

Awareness Regarding Transmission, Diagnosis and Treatment of Tuberculosis among ASHA Workers in a Rural Block of Haryana

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ABSTRACT

Introduction: Tuberculosis (TB) is a major global public health problem. The World Health Organisation (WHO) had given an estimated incidence of 2.2 million cases of tuberculosis (TB) for India out of a global incidence of 9.6 million cases. One of the key components of the National Rural Health Mission (NRHM) is to provide every village, Accredited Social Health Activist (ASHA). Directly Observed Treatment Short course (DOTS) provider, if accessible and acceptable to patient and accountable to health system, can play a significant role in reducing TB burden. ASHA can be a DOTS provider under Revised National Tuberculosis Control Programme. The present study attempts to understand awareness of ASHAs pertaining to diagnosis and treatment of tuberculosis.

Objective: To assess awareness regarding transmission, diagnosis and treatment of tuberculosis among ASHA workers

Methodology:

Study design: cross-sectional, descriptive

Settings: rural health training centre, Chiri block district Rohtak

Study participants: out of 106 ASHA workers 93 ASHAs participated in the study

Study tool: pretested, self-administered questionnaire

Study analysis: percentages and proportions

Results: Mean age of study participants was 29.0±5.7. TB can affect any organ of body correctly answered by 46% of ASHAs. 88% of ASHAs were aware about symptoms of tuberculosis while 82% ASHAs told sputum examination is the investigation of choice for diagnosis of TB. Regarding the mode of spread of TB, the correct response was (cough, spit, or sputum- droplet, air-borne) given by 96% of ASHAs. However 55% of ASHAs had told DOTs strategy used for treatment of tuberculosis. 19% ASHAs responded that treatment of TB has to be done in isolation.

Conclusion: The results highlight that knowledge gap still persists even after training of ASHAs regarding RNTCP. Hence there is a need to reinforce repeated sensitization so that they can utilize this knowledge for the benefit of the community.

Key Words: Awareness, ASHA worker, Tuberculosis.

INTRODUCTION

The World Health Organisation (WHO) gave an estimated incidence figure of 2.2 million cases of tuberculosis (TB) for India out of a global incidence of 9.6 million cases. India is the country with the highest burden of disease. The estimated TB prevalence i.e. the number of people in

India who are living with active tuberculosis is 2.5 million ^[1,2]

After implementation of RNTCP using DOTS strategy, cure rate has dramatically improved from 30% to more than 85% and has been consistently maintained at a satisfactory level. However, attainment of minimum level of case

detection rate of 70% in order to have any long term impact in terms of reduction in incidence and prevalence rates has been proved to be a hard task. [3] Over 15 million patients have been treated and three million additional lives have been saved by the Revised National Tuberculosis Control Programme (RNTCP) over the last decade. [4]

The public health care system holds a factual predominance of health care service delivery in India. Health care providers have additional responsibility to impart knowledge about these major public health problems. It is proven that health care providers’ knowledge levels directly impact the effectiveness of healthcare services. The unawareness about diagnosis and treatment of disease results in concealment of status, fear and shame which in turn leads to potential threat to preventive efforts. [5-8]

One of the key components of the National Rural Health Mission (NRHM) is to provide every village, Accredited Social Health Activist (ASHA). [9] Directly Observed Treatment Short course (DOTS) provider, if accessible and acceptable to patient and accountable to health system, can play a significant role in reducing TB burden. ASHA can be a DOTS provider under Revised National Tuberculosis Control Programme. The present study attempts to understand awareness of ASHAs pertaining to diagnosis and treatment of tuberculosis. Hence our prime challenge is to create awareness about the disease among link workers of public health system, so that they can handle such kind of cases which come across during their work.

A very few studies have been reported in Haryana, regarding awareness about tuberculosis among ASHA workers especially in public health care system. Hence the objective of this study was to assess awareness of ASHA workers about this disease.

Objective: To assess awareness regarding transmission, diagnosis and treatment of tuberculosis.

METHODOLOGY

Study design: cross-sectional, descriptive

Settings: rural health training centre- Chiri block district Rohtak

Study participants: out of 106 ASHA workers 93 ASHAs participated in the study

Study tool: pretested, self-administered questionnaire during monthly meeting of ASHAs.

Study variables: age, place of residence, marital status and knowledge about source of information about TB, prevention, mode of transmission, investigation, name of programme, strategy, involvement of organs and treatment of tuberculosis done.

Ethical issue: written informed consent taken from each study participants.

Inclusion criteria: all the participants who had given written informed consent.

Exclusion criteria: not willing to participate in study.

Data analysis: data was entered in Microsoft Office Excel 2010 and statistical analysis done using SPSS version 22.0. Descriptive statistics were expressed as mean with standard deviation for continuous variables and frequency with percentage for categorical variables.

RESULTS

A total of 93 ASHA workers enrolled for the study and mean age of study participants was 29.0±5.7 years. All the ASHAs were married and belonged to rural area. The present study revealed knowledge of ASHA workers regarding transmission, diagnosis and treatment of tuberculosis.

Table 1: Profile of study participants (n=93)

Attribute	Study participants N (%)
Caste General	33 (35)
OBC	24 (26)
SC/ST	36 (39)
Literacy	
High school	58 (62)
Senior secondary and above	35 (38)
Information about TB	
Friends/relatives/TV/obtained from media/ news	20 (22)
Health personnel/ during training	73 (78)

Figure in parenthesis indicate percentages

Table 2: Awareness regarding transmission, diagnosis and treatment of tuberculosis among study participants (n=93)

Attribute	N (%)
Tuberculosis prevention Isolation	2 (2)
can be done by Early diagnosis and Treatment	3 (3)
Prevent Smoking	5 (6)
BCG vaccination	83 (89)
Perception about mode of Direct contact, sharing things	4 (4)
transmission of TB via Cough, spit, or sputum-droplet	89 (96)
air-borne	
Investigation done for Sputum microscopy	82 (88)
diagnosis of Tuberculosis X-ray chest	7 (8)
Tuberculin test	4 (4)
Investigations for Tuberculosis done in Any health facility	22 (24)
Designated microscopic centre	71 (76)
Correct name of programme Know	43 (46)
under which diagnosis and Don't Know	50 (54)
treatment of TB done	
Correct name of strategy under which Know	51 (55)
diagnosis and treatment of TB done Don't know	42 (45)
Tuberculosis involves Lungs, bones/both	50 (54)
Any body part	43 (46)
Place of treatment of TB Hospital settings	39 (42)
Home	36 (39)
In isolation	18 (19)

Figure in parenthesis indicate percentages

DISCUSSION

The present study revealed awareness regarding transmission, diagnosis and treatment of tuberculosis among study participants about this disease. In this study, source of information regarding tuberculosis by health personnel/during training was among 78% ASHAs. The influence of mass media like television/news paper/social media was found substantially less in disseminating information on TB in the present study (22% study participants). Similar observations were recorded in a study conducted in North India by Malhotra R et al. The authors described that source of information in more than half of the respondents were health personals and role of mass media was limited. [10] Knowledge regarding role of BCG vaccination in prevention of Tuberculosis was found among 89% ASHAs. However typical contrast findings were observed by Subramanian T et al in their study conducted in Tamil Nadu (14%). [11]

This might be due to the contact of health personals and also the modular training provisions for skill development

from time to time in public health care system.

In terms of knowledge regarding mode of spread of TB, the majority of the study subjects (96%) mentioned that TB can be transmitted through cough, spit, or sputum- droplet, air-borne. Similar observations were made by Hashim DS et al that study participants had very good knowledge about the mode of transmission of TB (98.2%). [12] Similar responses were recorded in studies from Bangladesh, Pakistan and Egypt, where most of the respondents expressed the similar view. [13-15]

The present study explored that sputum examination is the investigation of choice for diagnosis of TB described by 88% of ASHAs and X-ray chest accounts for 8% while Tuberculin test as 4%. Very similar finding were revealed in a study conducted by Sagare SM et al that sputum is reliable method of diagnosis of pulmonary tuberculosis (88%) while 9% described X-ray chest. [16]

The present study revealed gaps in knowledge that TB can affect any organ of body correctly answered by 46 % of study participants while 54% responded lungs or bones or both the organs. Knowledge about describing correct name of Revised National Tuberculosis Control Programme and DOTs strategy used for treatment of tuberculosis was found among 46% and 55% study participants respectively. In contrast to that in a study conducted by Sagarel SM et al found that DOTS identified as the ‘key’ strategy to control tuberculosis under RNTCP by 95% of study subjects. [16] It might be due to the fact that correct naming of the programme and DOTs strategy among ASHAs was no remembrance due to their rural background and literacy status.

CONCLUSION AND RECOMMENDATIONS

The results highlight that there exists a knowledge gap regarding disease transmission, diagnosis and treatment. Hence there is a need to reinforce repeated

sensitization so that they can utilize this knowledge for the benefit of the community.

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