



A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON TULAREMIA A RE-EMERGING TICK BORNE INFECTIOUS DISEASE AMONG FARMERS RESIDING AT THIRUBUVANAI, PUDUCHERRY.

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ABSTRACT

The study to assess the effectiveness on the structured teaching program on a re-emerging tick borne infectious disease among farmers residing at thirubuvanai, Puducherry. The study was quasi experimental with one group pre test post test research design. The total of 50 farmers who met inclusion criteria was selected by using purposive sampling technique. The findings of the study revealed that out of 50 samples, in pretest, Majority of farmers 50(100%) had inadequate level of knowledge. In post test Majority of farmers 44 (88%) had moderate and 6 (12%) had adequate level of knowledge.

KEY WORDS: tularemia re-emerging tick borne disease, structured teaching program, farmers.

INTRODUCTION

Francisella tularensis is a pathogenic species of Gram-negative coccobacillus, an aerobic bacterium. It is nonspore-forming, nonmotile, and the causative agent of tularemia, the pneumonic form of which is often lethal without treatment. It is a fastidious, facultative intracellular bacterium, which requires cysteine for growth. Due to its low infectious dose, ease of spread by aerosol, and high virulence, *F. tularensis* is classified as a Tier 1 Select Agent by the U.S. government, along with other potential agents of bioterrorism such as *Yersinia pestis*, *Bacillus anthracis*, and Ebola virus. When found in nature, *Francisella tularensis* can survive for several weeks at low temperatures in animal carcasses, soil, and water. In the laboratory, *F. tularensis* appears as small rods. Incubation Period 3–5 days range 1–21 days.

Tularemia is a disease that can infect animals and people. Rabbits, hares, and rodents are especially susceptible and often die in large numbers during outbreaks. People can become infected in several ways,

including: Tick and deer fly bites, Skin contact with infected animals, Drinking contaminated water, Inhaling contaminated aerosols or agricultural and landscaping dust, Laboratory exposure, In addition, people could be exposed as a result of bioterrorism.

The signs and symptoms of tularemia vary depending on how the bacteria enter the body. Illness ranges from mild to life-threatening. All forms are accompanied by fever, which can be as high as 104 °F. Main forms of this disease are listed below:

Fever, chills, Headache, Malaise, fatigue, anorexia, Myalgia, Chest, discomfort, cough, Sore, throat, Vomiting, diarrhea, Abdominal pain.

Ulceroglandular This is the most common form of tularemia and usually occurs following a tick or deer fly bite or after handling of an infected animal. A skin ulcer appears at the site where the bacteria entered the body. The ulcer is accompanied by swelling of regional lymph glands, usually in the armpit or groin.

Glandular Similar to ulceroglandular tularemia but without an ulcer. Also generally acquired through the bite of an infected tick or deer fly or from handling sick or dead animals.

Oculoglandular This form occurs when the bacteria enter through the eye. This can occur when a person is butchering an infected animal and touches his or her eyes. Symptoms include irritation and inflammation of the eye and swelling of lymph glands in front of the ear.

AIM OF THE STUDY

The aim of the study was to assess the effectiveness of structured teaching programme on tularemia re-emerging tick borne infectious disease among farmers.

OBJECTIVES OF STUDY:

- To assess the the levels of knowledge regarding tularemia a re-emerging tick-borne disease among farmers.
- To evaluate the effectiveness of structured teaching programme on Knowledge Regarding tularemia re-emerging tick-borne infection among farmers.
- To associate between the level of knowledge regarding tularemia re-emerging tick borne infectious disease among farmers. and the effectiveness of structured teaching programme with their selected demographic variables.

METHODOLOGY

This chapter includes the research design, setting, population and sampling, sample size determination, criteria for the selection of samples, instruments and tools for measuring variables, techniques of data collection, and methods of data analysis.

RESEARCH APPROACH:

The quantitative research approach was selected for this study.

RESEARCH DESIGN:

Quasi experimental One group pre-test-post-test research design was adapted for this study.

POPULATION:

Population for this study was farmers in Thirubuvanai.

SAMPLE:

Farmers residing at Thirubuvanai who full fills inclusion criteria.

SAMPLE SIZE:

The sample size of the study consists of 50.

SAMPLE TECHNIQUE:

The purposive sampling technique was used for this study.

RESEARCH VARIABLES:

- **Dependent variable:** level of knowledge among farmers regarding tularemia re-emerging tick borne infectious disease.
- **Independent variable:** structure teaching programme regarding tularemia re- emerging tick borne infectious disease.

CRITERIA FOR SAMPLE SELECTION:**Inclusion criteria:**

- Farmers up to ageing up to 60.
- Farmers who are educated and uneducated.
- Farmers who are willing to participate in the study.

Exclusion criteria:

- The farmers who are not willing to participate.
- Farmers not present at the time of data collection.

DEVELOPMENT AND DESCRIPTION OF THE DATA COLLECTION TOOLS:**Section A:**

Demographic variables such as age, gender, place of residence, education, religion, family income, socioeconomic status, marital status, types of family, previous knowledge about tularemia, year of working in the agricultural field, source of information

Section B:

Multiple choice questionnaires to assess the effectiveness of structured teaching program on tularemia re-emerging tick borne infectious disease among farmers at Thirubuvanai, Puducherry.

It consists of totally 30 questions. Each question carries one mark.

SCORE INTERPRETATION:

Classification	Inadequate	Moderately adequate	Adequate
Score	0-10	10-20	20-30

DATA COLLECTION PROCEDURE:

After the validation of the tool and content from consent authority, the date and time will be fixed for collecting data. The sample of 50 tularemia re-emerging tick borne disease farmers at Thirubuvanai who was selected by purposive sampling technique, after introducing and maintaining interpersonal relationship with farmers at Thirubuvanai who are interested to be.

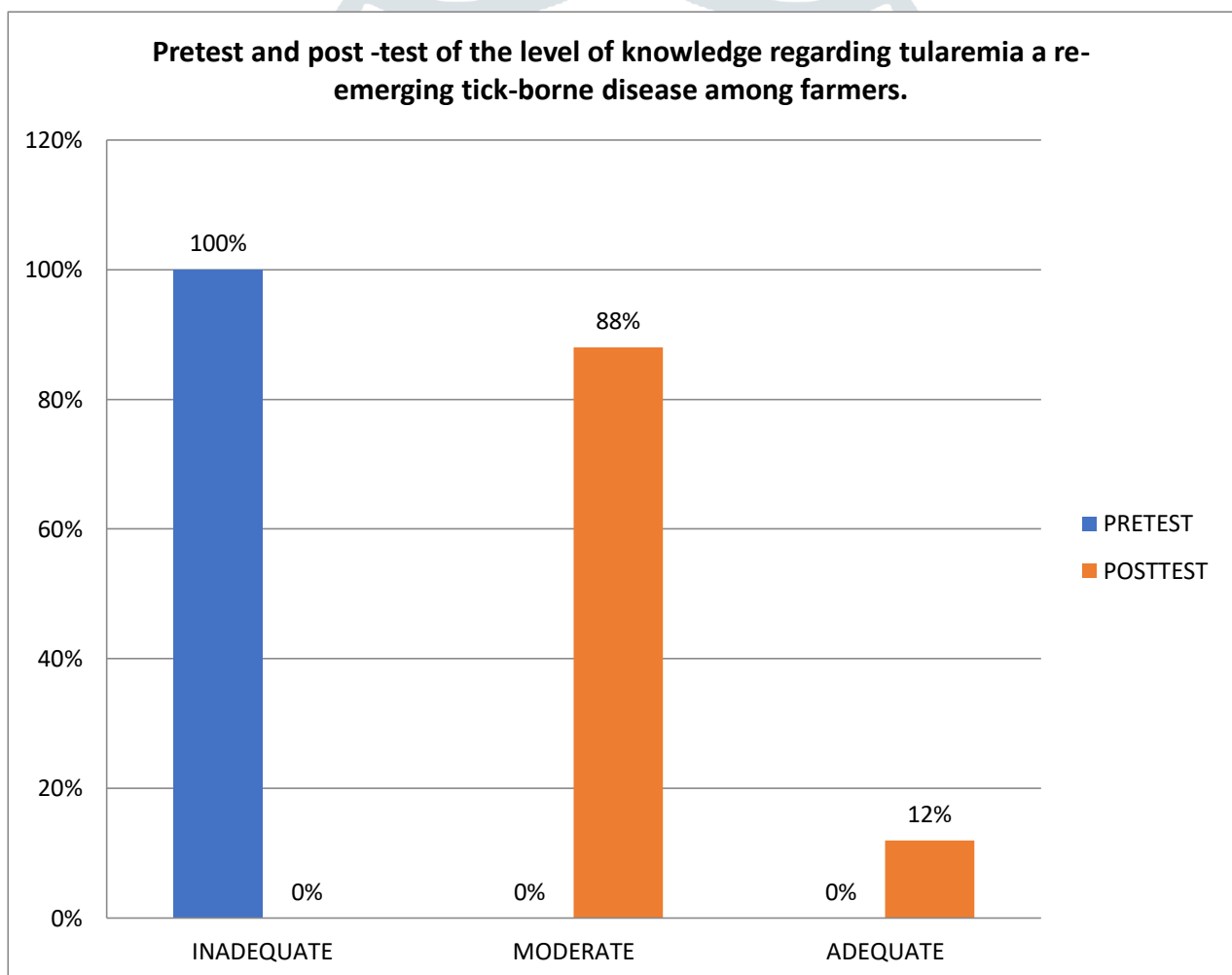
RESULTS:

In pretest, Majority of farmers 50(100%) had inadequate level of knowledge and the mean and standard deviation of the level of knowledge regarding tularemia a re-emerging tick-borne disease among farmers is 4.44 ± 1.38 .

In post- test, Majority of farmers 44 (88%) had moderate and 6 (12%) had adequate level of knowledge and the mean and standard deviation of the level of knowledge regarding tularemia a re-emerging tick-borne disease among farmers is 14.52 ± 2.97 .

frequency and percentage wise distribution of pretest and post -test of the level of knowledge regarding tularemia a re-emerging tick-borne disease among farmers.

LEVEL OF KNOWLEDGE REGARDING TULAREMIA	PRETEST		POST TEST	
	N	%	N	%
INADEQUATE	50	100	0	0
MODERATE	0	0	44	88
ADEQUATE	0	0	6	12
Mean				
Standard deviation	4.44±1.38		14.52±2.97	



effectiveness of structured teaching programme on Knowledge regarding tularemia a re-emerging tick-borne disease among farmers.

GROUP	TEST	MEAN	STANDAR D DEVIATO N	MEAN DIFFEREN CE	't' VALUE Paired -t test	df	'p' VALU E
STRUCTURED TEACHING PROGRAMME REGARDING TULAREMIA RE- EMERGING TICK- BORNE INFECTION	Pretest	4.44	1.38	-10.08	-20.65	49	0.000 HS
	Posttes t	14.52	2.97				

The third objective is to Associate between the levels of knowledge regarding tularemia re-emerging tick-borne infection among farmers with their selected demographic variables.

**** $-p < 0.001$ highly significant, NS-nonsignificant**

The mean score of level of knowledge of Effectiveness of structured teaching programme regarding tularemia re-emerging tick-borne infection among farmers in the pre-test was 4.44 ± 1.38 and the mean score in the post- test was 14.52 ± 2.97 . The calculated *paired 't' test* value of $t = -20.65$ shows *statistically highly significant difference* of effectiveness of structured teaching programme regarding tularemia re-emerging tick-borne infection among farmers.

CONCLUSION:

A study to assess the effectiveness of structured teaching on tularemia re-emerging tick borne disease among the farmers at thirubhuvanai,puducherry. The finding of th study revealed that out of 50 farmers.**In pretest**, Majority of farmers 50(100%) had inadequate level of knowledge and the mean and standard deviation of the level of knowledge regarding tularemia a re-emerging tick-borne disease among farmers is 4.44 ± 1.38 . **In post- test**, Majority of farmers 44 (88%) had moderate and 6 (12%) had adequate level of knowledge and the mean and standard deviation of the level of knowledge regarding tularemia a re-emerging tick-borne disease among farmers is 14.52 ± 2.97 .the demographic variable **Age, Education, Socioeconomic status and Years of working in the agricultural field** had shown statistically significant association between the post-test levels of knowledge regarding tularemia re-emerging tick-borne infection among farmers with their selected demographic variables.The other demographic variables had not shown statistically significant association between the post-test levels of knowledge regarding tularemia re-emerging tick-borne infection among farmers with their selected demographic variables.

NURSING IMPLICATIONS:

The study had implications for nursing education and nursing research, nursing practice, nursing administration .

NURSING EDUCATION:

The community health nursing curriculum needs to be strengthened in order to make the nursing students to know about Tularemia

Students should be provided with adequate opportunities for developing skills in handling such clients and how to identify the difficulties and help them to provide comfort and well being

NURSING PRACTICE

Further studies can be conducted to promote awareness regarding Tularemia. Community mass health education programme can be conducted.

NURSING ADMINISTRATION:

The nursing administration should take on active role in organizing and implementing programme and also conduct structured teaching programme on tularemia tick borne disease. Through the research findings knowledge on Tularemia is inadequate among farmers. The nurse administrator can educate in community area among farmers about the information regarding Tularemia.

NURSING RESEARCH:

The effectiveness of the research study is verified by its utility by the nurse in the practice field. The findings of the study also help the professional nurses and students to develop by provide a base. This help the nurse researcher regarding th effectiveness of tularemia re-emerging tick borne disease

DELIMITATIONS

- study was limited to one week period of data collection.
- Study was limited to sample size of 30.

RECOMMENDATIONS:

- The study can do at the large number of samples.
- .The study can be implemented at the various states of India.
- Similar study can be conducted in other parts of the country with large sample.

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