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A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON LEVEL OF THE KNOWLEDGE REGARDING DOTS THERAPY AMONG THE ASHA WORKERS AT DEHRADUN DISTRICT

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ABSTRACT

Background: Tuberculosis is a specific infectious disease caused by Mycobacterium tuberculosis. The disease primarily affects the lungs and causes pulmonary tuberculosis. It can also affect other body parts such as intestine, meninges, bones and joints, lymph gland, skin and other body parts. DOTS remain central to the public health approach to tuberculosis control, which is now presented as Stop Tuberculosis Strategy. DOTS therapy is the strategy to ensure cure by providing the most effective medicine and confirming that it is taken. It is only strategy, which has been documented to be effective worldwide on a programme basis. ASHA workers are designated as DOTS providers, they go house to provide the DOTS medicines to the community peoples. The study aims to assess the effectiveness of planned teaching programme on level of the knowledge regarding DOTS therapy among the ASHA workers. For this study a Pre-experimental design was selected with non-probability purposive sampling technique. Data was collected from 60 ASHA workers of Community Health Centre, Raipur, Dehradun, Uttarakhand. Tool used was a structured questionnaire regarding DOTS therapy. The tool consists of part-I socio-demographic variables and part-II consists of knowledge questionnaire.Collected data was analyzed by descriptive and inferential statistics. Tables and bar diagrams were used to depict the findings. The pre-test mean knowledge score of ASHA workers was 17.33, whereas the post-test mean knowledge score was 32.07.The difference between the pre-test and post-test mean knowledge score of ASHA workers regarding DOTS therapy was statistically significant. The $t_{cal}36.597>t_{tab}1.671$ was there, which shows that post-test knowledge score was statistically significant at $p<.05$ level of significance. Hence the research hypothesis H_1 was accepted and H_0 was rejected. There was no significant association between the demographic variables such as age, work place, type of family, educational qualification, source of information, working experience, family income per month and pre-test knowledge scores which was assessed with the use of chi-square. Hence null hypotheses H_0 was accepted.

Key Words: - Planned teaching programme, knowledge, Directly Observed Treatment Short-course, Accredited Social Health Activists.

Introduction:

Tuberculosis is a worldwide public health problem in India and all over the country, despite the fact that the causative organism of Tuberculosis was discovered more than 100 years ago and the highly effective drugs and vaccine are available to make the Tuberculosis a preventable and curable disease. In respect of Technology advanced countries have achieved spectacular results in the prevention and control of Tuberculosis. In 1900 to 1980 Tuberculosis death rate decline from 199 to 0.5 per 100,000 in United States. This decline started long before the advent of BCG or chemotherapy and has been attributed to changes in the "non- specific" determinants of the disease improvement in the standard of living and the quality of life of the people coupled with the application of available technical knowledge and health resources.[1]Uttarakhand is geographically and socially and culturally different state because of location and population in plain and hilly region. State has high prevalence of some of the communicable disease like tuberculosis (170 case/Lakh population), and vulnerability of HIV and AIDS, malaria (14% in fever cases).[2]DOTS therapy is the strategy to confirm cure by providing the effective medicine and to confirm that it is taken by patient. [1]Workers of ASHA who are involved in reproductive health care of women and children in the rural places will be trained for the multi-drug resistant tuberculosis eradication programme in North Delhi.[3]Nearly two million Indians develop Tuberculosis every year and about one thousand Indians die of Tuberculosis disease each day. Rate of Tuberculosis is especially high in urban slums, where overcrowding boosted and lack of space or access to running water can prevent adequate disposal of infected mucus that is coughed up by infected persons.[6]In 1962, National Tuberculosis Programme (NTP) was started with long term goal to reduce the incidence and prevalence of tuberculosis in the community to be sufficiently quickly to the level where it ceases to be a public health problem. This programme could not able to achieve the objectives because of low priority, managerial weakness, overdependence on x-rays for diagnosis. [7]The Director General of the world health organization has declared that "the DOTS strategy represents the most important public health breakthrough of the decade, an acronym for Directly Observed Treatment Short-course.[8]Pulmonary tuberculosis is treated primarily by chemotherapeutic agents (anti-tuberculosis agents) for 6 to 12 months. In current DOTS therapy, five first line medications are used. Those are Isoniazid, Rifampin, Pyrazinamide, and either Streptomycin or Ethambutal.[9]The ASHA workers may be the first to suspect Tuberculosis in patients, as they are the health workers from the grass root level. ASHA workers will be responsible for teaching the patient about the disease and its treatment. [10]

Statementof the problem:

A study to assess the effectiveness of planned teaching programme on level of the knowledge regarding DOTS therapy among the ASHA workers at Dehradun District.

Objectives:

1. To assess the pre test level of knowledge among the ASHA workers regarding DOTS therapy.
2. To develop a Planned Teaching Programme for ASHA workers regarding DOTS therapy.
3. To assess the post test level of knowledge among the ASHA workers regarding DOTS therapy.
4. To compare the pre-test level and post-test level of knowledge among the ASHA workers regarding DOTS therapy.

5. To find out the association between the pre-test knowledge score among the ASHA workers regarding DOTS therapy with their selected demographic variables.

Hypothesis:

H_1: - There will be a significant difference between pre-test and post-test knowledge score on DOTS therapy among ASHA workers.

H_0: - There will be no significant association between the pre-test knowledge score with the selected socio demographic variables.

Material and method:

The research design used for the present study was pre experimental one group pre-testpost-test design and non-probability purposive sampling was adopted to select the 60 samples according to the inclusion criteria. Data collection was done using a knowledge questionnaire to assess the level of the knowledge regarding DOTS therapy among ASHA workers.The researcher developed the tool and sent for 5 experts for content validity.

The researcher had used the split half method to assess the reliability of the structured questionnaire.A pilot study was conducted to assess the feasibility for conducting the main study and it was done with 10 samples. The setting of the pilot study was Sub-Centre, Nehru gram, Dehradun, Uttarakhand.The data collection of the main study was from 21-08-2015 to 30-08-2015. For conducting the study prior permission was obtained from the principal and ethical committee of the parental institution and the concerned authorities of Community Health Centre, Raipur, Dehradun, Uttarakhand.Non probability Purposive sampling technique was used to select the samples who met the inclusion criteria. Confidentiality was assured to all subjects. An informed consent was obtained from subjects before data collection.

Research variables:

Independent variable: Planned Teaching Programme

Dependent variable: Knowledge

Extraneous variable: age, work area, type of family, educational qualification, working experience, source of information, family income

Results:

Section A- Description of demographic variables of respondents.

Table-1 Frequency and percentage distribution of demographic variables of ASHA workers.

S. No.	SOCIO DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
1.	**Age**		
	20-30 years	19	31.7
	31-40 years	18	30.0
	41-50 years	23	38.3
2.	**Workplace**		
	Rural	29	48.3
	Urban	31	51.7
3.	**Family type**		
	Nuclear	35	58.3
	Joint	25	41.7
4.	**Educational qualification**		
	8^{th} pass	11	18.3
	High school	15	25.0
	Intermediate	23	38.3
	Graduate	11	18.3
5.	**Working experience**		
	Below 1 year	2	3.3
	1-5 years	35	58.3
	More than 5 years	23	38.3
6.	**Source of information**		
	Television	23	38.3
	Newspaper	21	35.0
	Internet	13	21.7
	Other media sources	3	5.0
7.	**Family income per month**		
	Below 5000 Rs	18	30.0
	5001-10,000 Rs	23	38.3
	10,001-15,000 Rs	16	26.7
	Above 15,000 Rs	3	5.0

Section B-Analysis of knowledge questionnaire done by descriptive statistics.

Table 2: Pre test and Post test mean knowledge score among ASHA workers regarding DOTS therapy.

N=60

S. No.	N	MEAN	STANDARD DEVIATION	STANDARD ERROR
Pre test	60	17.33	3.079	.397
Post test	60	32.07	1.339	.173

Table 3 Frequency and percentage distribution of pre test and post test knowledge score of ASHA workers regarding DOTS therapy.

S.No.	LEVEL OF KNOWLEDGE	PRE-TEST		POST-TEST	
		F	%	F	%
1.	POOR	2	3.3	0	0
2.	AVERAGE	56	93.3	0	0
3.	GOOD	2	3.3	60	100

Section C- Comparison of pre-test and post-test knowledge score by paired t-test.

Comparison of level of significance between the pre test and post test mean scores of ASHA workers regarding DOTS therapy the total number of sample was 60 in both the pre-test and in the post-test. Mean, standard deviation and standard error value in pre-test were 17.33, 3.079, .397 respectively whereas in post-test mean, standard deviation and standard error values respectively 32.07, 1.339 and 0.173, shows an improvement in knowledge scores.

Comparison of level of significance between the pre test and post test mean scores of ASHA workers regarding DOTS therapy shows significant result with t calculated = 36.597 > t tabulated with 0.05 level of significance for 59 df = 1.671 (p- value = 0.000 < 0.05).

Section D- Chi-square test was used to find out the association between demographic variables and pre-test knowledge score.

S.NO.	SOCIO DEMOGRAPHIC VARIABLES	KNOWLEDGE GRADING			CHI - SQUARE	df	P VALUE	SIGNIFICANCE
		POOR	AVERAGE	GOOD				
1.	**Age**							
	20-30 years	0	18	1				

	31-40 years	1	17	0	1.871	4	0.759	Not
	41-50 years	1	21	1			> 0.05	Significant
2.	**Workplace**							
	Rural	0	28	1	1.935	2	0.380	Not
	Urban	2	28	1			> 0.05	Significant
3.	**Family type**							
	Nuclear	1	32	2	1.518	2	0.468	Not
	Joint	1	24	0			> 0.05	Significant
4.	**Educational qualification**							
	8th pass	0	11	0				
	High school	1	13	1	2.795	6	0.834	Not
	Intermediate	1	21	1			> 0.05	Significant
	Graduate	0	11	0				
5.	**Working experience**	0	2	0			0.548	
	Below 1 year	2	31	2	3.061	4	> 0.05	Not
	1-5 years	0	23	0				Significant
	More than 5 years							
6.	**Source of information**							
	Television	0	23	0			0.083	
	Newspaper	2	19	0	11.193	6	> 0.05	Not
	Internet	0	11	2				Significant
	Other media sources	0	3	0				
7.	**Family income per month**							
	Below 5000 Rs	2	16	0	8.023	6	0.236	Not
	5001-10,000 Rs	0	21	2			> 0.05	Significant
	10,001-15,000 Rs	0	16	0				
	Above 15,000 Rs	0	3	0				

DISCUSSION:

Comparison of level of significance between the pre-test and post-test mean scores of ASHA workers regarding DOTS therapy the total number of sample was 60 in both the pre-test and in the post-test. Mean, standard deviation and standard error value in pre-test were 17.33, 3.079, .397 respectively whereas in post-test mean, standard deviation and standard error values respectively 32.07, 1.339 and 0.173, shows an improvement in knowledge scores.In contrast to this, a study was conducted by Raman Patidar et.al. on effectiveness of structured teaching program (STP) on knowledge regarding prevention and control of tuberculosis among GNM students in selected schools of Vadodara. The value of "t" was calculated to analyze the difference in knowledge of the students with their pre-test and post-test scores after calculation "t" calculated 21.87 is more than "t" table 2.000 at the 0.05 level of significance so it shows that very highly significant and association between pretest and posttest knowledge score of GNM internship students regarding prevention and control of Tuberculosis. [4] According to the study conducted byBaljit Kaur, a study to assess the knowledge regarding DOTS therapy among tuberculosis clients at tuberculosis Sanatorium in Amritsar, there was significant association of knowledge with selected socio-demographic variables as occupation, monthly income, education status and however there is no association with age, gender, religion, type of family, marital status, residential area and duration of DOTS therapy undergone.[5]

Recommendation:

- A comparative study may be undertaken in all types of health care settings.
- A similar study can be carried out for other health care professionals who are involved in DOTS and tuberculosis programmes.
- Increased focus on general public through media channels and public meetings.
- An experimental study can be done on large sample for the purpose of enhancing knowledge level of community health workers and community people.

Conclusion:

The main aim of the study was to assess the effectiveness of Planned Teaching Programme (PTP) on knowledge regarding DOTS therapy among ASHA workers. The pre test and post test knowledge were assessed, it concluded that Planned Teaching Programme (PTP) was effective in enhancing the knowledge of ASHA workers, as majority of the ASHA workers had good knowledge regarding DOTS Therapy. This type of studies can be conducted in other settings to assess the effectiveness of Planned Teaching Programme.

References:

1. Park K.(2005) A text book of Preventive and Social Medicine. 18th Ed. Jabalpur, Banarsidas, Bhanot publishers
2. Kumar R, Sharma SK (2013) Trends of communicable and non-communicable morbidities in Uttarakhand state
3. Patrica. H. NJMS National Tuberculosis Centre; (1996) Retrived from www.udmnj.edu
4. Raman Lal Patidar, Ravindra H.N., Pavan Kumar Jain (2013) f tuberculosis, *IOSR Journal of Nursing and Health Science* (IOSR-JNHS) e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 3, Issue 3 Ver. I (May-Jun. 2014), PP 56-61, Retrieved from www.iosrjournals.org
5. Baljit Kaur, Samuel.P, Ramesh Kumari, Manpreet Kaur Garcha (2010) *International Journal of Education and applied research,* IJEAR Vol. 4, Issue 1, Jan - June 2014 ISSN : 2348-0033 Retrieved from www.ijear.org
6. Dolin PJ. Raviglione MC, Kochi A. (1993) WHO /TB/93.173. Geneva: World Health Organization

7. Gro Harlem Brandtland. (2005) TB ALERT Stop Tuberculosis worldwide; www.tbalert.org/worldwide/DOTS.php
8. Clin Maye Wikipedia (2007) The free encyclopaedia; www.wikipedia.org/wiki/RNTCP
9. IvieSitali. (2007) Pursue high quality DOTS expansion and enhancement; Retrived from www.whoint/tb.dots/en.
10. National Journal of Research in Community medicine (2009) Vol.2.Issue.2.July-sep;1013(079-148)