

Assessment of college students awareness about tuberculosis in Moradabad

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ABSTRACT

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Lack of knowledge and awareness about Tuberculosis (TB) as well as Direct observed therapy short course (DOTS) are a persistent and major community problem due to which suffering and mortality rate increases tremendously. So it is responsibility of pharmacists to develop a common awareness for prevention, care and treatment of TB in the community. This survey is strictly based on assessing the awareness about TB among undergraduate (UG) and postgraduate (PG) students of nonmedical stream in Institute of Foreign Trade & Management, Moradabad (U.P.) India. In the present study, 59.41% were male and 52.78% were female. 60.81% P.G. students and 54.31 % UG students were answered among them. It represents that male student's awareness were higher than the female students. The survey results also revealed that both UG & PG students of I.F.T.M. possessed very poor knowledge about type of TB, multi drug resistance (MDR) & Mantoux test, and the knowledge of UG students was very poor as compared to PG students. Pharmacists should realise their role in health education programs in the community to improve the public awareness about health burden diseases like tuberculosis.

Keywords: Directly observed therapy short course, multi drug resistance, mass miniature radiography, National Tuberculosis Control Programme,

INTRODUCTION

Tuberculosis (TB) remains a major public health problem in India. World Tuberculosis Day is observed on 24 March of every year and is designed to build the public awareness about TB as an epidemic. In India two TB patients are losing their life in every three minutes; nearly 3 lakh School children give up study because of TB per year. Tuberculosis is a barrier to socio economic development. The greatest burden of tuberculosis incidence and mortality in India is in adults aged 15-16 years & higher prevalence seen in persons aged 60 years and above while lowest in childhood. While may be due to decrease immunity in old age people.¹ Despite the failure to reach many of the goals of the first and second national health policies, several health indicators have shown consistent improvement since the 1980s. Between 1980 and 2006, infant mortality fell from 113 to 59 deaths per thousand live births, total fertility from five to three births per adult female and maternal mortality from seven to three deaths per 1000 live

births² This system is coordinated by a specialized human resources development (HRD) unit within the Central TB Division. However, a programme review noted that the concept of HRD was not well understood at the state and district level, and there were insufficient staff dedicated to manage the development process at the central and state level³. The 2009 budget allocates US\$ 34 million for human resources to ensure adequate numbers of TB dedicated staff and to fill gaps in essential general health services posts, e.g. medical officers, laboratory technicians, etc. The health care, as in today's Indian society is centralized in the hands of physician but in a sense of pharmacy practice, pharmacist serve the role of community care taker, diagnosing disease and then managing them by compounding individual remedies⁴ and DOTS implementation is responsible for rapid reduction of tuberculosis prevalence.⁵

A pharmacist can play a vital role in development of action plans to increase adherence on medication. They have the ability to gather information, review of data, patient counseling and involve in the disease management.

MATERIAL AND METHODS

The study was conducted during January to April 2009 in

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IIFTM Campus, Moradabad (U.P.) India. Three hundred sixty students (both male and female) in the age group of 16-24 years responded to the questionnaire. A well design fifteen item questionnaire was developed (Annexure 1). For each question two choices were given (Yes or No). The respondents were advised to give answers on the basis of their previous awareness and knowledge about TB. The survey was performed on B. Tech, MBA and BBA students.

RESULTS

From the Survey of 360 students of under graduate & Post graduate in which number of PG students were 142 (both male and female) and the number of under graduate students were 218 (both male & female). From the result of survey on the basis of education level (both UG & PG), (54.31 %) U.G students & (60.81%) P.G. students were responded correctly. Students without having awareness of TB were (59.41%) male & female (52.78) (Table I).

A student based survey about the TB revealed that the PG students exhibited more knowledge about TB than UG students. The most striking features that emerges from this survey was the extent of awareness about TB among the post graduate on the basic issues like transmission, treatment & drug therapy was found to be 59.15% where as in UG students it was found to be 56%. Therefore, we can assume that PG students awareness was significantly higher than the UG

Table 1: Distribution of students on based of sex and education level.

Sl. No.	Sex/ Education level	No of students	Correct response (%)	Incorrect response (%)
1	Male	162	59.41	40.59
2	Female	198	52.78	47.22
3	P.G.	142	60.81	39.29
4	U.G.	218	54.31	45.69

Fig. 1: The percentage of P.G students (Male & Female) awareness about T.B

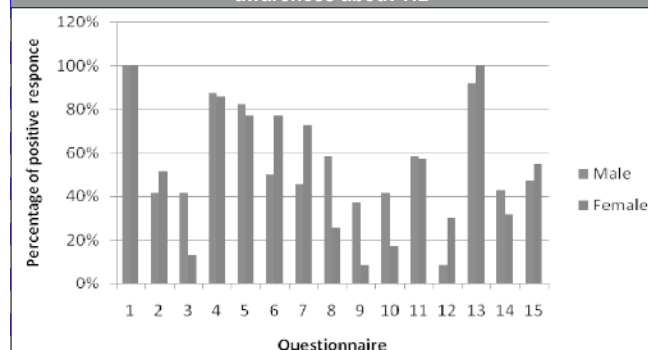


Fig. 2: The percentage of U.G students (Male & Female) awareness about T.B

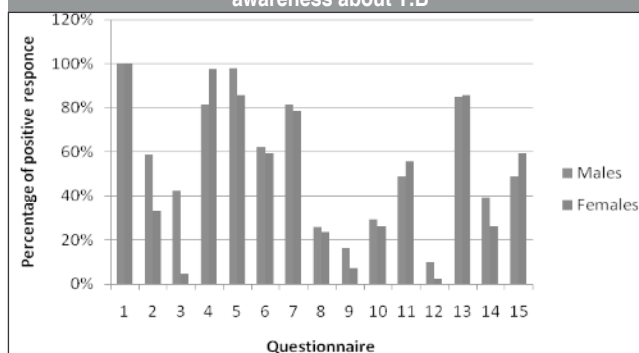
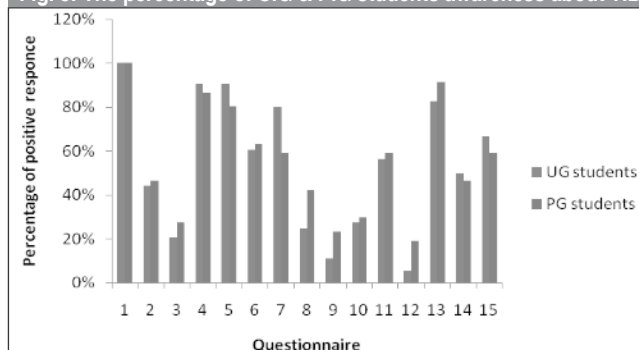


Fig. 3: The percentage of U.G & P.G students awareness about T.B



students. Percentage result from the survey about symptoms of T.B. methods for detection of TB showed that knowledge of UG students were 31.65% & 46.47% in PG students. This reveals that UG students were not having sufficient information about the symptoms & diagnosis. In over all study we found that the knowledge regarding TB is higher in male than female. The survey results also reveal that both PG & UG students of I.F.T.M possessed very poor knowledge about Type of T.B, multi drug resistance (MDR) & Mantoux test. From the survey results the percentage of correct response of UG students about detection method like X-ray, which was found to be 27.50% while knowledge about MDR was found to be 11%, knowledge about change in urine colour was found to be 24.77% which reveal that knowledge of the UG students were significantly poor as compared to PG students (Fig 1, 2 and 3).

DISCUSSION

In the present study, assessment of student's awareness about TB in I.F.T.M, Moradabad (U.P.) India showed that the knowledge of students is not satisfactory. The goal of national health policy 2002 was to increase the awareness of TB in both educated & uneducated people. In 1959 the Government of India, with the help of WHO, established the National TB Institute (NTI) in Bangalore to develop a national TB control

programme (NTP), with the aim of establishing prompt awareness, diagnosis and ambulatory treatment which were integrated into general health services.⁶ In contrast in a study among tribes of Andhra Pradesh, only 44% had heard of tuberculosis.⁷ Over half of total students knew about BCG vaccination as a preventive tool against tuberculosis, only about forty percent cases knew that tuberculosis is now a fully curable disease knowledge about BCG vaccination was present in only 14% rural population in a study from Tamilnadu.⁸

In the present study, the level of awareness among the students was very poor. Therefore, pharmacy students can contribute to achieve satisfactory response and prevention in the following aspects: Mobilise students for BCG vaccination & increase the awareness about BCG revaccination; create awareness among the students for the knowledge of treatment and prevention; effectively communicate & give knowledge about colour change in urine due to use of TB drugs (Isoniazid, Rifampicin) during treatment; TB affected women can breast feed her baby; sanitation procedure to be followed during infection; disinfection procedure to be followed for disinfecting house & articles; advising the students & to provide sufficient information at college level about free medical treatment, detection test, DOTS centers and mode of transmission. Our study showed that the PG students exhibited more aware about TB when compared with the UG students. A high level of ignorance, wrong knowledge, wrong attitudes and wrong practices was demonstrated among senior secondary students in a study by Tanimowa from Zambia⁹

Many studies have revealed that a lot of awareness and knowledge is still required among the students of schools and colleges. In spite of the advertisement of DOTS centers through media pamphlet, banners on public places, the awareness of students were not satisfactory. Therefore, the central and state Government and principals of school & colleges must uplift some new steps in increasing the awareness of DOTS, methods of treatment, transmission and detection of TB. Pharmacist are often considered as first point of contact in Health Care System and also a UG and PG students of pharmacy can contribute to enhance the awareness in other department of students.

CONCLUSION

In conclusion, our study findings indicate that post graduate (P.G) student's awareness was significantly higher than under graduate (U.G) students. PG students

awareness regarding cause, symptom, transmission, treatment of TB was higher compared to the UG students. Thus for the upliftment of student's knowledge about TB pharmacy students should join hands with the other students of college to uproot the cause of lack of awareness about TB by organizing various programmes, debates and seminar in collaboration with hospitals and primary health centers which ultimately will increase the awareness of TB among all students of professional colleges. If these measures are implemented firmly, it can increase the awareness of tuberculosis and ultimately TB free community can be created in India.

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ANNEXURE 1 (QUESTIONNAIRE)

1. Have you heard about TB?
2. What is the cause of TB?
3. Do you know different types of TB?
4. Is TB curable or not?
5. Whether TB can be transmitted to other family members from a person having TB?
6. Do you know about DOTS?
7. Do you know about MDR?
8. Do you know free treatment is being provided by Govt. in case of TB?
9. Can a lady with TB breast feed her baby?
10. Do you know about the mode of transmission of TB?
11. Do you know the symptoms of TB?
12. What is the effect of TB on body weight?
13. Is there any change in urine colour occurs during the treatment of TB?
14. Do you know about Mantoux test?
15. Have you ever heard or seen an X-ray of a TB patient?