



Research Article

ASSESSMENT OF COLLEGE STUDENT'S AWARENESS ABOUT TUBERCULOSIS IN AHMEDNAGAR

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(Received: August 25, 2012; Accepted: November 28, 2012)

ABSTRACT

Lack of knowledge and awareness about tuberculosis (TB) as well as Direct observed therapy short course (DOTS) area persistent and major community problem due top 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 and Management Ahmednagar (MH) India. In the present study 59.41% were male and 52.78% were female, 60.81% P.G. students and 54.31% U.G. 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 U.G. and P.G. students of H.S.B.P.V.T., C.O.P. &.C.O.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 realize their role in health education programs in the community to improve the public awareness about the 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 children give up study because of TB per year.¹⁻² 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 aged people.³ Despite the failure to reach many of the goals

of 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 births. 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 to development process at the central and state level. 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.⁴⁻⁵ The health care as in today's Indian society is centralized in the hands of Physician but in sense of Pharmacy practice, Pharmacists serve the role of community care taker, diagnosing disease and then managing them by compounding individual remedies and DOTS implementation is responsible for rapid reduction of tuberculosis prevalence's.⁶

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 various colleges in Ahmednagar (MH) 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 questionnaires 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.S.C., B.A., B.COM, MBA and BBA students.

RESULTS:

From the survey of 540 students of U.G & P.G. in which number of PG students were 224 (both male & female) and the number of U.G. students were 316 (both male & female). From the result of survey on the basis of education level (both U.G. & P.G.)52.58 % U.G. students & 61.01% P.G. students were responded correctly. Students with having awareness of TB were 55.35 % male and female 44.44 %. (Table 1)

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

S. No.	Sex/ education level	No. of students	Correct Response (%)	Incorrect Response (%)
1	Male	309	55.35	44.65
2	Female	242	44.44	55.56
3	P.G.	224	61.01	38.99
4	U.G.	316	52.58	47.42

A students based on survey about the TB revealed that the PG students exhibited more knowledge about TB than UG students. The most striking features that emerges from the

P.G. on the basis issues like transmission, treatment & drug therapy was found to be 58.10%, where as in U.G. students it was found to be 53%. Therefore we can assume that PG student's awareness was significantly higher than U.G.

Students. Percentage result from the survey about symptoms of TB methods for detection of TB showed that knowledge of U.G. students were 29.50 % & 45.65 % in P.G. students. This reverts that U.G. 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 P.G. & U.G. students of various colleges in Ahmednagar District 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 U.G. students about detection method like X-ray which was found to be 30.02 %, while knowledge about MDR was found to be 11 % knowledge about change in urine colour was found to be 25.75 %, which reveal that knowledge of the U.G. students were significantly poor as compared to P.G. students (Fig.1 & Fig.2).

Discussion:

In the present study, assessment of student's awareness about T.B. in Ahmednagar District (MH) India showed that the knowledge of students is not satisfactory. The goal of national health policy 2002 was to increase the awareness of T.B. in both educated and uneducated people. In 1959 government of India, with the help of WHO, establish the national T.B. Institute (NTI) in Bangalore to develop a national T.B. control programme (NTP), with the aim of establishing prompt awareness, diagnosis and ambulatory treatment which were integrated into general health services.

In contrast in a study among tribes of Maharashtra only 48% had heard about Tuberculosis. Over half of total students knew about BCG vaccination as a preventive tool against

Tuberculosis, only about 40 % cases new that Tuberculosis is now fully curable diseases knowledge about BCG vaccination was present in only 20% rural population in a study from Karnataka.⁷⁻⁹

effectively communicate and give knowledge about colour change in urine due to use of T.B. drugs (isoniazid, Rifampicin) during treatment; T.B. affected women can breast feed her baby; sanitation procedure to be followed during

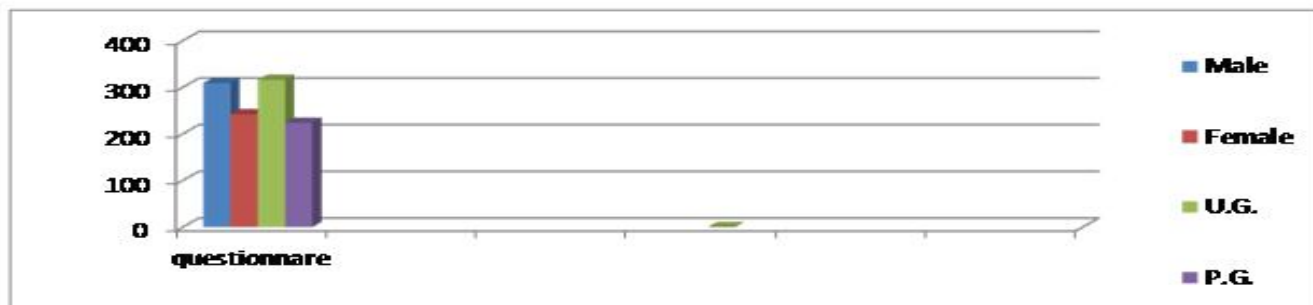


Fig.1: The percentage of P.G. students (Male & Female) awareness about T.B.



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

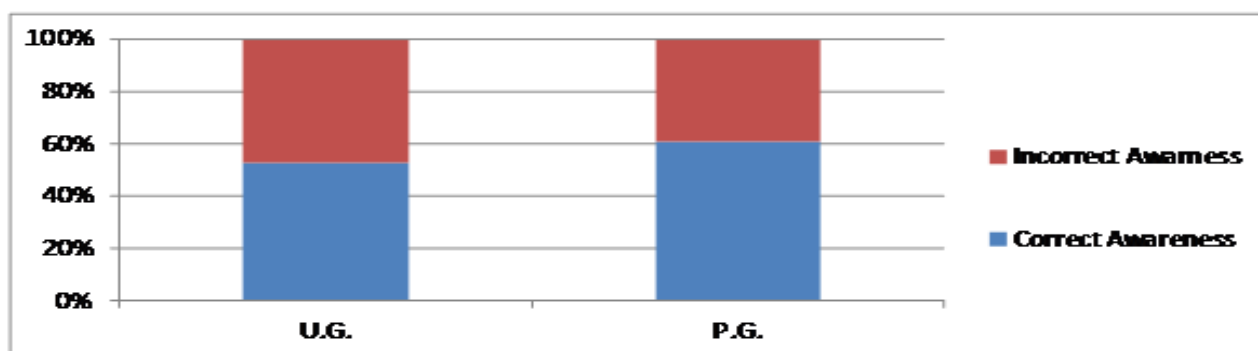


Fig. 3: The percentage of U.G & P.G student's awareness about T.B.

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 following aspects. Mobilize students for BCG vaccination and increase the awareness about it; create awareness among the students for the knowledge of treatment and prevention;

infection. This infection procedure to be followed for disinfecting house and articles; advising the students and to provide sufficient information at college level about free medical treatment, detection test, DOTS centres and mode of transmission. Our study showed that the P.G. students exhibited more aware about T.B. when compare with the

U.G. students. A high level of ignorance, wrong knowledge, wrong attitudes and wrong practices was demonstrated among senior management students in a study by Priyanka.

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 schools and colleges must uplift some new steps increasing the awareness of DOTS, methods of treatment, transmission and detection of T.B. Pharmacist are often considered as 1st point of contact in health care system and also a U.G. and P.G. students of Pharmacy can contribute to enhance the awareness in other departments of students.

Conclusion:

In conclusion, our study findings indicate the P.G. student's awareness was significantly higher than the graduate students. P.G. student's awareness regarding cause, symptoms, transmission, treatment of T.B. of higher compared to the U.G. students. Thus for the upliftment of students knowledge about T.B., Pharmacy students should join the hands with other students of college to uproot the cause of lack of awareness about T.B. by organizing the various programs, debates -and seminars in collaboration with hospitals and primary health centers which ultimately increase the awareness of T.B. among all students of professional colleges. If these measures are implanted firmly, it can increase the awareness of T.B. and ultimately T.B. free community can be created in India.

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Annexure

Questionnaire:

1. Have you heard about T.B.?
2. What is the cause of T.B.?
3. What are the different types of T.B.?
4. T.B. is curable or not?
5. Whether T.B. can be transmitted to other family members from a person having T.B.?
6. Have you heard about DOTS?
7. Do you know about MDR?
8. Do you know free treatment is being provided by government in case of T.B.?
9. Can a lady with TB breast feed her baby?
10. Do u 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 TB patient?