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Original Research Paper



EDUCATION TO FEMALE HEALTH WORKERS ON IMPORTANCE AND MAINTENANCE OF VACCINE POTENCY IN SELECTED PRIMARY HEALTH CENTERS OF COAIMBATORE DISTRICT

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ABSTRACT Back ground: The importance of proper storage conditions for vaccines is often over looked. When vaccines, are inactivated at high temperatures, there is typically little physical evidence of inactivation. The periodic up gradation of knowledge and standards of practice for the storage of vaccines have been established by education.

Methods: Quantitative research approach with one group pre-test and post-test was used in this study. Purposive sampling technique was adopted. The population in this study consists of 30 female health workers who are working in the Thudiyalur and Karamadai block level primary health centre.

The data were collected from thirty female health workers were tabulated, analyzed and interpreted to understand the knowledge and knowledge on practice before and after education. The paired 't-test and karl pearsons correlation co-efficient was adopted to verify the results.

Results: After the reassessment all the data were analyzed and interpreted, comparison was done by using master code sheet for comparison. The researchers found marked improvement in the post test score from pre-test score.

KEYWORDS : Vaccine storage, Female health workers, vaccine potency, Education

INTRODUCTION

Every human being has a natural defense against infections, without which survival would be impossible. This natural defense comes from the immune system present in human beings. Immunity is the protection that the immune system provides us.(Ministry of health and family welfare, 1999)

The immune system has the ability to recognize and destroy antigens to protect ourselves against certain infections with the use of vaccines. A vaccine contains antigens of a particular organisms and provokes the immune system to recognize, remember and produce antibodies and cells that destroy antigen. Vaccine is an immuno biological substance designed to produce specific protection against a particular disease.(Park.K,2005).

Need For The Study

A significant part of high morbidity and mortality among infants and children can be attributed to a few common communicable diseases which can be prevented by immunization. In order to achieve the objective of universal immunization. It will be essential to augment the inputs of trained manpower. Cold chain equipment, transport facilities and other essential supplies and equipment immunization services will be provided through all health institutions, health care camps and teams and the cold chain will be suitably strengthened for vaccine storage (Health and Family Welfare,2002).

Statement Of The Problem

Education to female health workers on importance and maintenance of vaccine potency in selected primary health centers of Coimbatore district.

Objectives

1. Assessment of the knowledge and knowledge on practice of female health workers on importance and maintenance of vaccine potency.

2. Education to female health workers to improve knowledge on their role in maintenance of vaccine potency.

MATERIALS AND METHODS

Quantitative research approach with one group pre-test and post-test design was used in this study. Purposive sampling technique was adopted. The population in this study consists of 30 female health workers who are working in the Thudiyalur and Karamadai block level primary health center.

Data Collection Procedure:

The formula used in pre-test(Q1) Treatment PTP Post-test(Q2)effectiveness of PTP = Q2-Q1

Group	PHASE-I	PHASE-II	PTP	PHASE-III	After	
	Preparation of structured	Pretest	(X)	Post test	Post test	
	interview schedule & PTP	(Q1)		(Q2)		
Female health	Review of existing	Pre-test to	Administration of	Post-test	Comparison of pre and	
worker in	literature	assess the	PTP to the subjects	knowledge	post test score	
selected	 Discussion with 	knowledge by	after the pre test	assessment on	Analysis and	
primary Health	experts	a structured		the 7 th	interpretation of data	
center	 Preparation of 	interview		day with the	Hypothesis testing	
of Coimbatore	structured interview	schedule prior		same structured	Interpretation of data	
district	schedule	to the PTP		interview	with diagnosis	
tamilnadu	Development of PTP			schedule		
	 Validation of the tool 					
	and PTP					
	Pre testing the tool for					
	reliability assessment					
	 Pilot study 					

Technique Of Data Analysis And Interpretation:

The data were collected from thirty female health workers were tabulated, analyzed and interpreted to understand the knowledge and knowledge on practice before and after education. All right answers had been considered as score of knowledge and knowledge on practice based on this total scoring for each workers. The paired 't' test and karl pearsons correlation co-efficient was adopted to verify the results.

RESULTS AND DISCUSSION: Level of knowledge score

Test	Inadequate (< 50 %)		Moderate (< 50 %)		Adequate (< 50 %)	
	Respondents	%	Respondents	%	Respondents	%
Pre-test	0	0	27	90	3	10
Post-test	0	0	0	0	30	100

Table 3 reveals that majority of workers 27(90%) in the pretest had moderate knowledge and 3(10%) had adequate knowledge in importance and maintenance of vaccine potency but in the post test all 30(100%) workers had adequate knowledge on importance and maintenance of vaccine potency.

Pretest And Post-test Knowledge Score

Test	Mean	SD	Mean Difference	t value
Pre-test	9.73	3.17	4.53	16.78
Post-test	14.26	3.84		

The data presented in the table 2 indicates that the mean post test score (14.26)were higher than the mean pretest score(9.73). This shows an average increases of 4.53. The calculated t value 16.78 is greater than the table value 1.699 at 29 degrees of freedom at 0.05 level of significance. Thus the null hypothesis was rejected.

CONCLUSION:

Study results reveals that a significant difference between the pre-test and post-test mean scores. Thus the difference was statistically significant and it confirms that the education was effective in increasing the knowledge of female health workers on importance and maintenance of vaccine potency.

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