



A STUDY TO EVALUATE THE EFFECTIVENESS OF IEC CAMPAIGN ON SELF EFFICACY, HEALTH BEHAVIOUR AND THE REGULARITY OF DOTS THERAPY FOR EMPOWERMENT OF TB PATIENTS IN SELECTED TUBERCULOSIS UNITS, CHITTOOR DIST, ANDHRAPRADESH

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ABSTRACT

The aim of the study was to evaluate the effectiveness of IEC (Information Education and Communication) campaign on self efficacy, health behavior and regularity of DOTS therapy for the empowerment of TB patients. True experimental design was adopted for this study. 20 adult tuberculosis patients were selected from Arogyavaram TB Sanatorium Chittoordist, Andhra Pradesh. Based on simple random sampling technique, 10 samples were allotted to each in experimental and control group. For both experimental and control groups, routine treatment was given (height, weight and sputum analysis). For the experimental group the intervention (Information Education and Communication) was administered. The post test overall mean value of self efficacy, health behavior and the regularity of DOTS therapy was found to be higher than the pretest value. The 't' value for self efficacy, health behavior and the regularity of DOTS therapy between the post test assessment of experimental and control group was found to be 5.47, 4.98 & 4.77 respectively. It was found to be highly significant at $p < 0.001$. Therefore the study concludes that the IEC campaign was effective in improving the self efficacy, Health behavior and the regularity of DOTS therapy among TB patients.

KEY WORDS: Tuberculosis clients, IEC, Self efficacy, health behavior, regularity of DOTS therapy.

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INTRODUCTION

Tuberculosis is a major public health problem in India. It is potentially a fatal contagious disease that can affect almost any part of the body but it is mainly an infection of the lungs. It is preventable and curable if we diagnosed early¹. India is the country with the highest burden of TB, with WHO statistics for 2013 giving an estimated incidence figure of 2.1 million cases of TB for India out of global incidence of 9 million. The estimated TB prevalence figure for 2013 is given as 2.6 million.²⁻³

Table no.1
WHO estimated burden of tuberculosis in India – 2014

Year	Population of India covered under RNTCP (millions)	Total TB cases notified	Total smear positive TB cases identified	New smear positive TB cases notified	New smear negative TB cases notified	New extra pulmonary TB cases notified
2011	1,210	1,515,872	844,920	642,321	340,203	226,965
2012	1,228	1,467,585	817,234	629,589	317,616	234,029
2013	1,247	1,410,880	798,414	619,923	290,543	225,619

The Revised National TB Control Program (RNTCP) is being implemented as a 100% centrally sponsored scheme which is WHO recommended unawareness of tuberculosis leads to hesitation in medication and sometimes discrimination of the treatment in between which results in a change in their treatment category and duration. The purpose of information, education and communication (IEC) is to improve people's health by increasing awareness and knowledge and changing attitudes and behavior.⁴ The WHO defines empowerment as a process through which people gain greater control over decisions and actions affecting their health.⁵

MATERIALS AND METHODS

True experimental research design was used for this study.⁶ After obtaining institutional ethical committee approval, the study was conducted among category I & II tuberculosis patients who attended the OPD In Arogyavaram TB Sanatorium Chitoor Dist, Andhra Pradesh. By simple random sampling technique, 10 samples were allotted to each experimental and control group.⁷ The tools used for the study as follows: Section I: Demographic profile consists of 24 items. Section II: Rating scale to assess the self efficacy of the samples.⁸ It consists of 6 components (manage disease in general scale, managing the symptoms, manage shortness of breath, physical activity, emotional condition, communicate with physician) Section III: Questionnaire to assess health behavior.⁹ This section consists of 4 parts related to health behavior, habits, diet, exercise, activities of daily living, follow up & treatment. Section IV: Checklist on regularity of DOTS therapy.¹⁰ It consists of 2 parts regarding baseline information & check list on regularity of DOTS therapy. IEC campaign includes information, Education and communication.

Information

Posters, pamphlets & leaflets are considered to be one of the important means for disseminating information to literate and semi literate groups.

Education

The structured teaching program includes the disease condition, medical management, nutrition, exercise, monitoring, follow up, complications and prevention and is executed by group teaching method with the help of flash cards which lasts for 40 minutes.

Communication

Mass communication was given to create the awareness on tuberculosis in the form of role play. It is a drama where trainees/ participants act out real life situations relating to a chosen issue in front of their colleagues/peers. Data collection was done in 3 phases.i.e (Pretest- IEC- Posttest). Pre test was conducted among tuberculosis clients on self efficacy, health behavior and regularity of DOTS therapy with structured questionnaire, rating scale and check list on Monday, Wednesday and Friday in outpatient department of arogyavaram TB sanatorium. Two months after the pre test, IEC was administered to the experimental group.i.e. IEC- Information was given through posters, pamphlets & leaflets.¹¹ Education was given in the form of structured teaching Program.¹² Mass Communication was given in the form of Roleplay.¹³ Post test was done for both the group using the same tool 2 weeks after the intervention.

RESULTS & DISCUSSION

Descriptive (Mean, Standard deviation) and inferential statistics (paired 't' test and independent 't' test).¹⁴ were used. The mean difference obtained between the pretest & post test among experimental group for self efficacy, health behavior and regularity of DOTS was found to be 51.5, 5.00, 10.60 respectively (Table-1, 2 & 3: Figure-1). The obtained 't' value was 6.5, 6.7, 6.6 and found to be highly significant at $p < 0.001$. The improvement mean obtained for post test between experimental & control group for self efficacy, health behavior & regularity of DOTS was found to be 47.2, 3.60 & 11.8 respectively for which the obtained 't' calculated value was 5.4, 4.9, & 4.7 and found to be highly significant at $p < 0.001$ (Table-4; Figure-2). The current study is significant, despite its limitations, in that it can serve as a baseline for future impact assessments, and an essential component of

RNTCP evaluation in India.¹⁵ The similar findings were supported by a study conducted by Sharma et al (2005), the IEC has been effective in raising awareness and

improving self reporting, but it requires intensification with suitable modification to reach all sectors.¹⁶

Table 1
Comparison values of pre and post test of self efficacy

n =10					
Self efficacy	Mean	SD	Mean difference	Paired 't' value	P –value
Pretest	102.00	15.13			
Posttest	153.50	20.55	51.50	6.49* (df =9) (S)	<0.001

Table 2
Comparison values of pre and post test of health behavior

n=10					
Health behavior	Mean	SD	Mean difference	Paired 't' value	P –value
Pretest	10.70	2.26			
Posttest	15.70	1.70	5.00	6.70* (df =9) (S)	<0.001

Table 3
Comparison values of pre and post test of regularity of DOTS therapy

n=10					
Regularity of DOTS	Mean	SD	Mean difference	Paired 't' value	P –value
Pretest	35.80	6.14			
Posttest	46.40	3.86	10.60	6.63* (df =9) (S)	<0.001

Table 4
Comparison values of post test self efficacy, Health behavior and regularity of DOTS therapy

N= 20						
Domain	Group	Mean (post test)	SD	Mean difference	Independent 't' test value	P-value
Self efficacy- posttest	Experimental group(n=10)	153.50	20.55			
	Control group(n=10)	106.30	17.89	47.20	5.48* (df=9)	P<0.001
Health behavior post test	Experimental group(n=10)	15.7	1.70			
	Control group(n=10)	12.10	1.52	3.60	4.98* (df=9)	P<0.001
Regularity of DOTS-posttest	Experimental group(n=10)	46.40	3.86			
	Control group(n=10)	34.60	6.79	11.80	4.78* (df=9)	P<0.001

Fig:1 Comparison of Self Efficacy, Health Behaviour and Regularity of DOTS therapy of Pre and Post test for Experimental Group

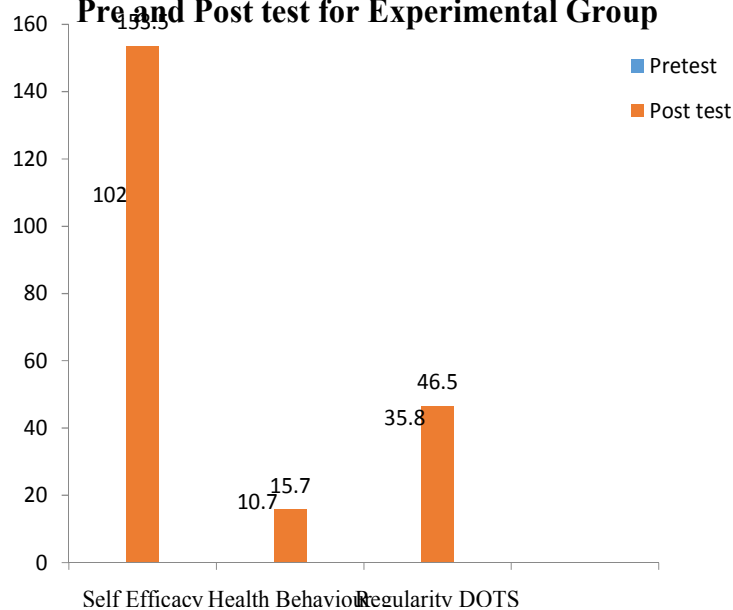
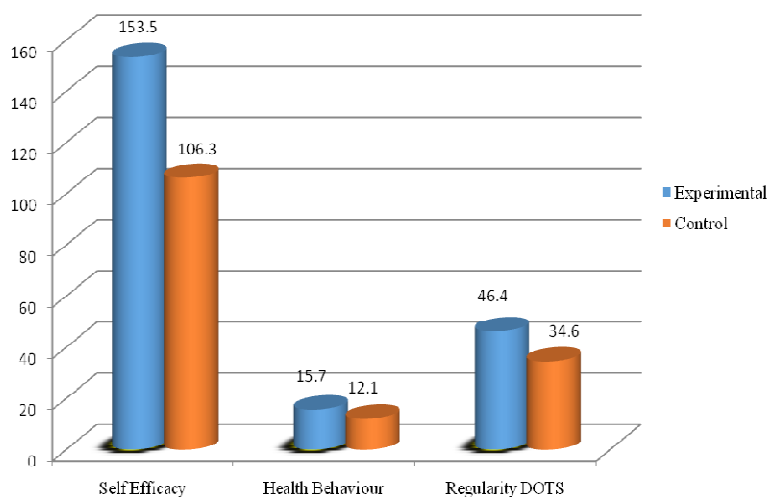


Fig:2 Comparison of Self Efficacy, Health Behaviour and Regularity DOTS for Experimental and Control



CONCLUSION

In the light of the results of the study, the IEC needs to be continued, with increased focus as disadvantaged social groups. IEC methods can be implemented for people without formal education, women and lower socio-economic classes. Finally the present study should be followed by regular IEC input assessment studies to better monitor this essential component of the RNTCP.

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CONFLICT OF INTEREST

Conflict of interest declared none.

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