penicillin. Less than 80% of the participants knew that screening test is to be done for Syphilis in Pregnant women and in blood transfusion (Figure 5). There was lack of knowledge among the participants regarding syndromic classification of STI RTI and could not enumerate all the syndromes. Knowledge regarding services through DSRCs was 21%.

Figure 1: Basic Knowledge on RTI/STIs among interns, Govt Vellore Medical College, 2017

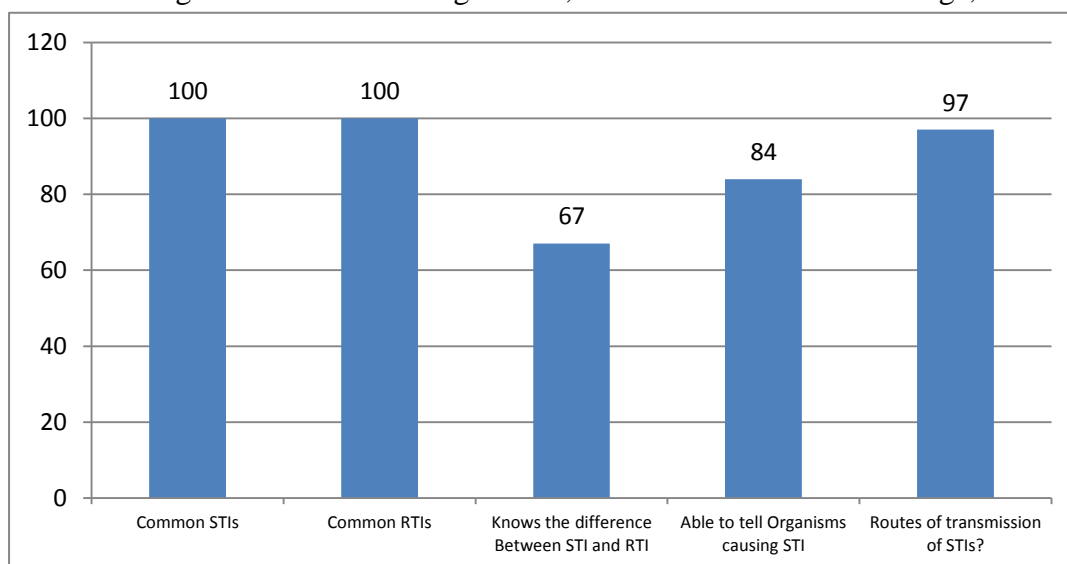


Figure 2 : Knowledge on Syndromic presentation, among interns, Govt Vellore Medical College, 2017

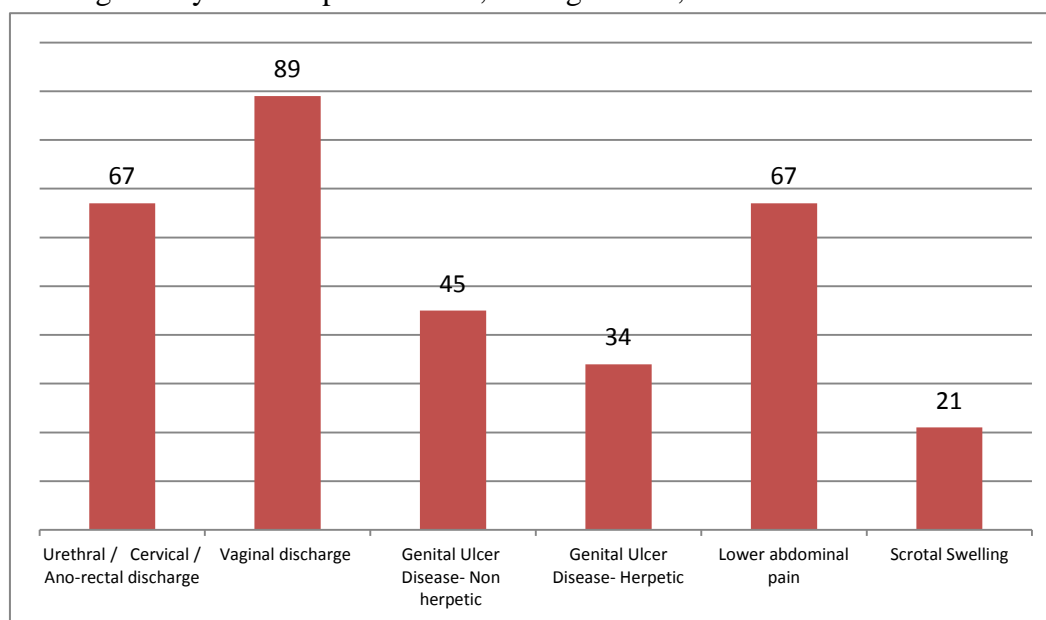


Figure 3: Knowledge on STI Causative organisms, among interns, Govt Vellore Medical College, 2017

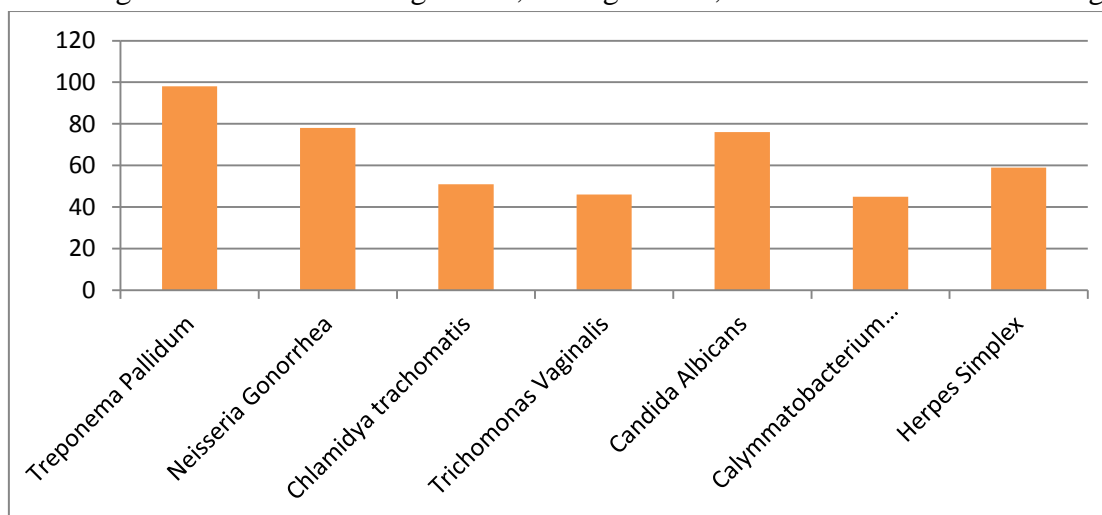


Figure 4: Knowledge on Syndromic treatment among interns, Govt Vellore Medical College, 2017

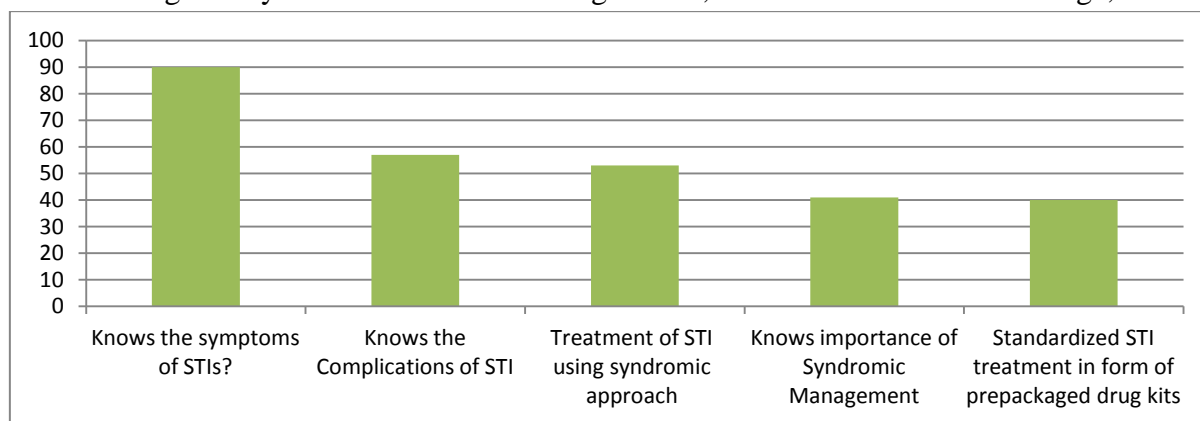
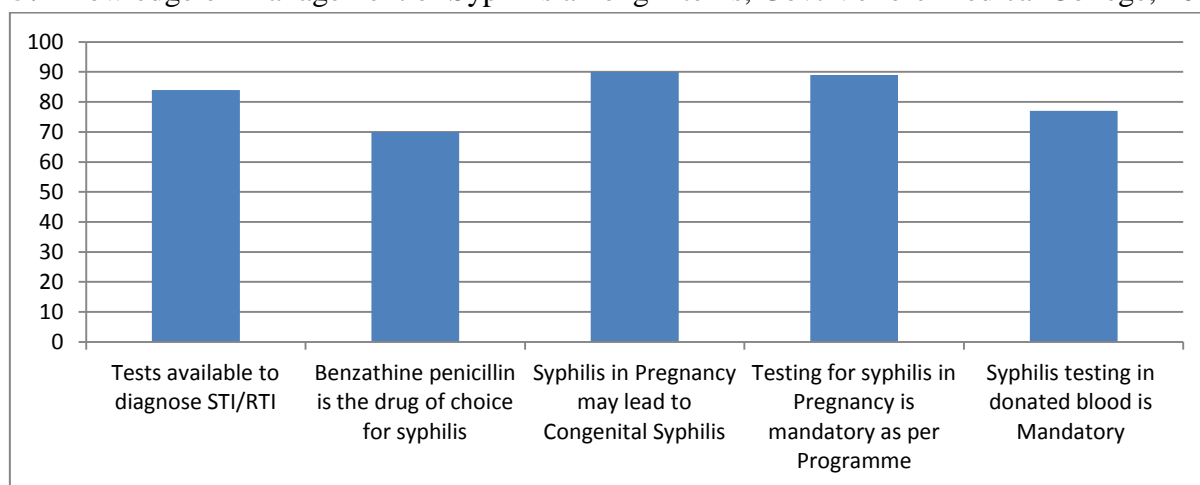


Figure 5: Knowledge on management of Syphilis among interns, Govt Vellore Medical College, 2017



Discussion

This study was conducted mainly to understand the level of knowledge on STI RTI control and prevention strategies among interns who will be future doctors. Medical professionals on completion of their under graduation start their careers in Government or private sectors. The duration of Compulsory Rotatory Residential Internship is 1 year. During this period they undergo optional postings in Dermato-Venereology department.

During internship itself they have the opportunity to witness a considerable number of cases of STI. They are trained to treat STI/RTI cases from their period of Compulsory Rotatory Residential Internship. They are supposed to acquire knowledge on prevention and treatment aspects of STI RTI during this period. Further in their practice in the Government or private sector, whenever they see a STI/RTI case appropriate

knowledge on STI/RTI services will facilitate early intervention and prevent complications.

Sexually Transmitted Infections (STI) and Reproductive Tract Infection (RTI) increase the chances of acquiring and transmitting HIV infection by 4 to 8 times and, so control and prevention of STI/RTI is a key prevention strategy for HIV.

More than 80 Lakhs episodes of STI have been targeted for treatment by the health care providers every year. Immediate treatment with appropriate antibiotics forms the main strategy for curtailing the transmission. Missed opportunity to provide treatment at the first contact may result in spreading the infection to partners.

Syndromic Case Management, without major laboratory investigations, is the cornerstone of STI/RTI management as per the National AIDS Control Programme policy⁶. Standardized treatment protocols were introduced to improve

prescription practices and to prevent irrational drug combinations as well as to reduce the number of drugs prescribed. In our study, the knowledge among the interns on Syndromic case management is less than 50% which is very similar to the Pakistan study among general practitioners is only 26.2 %⁸.

Study on knowledge among interns is not available for comparison. However in a study among medical practitioners in Bangladesh less than 50% were able to tell appropriate treatment⁷. In a study conducted at Vidarbha, Maharashtra among medical undergraduates knowledge on common STIs were fairly good which is consistent with our study case in our study⁹.

In a Pakistan study among general practitioners 94% were able to tell the organism causing gonorrhoea but only 38% had the knowledge on *T.pallidum* as causative organism for STI⁸. Our study findings were consistent with these findings. STI/RTI management services are also an integral part of RMNCH+A services. In 2007, WHO launched an initiative for the global elimination of congenital syphilis and strategies are adopted to increase access to syphilis testing and treatment for antenatal mothers.

Further STI RTI has social implications and stigma issue. Due to this considerable proportions of patients take self medication or over the counter drugs or seek treatment from non professionals. This results in complication of the infection and treatment difficulties.

One of the key strategies in STI control is integrating essential components in primary health care. Hence the professionals need to know about the clinical services including syndromic diagnosis, treatment modalities, referrals for appropriate laboratory investigations and management of complications. These components are included in the national programme for STD which has been integrated now with HIV /AIDS control programme. Hence appropriate knowledge on the STI treatment is required for the doctors.

Doctors should be able to quickly and confidently identify and manage the RTIs/STIs cases. An

understanding of difference between STI and RTI is essential in order to provide effective care and appropriate advice to patients with reproductive tract complaints. It is observed that the interns knew about the causes and occurrence of common STIs and RTIs but lack adequate knowledge in programmatic aspects such as availability of standardised treatment protocols, prepackaged drug kits. Similarly the knowledge on essentiality of screening for syphilis in pregnant mother and pre transfusion screening of syphilis before transfusion of donated blood is inadequate.

Conclusion

From this study, it is concluded that medical professionals need to know a lot about the programme guidelines and implementation strategies. Their approach in managing STI/RTI should be more systematic. The medical professionals need training in all the programmatic guidelines on STI before they come out of the medical Institutions. The doctors need to be mandatorily posted in STD department of the medical colleges and also focus be given on field and hands on training to improve the quality of services provided by them.

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