EDITORIAL OPEN ACCESS

A new concept in tuberculosis awareness in the low income countries

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The tuberculosis (TB) is a disease of great significance and is a major public health problem in low income countries like India. Tuberculosis is an infectious disease caused by Mycobacterium tuberculosis that affects the lungs and other body parts [1]. Tuberculosis is commonly transmitted by aerosols [2]. The TB of the lung is known as pulmonary TB and the TB involving other body parts is known as extrapulmonary TB [1]. A remarkable success has been achieved in TB control, yet it remains one of the most serious, alarming public health problems in low income countries [1]. Every year, millions of people get tubercular infection and thus it remains a second leading cause of deaths due to the infectious diseases worldwide [2]. It is estimated that one-third of the population in the world have a tubercular infection; nonetheless, the observed cases represent the tip of iceberg [3, 4]. In India alone, there are about 2 million deaths per year [5]. Also, India has the highest burden of TB in the world, accounting for approximately one-fifth of the global incidence [6]. India alone accounts for more than 25% of the world's incident cases with about four lakh deaths per year [5, 7]. TB represents 3.75% of India's disease burden, which is eleven times that of malaria and is one of the leading causes of death in the 15–45 year age group [5]. In such a scenario, the importance of awareness about this infectious disease is inevitable. The Government of India has launched a number of awareness programs like advertisements in print and media, audio and video commercials, puppet shows, community meetings, mass awareness campaigns in the slums and in areas of high endemicity, etc.

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Although, a lot of efforts are put in to create mass awareness even then the goal of controlling TB in near future looks a distant dream. WHO with its "STOP TB" strategy has given a vision to eliminate TB as a public health problem from the face of this earth by 2050 [8]. The problem with the awareness campaigns is that most of these are held on the occasions of the World TB Day and there remains a lean patch throughout the year in these awareness programs. The lackluster attitude of the Governments, communities and local political parties is one of the main reasons for the prevalence of large number of cases in the developing countries.

According to the WHO, TB is a worldwide pandemic and among the 15 countries with the highest estimated TB incidence rates, 13 are in Africa, while half of all new cases are in six Asian countries, viz., Bangladesh, China, India, Indonesia, Pakistan and Philippines. A WHO fact sheet dated March 2010 on tuberculosis stated that overall one-third of the world's population (over 2 billion) is currently infected with the TB bacillus [9, 10]. According to it, every second, someone in the world is newly infected with TB bacilli and 1 in every 10 of these newly infected people will become sick or infectious later in life [10]. Since concurrent infection with HIV weakens the immune system, people with co-infection of HIV and TB are much more likely to develop TB; it is a leading cause of death among HIV-positive people [10]. The present situation demands TB to be dealt as a social problem and not as a medical or even public health problem alone. The disease can be controlled by taking innovative interventions targeted at the vulnerable sections of the society [5]. The WHO declared tuberculosis a global emergency in 1993, and the 'stop TB partnership' proposed a global plan to stop tuberculosis, which aims to save 14 million lives between 2006 and 2015 [5]. The stop TB strategy has a very important component, which is empowering people with TB, and communities [5]. In a vast country like India, it is essential to involve every segment of the community for effective prevention and control of tuberculosis [5, 11]. The places with high passenger loads like metro stations, bus stations, railway stations and the airports are the main targets that should be considered for creating awareness, since most of the population is still

not aware of about the TB. The commuters are receptive and responsive to special health education messages and are more inclined to assimilate the information and relay it to other household members and friends.

Herein, I disscuss about the novel concept of public awareness campaign against TB at one of the busiest metro station in North Delhi. The main aim of this campaign was to increase the awareness, highlight the importance of TB symptoms and to encourage the involvement of the masses towards the tuberculosis control program by active participation.

Directly observed treatment-short course (DOTS) is an internationally recognized strategy for delivering the basics of TB case-finding and cure. It is not simply a clinical approach to patients, but rather a management strategy for public health systems, including political commitment, case-detection through quality-assured bacteriology, short-course chemotherapy, ensuring patient adherence to treatment, adequate drug supply and sound reporting and recording systems [12]. The Delhi DOTS Program under the Revised National Tuberculosis Control Program (RNTCP) has 24 Chest Clinics spread over whole Delhi. The Chest Clinic Moti Nagar (CCMN), a District Tuberculosis Centre (DTC) or the Chest Clinic as it is known in Delhi DOTS Program, is the nodal point for all TB control activities in North Delhi. In RNTCP, the primary role of the DTC has shifted from clinical to managerial functions. The District TB Officer (DTO) at the DTC has the overall responsibility of management of RNTCP at the district level as per the program guidelines. The CCMN is located in the North Delhi and it is one of the largest TB centers which cover a population of about 1.2 million. It has 18 DOTS centers and 13 Designated Microscopy Centers (DMC's), under its supervision. The CCMN is working efficiently to cater the needs of the huge number of TB patients. However, even after the regular mass awareness campaigns like community meetings, active mass scale public education programs about the TB and other regular health education activities the number of new TB cases is still raising. Although, the relapse rate is declining significantly, but even then the CCMN has had a huge burden of the TB patients including MDR-TB and XDR-TB. Thus, showing that although the awareness activities are going in the right direction yet the spread of infection of TB is over and beyond the control of existing awareness drives.

Taking into consideration the above points a novel concept was introduced in the TB control activities at the CCMN. Thus, on the occasion of the World TB Day, 24 March 2015 for the very first time in India, the CCMN started a public awareness campaign for five days at the Delhi Metro Station, Moti Nagar. In the past, similar campaigns were reported from all over the world. In India, recently a major political party created awareness about the recent outbreak of the deadly swine flu [13]. In the UAE, a 12-day campaign against the soaring rates of thalassemia was done in 2013 [14]. However, this is the very first time that such type of awareness activity related to tuberculosis was done in the national capital at the metro station wherein, a DOT provider and a physician were actively involved in creating awareness among the masses.

The Delhi Metro Station, Moti Nagar was chosen because it is a very busy station and has a huge passenger load. By this campaign the commuters got a chance to know about the disease, its symptoms and the free cure which available throughout the country. They were given information brochures free of cost, which were self-explanatory and were in two languages, i.e., Hindi and English. Those passengers who complained of symptoms of cough for two weeks or more with or without other symptoms of TB were encouraged to visit CCMN where the sputum examination was done, thereby actively finding TB cases. These passengers with the symptoms of TB were also examined by the expert physicians for the disease and were also provided medicines free of cost.

This whole novel activity was conducted for five days, from 23 March 2015 to 27 March 2015. And during these five days' time the response of the passengers was noted and it was found that the there was a gradual increase in the number of commuters stopping at the awareness point and discussing about the disease. Also, the patient inflow at the CCMN gradually increased with the prospective tuberculosis patients. The knowledge about the common symptoms of TB and the availability of free diagnosis and treatment facility also helped in improving the treatment seeking behavior [15]. The activity had also impacted on the stigma and discrimination associated with the disease. The whole activity required less than two dollars per day and thus was financially affordable. Besides, there was not a requirement for engaging more than two staff that included a physician and a TB health visitor/DOT provider. This campaign was also observed by the WHO representatives and received appreciation for such an innovative idea.

The TB is a great public health problem and the role of new and innovative ideas to control this infectious disease is the need of the hour. The awareness campaign carried out at the CCMN is affordable financially and does not require huge setup and staff. Also, the results obtained in a short period of time showed that such activities can be carried out throughout the year and should not be limited to the occasions of the World TB Day. The results of such successful awareness campaigns in the control of various other diseases are well documented and thus such awareness campaigns are essential to control TB in the low income countries. The TB control is possible if all the stakeholders involved like physicians, private sector, religious bodies, and other local nonprofit organizations, e.g., Lions Club, Rotary International, Governments and local political parties work in unison.

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REFERENCES

1. Amgain K, Maharjan M, Paudel DP, Dhital M, Amgain G, Paneru DP. Awareness and attitude of pulmonary tuberculosis patients toward tuberculosis: A cross-sectional study from Chitwan district of Nepal. Int J Health Allied Sci 2014;3:216–20.
2. Grange JM, Greenwood D, Slack R, Peuthere JF. Medical Microbiology 15th ed. UK: ELBS Churchill Livingstone; 1998. p. 215.
3. Miller B, Schieffelbein C. Tuberculosis. Bull World Health Organ 1998;76 Suppl 2:141–3.
4. WHO. Global Tuberculosis Report 2012. Geneva, Switzerland: World Health Organization; 2012b.
5. Gothankar JS. Tuberculosis awareness program and associated changes in knowledge levels of school students. Int J Prev Med 2013 Feb;4(2):153–7.
6. Central TB Division, Directorate General of Health Services. New Delhi: Ministry of Health and Family Welfare Nirman Bhawan; TB India. RNTCP Annual Report; 2011. p. 1.
7. WHO Report 2011. Geneva: World Health Organization; Global tuberculosis control. 2011.
8. World Health Organization. Global Tuberculosis Report. Geneva: WHO; 2009.
9. Geneva: WHO; 2010. World Health Organization. Fact Sheet No. 104: Tuberculosis. Available from URL: http://www.who.int/mediacentre/factsheets/fs104/en/print.html (Accessed 2015 June 15).
10. Sandhu GK. Tuberculosis: Tuberculosis: current situation, challenges and overview of its control programs in India. Current Situation, J Glob Infect Dis 2011 Apr;3(2):143–50.
11. Challu VK, Kumar P, Rao VS. Involvement of youth for TB advocacy-An innovative experiment. NTI Bull 2005;41:71–5.
12. Geneva: WHO; 2006. World Health Organization. THE GLOBAL PLAN TO STOP TB 2006-2015: PART I Strategic directions. Available from URL: http://www.searo.who.int/LinkFiles/TB_Day_Kit_The_Global_Plan_to_Stop_TB_2006-2015.pdf (Accessed 2015 June 15).
13. DPCC kicks off flu awareness drive. Available from URL: http://www.tribuneindia.com/news/delhi/dpcc-kicks-off-flu-awareness-drive/52616.htm (Accessed 2015 June 15).
14. Thalassaemia awareness campaign launched. Available from URL: http://www.khaleejtimes.com/nation/inside.asp?xfile=/data/nationhealth/2013/March/nationhealth_March52.xml&section=nationhealth (Accessed 2015 June 15).
15. Chinnakali P, Ramakrishnan J, Vasudevan K, et al. Level of awareness about tuberculosis in urban slums: Implications for advocacy and communication strategy planning in the National program. Lung India 2013 Apr;30(2):139–42.

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