

To assess the Effect of Self-Instructional Module on Knowledge and Practices Regarding Directly Observed Treatment, Short-Course (DOTS) among ASHA in Selected Rural Area

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ABSTRACT

Introduction: Tuberculosis is one of India's major public health problems. The Indian government's Revised National TB Control Programmed (RNTCP) started in India during 1997. The program uses the WHO recommended directly Observed Treatment Short Course (DOTS) strategy to develop ideas and data on TB treatment. Accredited Social Health Activists (ASHA) Workers as the first point of contact, at the rural community level, can play a key role in TB control as they are in the ideal position to promptly detect and refer the presumptive. A Quasi experimental one-group pre-test and post test study was carried out to know the effect of Self-Instructional Module on knowledge and practices of ASHA workers regarding TB and DOT'S.

Material and methods: A quasi experimental study was conducted on 60 ASHA Workers selected from 5 random primary health centers in selected rural area. After fulfilling the inclusion and exclusion criteria written consent was taken from the subject. Data was collected with the help of structured questionnaire and self reported observational checklist from 27 Jan 2017 to 2 Feb 2017. During this period implementation of self-instructional module was done to evaluate the effect of module on knowledge and practices.

Results: Average mean score of overall knowledge of ASHA workers regarding DOTS was 31.66% before the test, which significantly increased 90% after the implementation of self instructional module. Majority that is 45% of ASHA had poor practice score in pre-test regarding DOTS which was improved in post test i.e. 95%. Pearson Correlation formula was used to find out Correlation between knowledge and practices score. pre-knowledge score and pre-practices score the Correlation is significant that means as per knowledge increased there are positive change in Practices regarding TB and DOTS ('r' value is 0.43).

Conclusion: ASHA workers play a vital role in control of tuberculosis and implementation of DOTS in rural area, ASHA workers helped to reduce a morbidity and mortality of tuberculosis. Our study finding also suggested that there is need to upgrade the knowledge of ASHA workers by implementing a various strategies which will helps to ASHA workers to work efficiently at grass root level of health care delivery system. Self-explanatory specific guidelines should be made available for ASHA workers regarding administration of DOTS to tuberculosis client in community.

Keywords: Self-Instructional Module, Knowledge, Practices, DOTS, ASHA, Tuberculosis RNTCP, NRHM

problems. Tuberculosis is a disease caused by bacteria called mycobacterium tuberculosis causes nearly two million deaths worldwide each year. According to WHO estimates, India has the world largest tuberculosis epidemic. Tuberculosis is curable and preventive disease and yet it causes significant morbidity and mortality.¹

India is developing nation, where tuberculosis is highly prevalent. The nation constitutes about 1/5th of the global tuberculosis incident cases and nearly 2 million people in India develop tuberculosis of which around 0.87 million are infectious cases. It is estimated that around 3, 30,000 Indians die due to tuberculosis annually.²

The government of India launched National Rural Health Mission (NRHM) on 12th April 2005 to address the health needs of rural population. Specifically the vulnerable section of the society. One of the key components of the National Rural Health Mission is to provide every village in the country with a trained female community health activist or accredited social health activist (ASHA) selected from the same village.³ The Indian government Revised National tuberculosis control programme (RNTCP) started in India during 1997. The programme uses the WHO recommended Directly Observed Treatment Short Course (DOTS) Strategy to develop ideas and data on TB treatment.⁴ Accredited social health activist (ASHA) workers as the first point of contact at the rural community level, can play a key role in TB control as they are in ideal position to provide the DOT'S in rural area. Study finding indicated that 70.0% ASHA workers are playing role of DOT'S provider.⁵

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INTRODUCTION

Tuberculosis is one of the India's major public health

A Quasi experimental one-group pre-test and post test study was carried out to know the effect of Self-Instructional Module on knowledge and practices of ASHA workers regarding TB and DOT'S.

MATERIAL AND METHODS

Study was conducted from 27 June 2017 to 02 Feb 2017. After taking the prior permission from institutional ethical committee and obtaining permission from the District Health Officer (DHO) the study was conducted.

Content validity of the research tool was established by obtaining suggestion from the expert of various fields, the reliability value obtained for structured questionnaire was 0.76 and observation checklist was 0.79 by Cohen's Kappa formula which shows the research tools were statistically reliable. As per the prefix date and time that is 27/01/2017 to 02/02/2017 the researcher visited the study area and explained the purpose of the research study to the ASHA workers. Written informed consent taken from the ASHA workers and confidentiality was assured. The researcher has first administered pre-test structured questionnaire to the ASHA workers. Followed that researcher has administered Self-Instructional Module on DOTS to them and requested to them come for the post- test on 02/02/2017. This process of data collection has been followed till the desired number of sample were achieved.

Inclusion Criteria

1. ASHA workers who are working in rural area
2. Those who are willing to participate
3. Those who are present at the time of data collection.

Exclusion Criteria: ASHA workers who are participated in pilot study, those who are not willing to participate in the study.

STATISTICAL ANALYSIS

The collected data was organized, tabulated and analyzed by using descriptive statistics that is in frequency, percentage, mean and standard deviation and inferential statistics that is t-test and chi-square test are used to find out the co-relation between knowledge and practices.

RESULTS

Demographic findings of the study indicated that majority (88%) of ASHA workers completed their education till high school, it shows the minimum level of education to appointing ASHA Workers is followed by government. 70% ASHA workers providing DOT'S in their respective area it shows that as per NRHM (2005) guidelines ASHA workers acting as a DOT'S provider/DOTS agent in rural area.⁶ Study finding indicated that In pre-test knowledge score and practices score was poor that was improved in post-test which suggest that self-instructional module was effective to improve the knowledge and practices of ASHA workers. (Grading of knowledge and practices shown in table 1 and 2. Table 2: The practices scores of ASHA workers regarding DOTS was calculated in terms of grade in pre-test and post-test.

Grads of knowledge	Pre-test		Post-test	
	Frequency <i>f</i>	Percent %	Frequency <i>f</i>	Percent %
Poor:	19	31.66	0	0
Average	9	15	1	1.6
Good:	19	31.66	1	1.6
Very Good	5	8.33	4	1.6
Excellent	8	13.33	54	90

Table-1: Grads of knowledge of ASHA Workers regarding DOTS in Pre-Test and Post-Test

Grads of practices	Pre-Test		Post-Test	
	Frequency <i>f</i>	Percent %	Frequency <i>f</i>	Percent %
Poor:	27	45	1	1.7
Average	3	5	0	0
Good:	5	8.33	0	0
Very Good	6	10	2	3.33
Excellent	19	31.66	57	95

Table-2: The practices scores of ASHA workers regarding DOTS was calculated in terms of grade in pre-test and post-test.

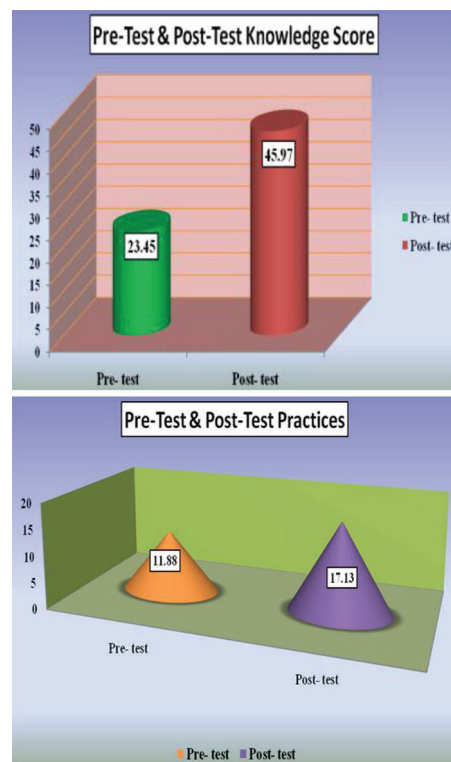


Figure-1 and 2: Comparison of Pre-Test and Post-Test Mean Knowledge and Practices score

Study finding also indicates that calculated 't' value (24.07) was greater than the table value (2.12) at 0.01 level of significance with the degrees of freedom being (59). Thus the null Hypotheses (H_0) was rejected and Hypotheses (H_1) was accepted. Thus the significance of 'Self-Instructional Module' was effective in the improvement of knowledge of ASHA workers regarding DOTS. (Fig.1)

Overall practice score calculated 't' value (- 9.07) was greater than the table value (0.11) at 0.01 level of significance with

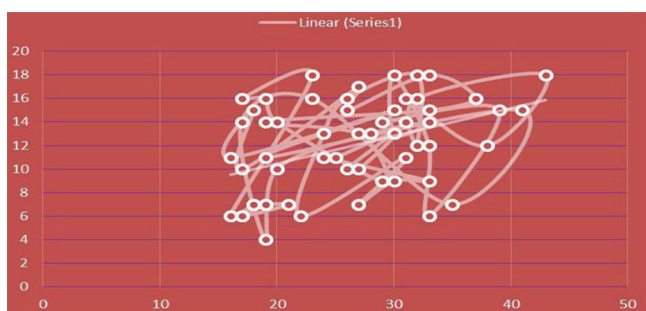


Figure-3: Correlation between Pre-Knowledge mean score and Pre-Practices mean score

the degrees of freedom being (59). Thus the null Hypotheses (H_0) was rejected and Hypotheses (H_1) was accepted. Thus the significance of 'Self-Instructional Module' was effective in the improvement of practices (Fig.2)

Study highlighted a correlation between pre-knowledge score and pre-practices score the Correlation is significant that means as per knowledge increased there are positive change in Practices regarding TB and DOTS r. Value is 0.43. (Fig.3)

DISCUSSION

ASHA can be a DOTS provider as per Revised National Tuberculosis Control Programme (RNTCP) guideline present study finding suggested that 72%ASHA workers acting as a DOTS provider.⁶ S. M. Sagare (2011) a questionnaire based KAP (Knowledge, Attitude and Practice) study suggested that For better understanding regarding tuberculosis and other health related issues, methodologies like quiz competition, group discussion, posters, role play, printed handouts, film show, setting up novel examples etc. need to be incorporated in training programme in the present study Self-Instructional Module was effective to improve the knowledge of ASHA workers and practices also improve which indicates that self learning material are useful to improve the knowledge on health issue.⁷

A cross sectional study was conducted to assess the knowledge, attitude and practices regarding Tuberculosis and DOTS among young medical graduates in Lady Harding Medical College New Delhi. Majority of the study subjects (92.7%) ranked DOTS strategy as more successful for treating tuberculosis in comparison to self-administered therapy and study concluded that Tuberculosis is a major health problem and there is a need for appropriate changes in the under-graduate medical teaching curriculum with regard to Tuberculosis. Present study indicated that there is need to make the appropriate changes in ASHA workers training program which is organized by the government of India.⁸ Experimental study was conducted to assess the effectiveness of instruction module on Tuberculosis control and DOTS to medical under-graduates in Malawi. 134 medical students were selected randomly Pre module and Post module assessment was done using a structured questionnaire. Results suggested a satisfactory increase in knowledge levels of subjects by comparison of post module mean scores and pre module mean scores. Present study also indicted that

comparison between the pre-test, post-test knowledge score and there is satisfactory increase in knowledge of ASHA workers in post-test.⁹

Rajpal S et al. (2010) conducted a study on Knowledge, attitude and practices regarding tuberculosis and DOTS among interns in Delhi, A total of 287 interns were surveyed. Majority of the study subjects (92.7%) ranked DOTS strategy as more successful for treating tuberculosis in comparison to self-administered therapy. Present study suggested that DOT'S Strategies is most important to reduce the TB prevalence in a rural area.¹⁰

Our study findings are related with Srivastava SR, et al.(2011).conducted a cross sectional study to evaluate the knowledge, attitude and practices of ASHA workers in relation to child health Our study also conducted on ASHA workers and suggested that ASHA workers is A Key components of NRHM to provide a care a rural, vulnerable group of community.¹¹

CONCLUSION

The Study finding gives sufficient evidence that there was a significant effect of Self- Instructional Module that ASHA workers knowledge has improved after implementation of module. Study finding also suggested that there is need to upgrade the knowledge of ASHA workers by implementing a various strategies which will helps to ASHA workers to work efficiently at grass root level of health care delivery system, and need to provide a self- learning material to ASHA workers.

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