



Research Paper

“A Study to Evaluate the Effectiveness of Planned Teaching Programme on Prevention and Control of Tularemia Among Farmers At Selected Area Puducherry”.

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I. INTROUCTION

“The depth of the suffering cannot be understood, until they happen to you or a loved one.”

-Merlin Mathews

Tularemia is a rare infectious disease. Also known as rabbit fever or deer fly fever, it typically attacks the skin, eyes, lymph nodes and lungs. Tularemia is caused by the bacterium Francisella tularensis. The disease mainly affects rabbits, hares, and rodents, such as muskrats and squirrels. Typically, people become infected through the bite of infected insects (most commonly, ticks and deerflies), by handling infected sick or dead animals, by eating or drinking contaminated food or water, or by inhaling airborne bacteria. Antibiotics used to treat tularemia include streptomycin, gentamicin, doxycycline, and ciprofloxacin. Treatment usually lasts 10 to 21 days depending on the stage of illness and the medication used. Although symptoms may last for several weeks, most patients completely recover. Left untreated, tularemia can be fatal. Other possible complications include: Inflammation of the lungs (pneumonia)

II. REVIEW OF LITERATURE:

C Rojas-Moreno et al., (2021) was conducted a study on Tetracyclines for Treatment of Tularemia. Time series research design is used. They selected totally a 48 cases of tularemia at the University of Missouri. The Tetracyclines were given to 24 samples of experimental group and remaining had received non-tetracycline antibiotics active against tularemia after completion of therapy. Retrospective analysis was done in those 17 patients who had underwent treatment with tetracyclines. In results of the study, therapeutic failure was not observed after treatment of tularemia with tetracyclines along with prompt attention to drainage of abscessed lymph nodes. Duration of therapy of 21 days appears to be effective, particularly if aspiration or incision and drainage procedures are needed.

STATEMENT OF THE PROBLEM:

“A study to evaluate the effectiveness of planned teaching programme on prevention and control of tularemia among farmers at selected area Puducherry”.

OBJECTIVE:

- To assess the effectiveness of planned teaching programme on prevention and control of tularemia among farmers.
- To evaluate the effectiveness of planned teaching programme among farmers.

HYPOTHESIS:

- There will be a significant Assessment of the level of knowledge on prevention and control of tularemia among farmers.
- There will be significant Effectiveness of planned teaching programme of knowledge on prevention and control of tularemia among farmers.

- There will be significant Association between the level of knowledge on prevention and control of tularemia among farmers with selected demographic variable

ASSUMPTION

- The farmers may not have sufficient knowledge regarding tularemia.
- The tool prepared for the study will be sufficient for collecting information on effectiveness of planned teaching programme among farmers

III. MATERIALS AND METHODS:

This chapter deals with methodology adopted to the effectiveness of planned teaching programme on prevention and control of tularemia among farmers, Puducherry.

Section A: Demographic variables such as Age, Sex, Educational Status, Religion, Place of Residence, experience, marital status and Source of information.

Section B: It consist of multiple choice questions on practice checklist on evaluating the effectiveness of planned teaching programme among farmers.

SCORE INTERPRETATION:

SCORING INTEPRETATION	SCORE
Inadequate knowledge	0-10
Moderate knowledge	10-20
Adequate knowledge	20-30

RESEARCH APPROACH:

A quantitative research approach was adapted for this study.

RESEARCH DESIGN:

The descriptive research design was adapted for this study.

POPULATION

The target population for this study comprises of farmers who lives in thirubuvanai, Puducherry.

SAMPLE:

The sample for the study comprises of farmers who lives in thirubuvanai, Puducherry.

SAMPLE SIZE:

The sample size consists of 50 farmers.

Inclusion criteria:

- Farmers of both sex.
- Farmers who are willing to participate in the study.
- Age group 25 to 45 years.

Exclusion criteria:

- Farmers who are deaf and dumb.
- Farmers who are not willing to participate in the study.
- Geriatric.

IV. RESULTS:

- Majority of the farmers 45(90%) had Inadequate and 5(10%) had moderate level of knowledge and the mean and standard deviation of the level of knowledge on prevention and control of tularemia among farmers is 6.06 ± 3.65 .
- Majority of farmers 46(92%) had adequate and 4(8%) had moderate level of knowledge on the mean and standard deviation of the level of knowledge on prevention and control of tularemia among farmers is 26.58 ± 3.333 .
- The demographic variable had not shown statistically significant association between the post-test level of knowledge on prevention and control of tularemia among farmers with selected demographic variables respectively

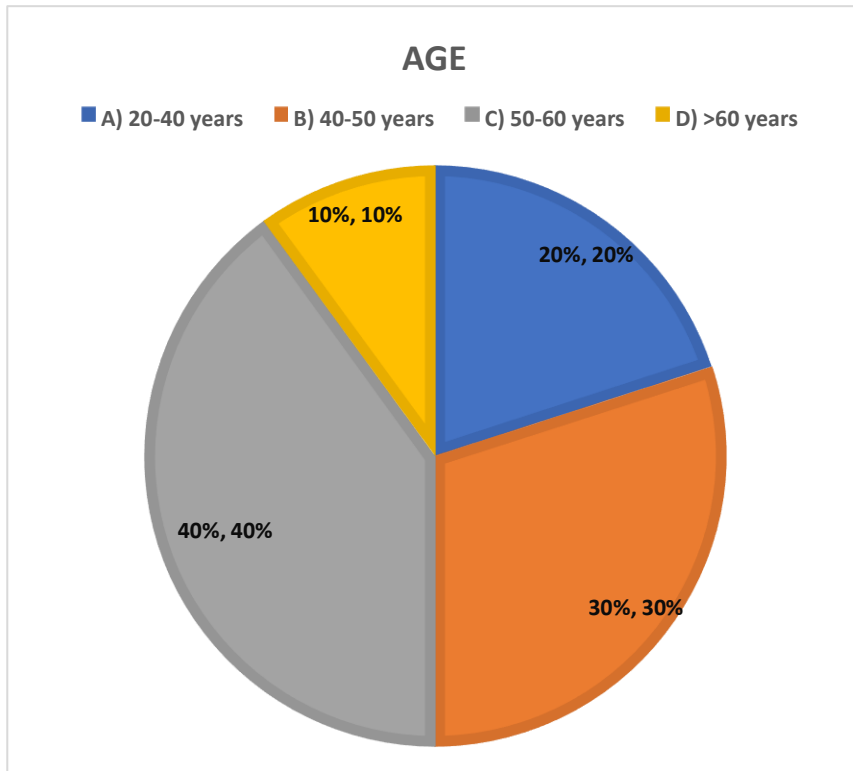
Section A: Description of the demographic variables among farmers.

Table1:- Frequency and percentage wise distribution of demographic variables among farmers.

(N=50)

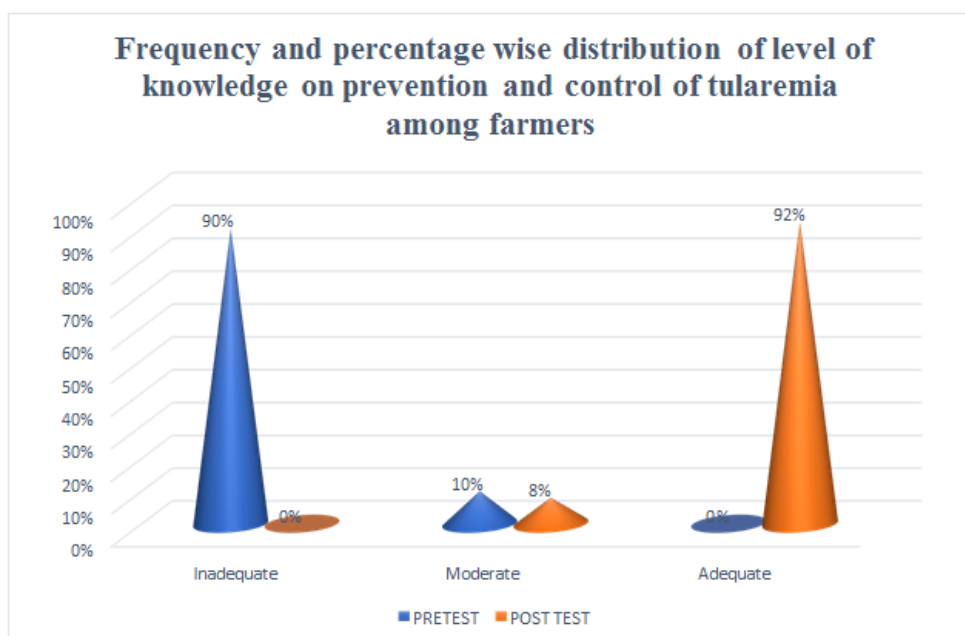
SL. NO	DEMOGRAPHIC VARIABLES	FREQUENCY (N)	PERCENTAGE (%)
1	Age		
	A) 20-40 years	10	20
	B) 40-50 years	15	30
	C) 50-60 years	20	40
	D) >60 years	5	10
2	Gender		
	A) Male	33	66
	B) Female	17	34
3	Religion		
	A) Hindu	47	94
	B) Christian	1	2
	C) Muslim	2	4
	D) Others	0	0
4	Education		
	A) Un educated	2	4
	B) Elementary school	46	92
	C) Higher Secondary	2	4
	D) Graduated	0	0
5	Occupation		
	A) Government job	1	2
	B) Private job	5	10
	C) self employed	13	26
	D) Unemployed	31	62
6	Monthly Income		
	A) Rs1000-5000	5	10
	B) Rs 5000-10,000	20	40
	C) Rs 10,000-15,000	25	50
	D) Rs>20,000	0	0
7	Sociol status		
	A) Poor	6	12
	B) Middle Class	44	88
	C) Rich	0	0
8	Marital status		
	A) Married	0	0
	B) Unmarried	50	100
9	Type of family		
	A) Nuclear family	50	100
	B) Joint family	0	0
10	No. of children		
	A) One	0	0

	B) Two	0	0
	C) above two	50	100
	D) No children	0	0
11	Residential area		
	A) Rural	50	100
	B) Urban	0	0
12	Lifestyle diseases		
	A) Yes	5	10
	B) No	45	90
13	Diet		
	A) Vegetarian	0	0
	B) Non Vegetarian	0	0
	C) Both	50	100
14	Previous knowledge about Tularemia		
	A) Yes	0	0
	B) No	50	100
15	Previous history of Tularemia		
	A) Yes	0	0
	B) No	50	100
16	Years of working in the agricultural field		
	A) 5 years	0	0
	B) 5-10 years	24	48
	C) 10-20 years	26	52
	D) >20 years	0	0
17	Sources and information about Tularemia		
	A) Newspaper	0	0
	B) Television	0	0
	C) Family members	50	100
	D) don't know	0	0



Frequency and percentage wise distribution of level of knowledge on prevention and control of tularemia among farmers.

LEVEL OF KNOWLEDGE	PRETEST		POST TEST	
	N	%	N	%
Inadequate	45	90	0	0
Moderate	5	10	4	8
Adequate	0	0	46	92
Mean	6.06 ± 3.65		26.58 ± 3.333	
Standard deviation				



Effectiveness of planned teaching programme of knowledge on prevention and control of tularemia among farmers.

(N=50)

GROUP	TEST	MEAN	STANDARD DEVIATION	MEAN DIFFERENCE	't' VALUE Paired -t test	df	'p' VALUE
Level of knowledge on prevention and control of tularemia	Pretest	6.06	3.65	-20.52	-28.49	49	0.000** HS
	Posttest	26.58	3.333				

***-p < 0.001 highly significant, NS-Non Significant.*

The mean score of effectiveness of planned teaching programme of knowledge on prevention and control of tularemia among farmers in the pre-test was 6.06 ± 3.65 and the mean score in the post- test was 26.58 ± 3.333 . The calculated *paired 't' test* value of $t = -28.49$ shows **statistically highly significant** difference of effectiveness of planned teaching programme of knowledge on prevention and control of tularemia among farmers.

Table –4: Association between the post-test level of knowledge on prevention and control of tularemia among farmers with selected demographic variables.

(N=50)

SL. NO	DEMOGRAPHIC VARIABLES	LEVEL OF KNOWLEDGE				Chi-square X ² and PValue
		MODERATE		ADEQUATE		
		N	%	N	%	
1	Age					X ² =2.67 Df=3 p =0.445 NS
	A) 20-40 years	2	50	8	17.4	
	B) 40-50 years	1	25	14	30.4	
	C) 50-60 years	1	25	19	41.3	
	D) >60 years	0	0	5	10.9	
2	Gender					X ² =0.496 Df=1 p =0.481 NS
	A) Male	2	50	31	67.4	
	B) Female	2	50	15	32.6	
3	Religion					X ² =0.278 Df=2 p =0.870 NS
	A) Hindu	4	100	43	93.5	
	B) Christian	0	0	1	2.2	
	C) Muslim	0	0	2	4.3	
	D) Others	0	0	0	0	
4	Education					X ² =5.104 Df=2 p =0.078 NS
	A) Un educated	1	25	1	2.2	
	B) Elementary school	3	75	43	93.5	
	C) Higher Secondary	0	0	2	4.3	
	D) Graduated	0	0	0	0	
5	Occupation					X ² =2.66 Df=3 p =0.446 NS
	A) Government job	0	0	1	2.2	
	B) Private job	0	0	5	10.9	
	C) self employed	0	0	13	28.3	
	D) Unemployed	4	100	27	58.6	
6	Monthly Income					X ² =1.223 Df=2 p =0.543
	A) Rs1000-5000	1	25	4	8.7	

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	B) Rs 5000-10,000	1	25	19	41.3	NS
	C) Rs 10,000-15,000	2	50	23	50	
	D) Rs >20,000	0	0	0	0	
7	Sociol status					
	A) Poor	1	25	5	10.9	$X^2=0.696$ Df=1 p =0.404 NS
	B) Middle Class	3	75	41	89.1	
	C) Rich	0	0	0	0	
8	Marital status					CONSTANT
	A) Married	0	0	0	0	
	B) Unmarried	4	100	46	100	
9	Type of family					CONSTANT
	A) Nuclear family	4	100	46	100	
	B) Joint family	0	0	0	0	
10	No. of children					CONSTANT
	A) One	0	0	0	0	
	B) Two	0	0	0	0	
	C) above two	4	100	46	100	
	D) No children	0	0	0	0	
11	Residential area					CONSTANT
	A) Rural	4	100	46	100	
	B) Urban	0	0	0	0	
12	Lifestyle diseases					$X^2=1.08$ Df=1 p =0.297 NS
	A) Yes	1	25	4	8.7	
	B) No	3	75	42	91.3	
13	Diet					CONSTANT
	A) Vegetarian	0	0	0	0	
	B) Non Vegetarian	0	0	0	0	
	C) Both	4	100	46	100	
14	Previous knowledge about Tularemia					CONSTANT
	A) Yes	0	0	0	0	
	B) No	4	100	46	100	
15	Previous history of Tularemia					CONSTANT
	A) Yes	0	0	0	0	
	B) No	4	100	46	100	
16	Years of working in the agricultural field					$X^2=1.27$ Df=1 p =0.260 NS
	A) 5 years	0	0	0	0	
	B) 5-10 years	3	75	21	45.7	
	C) 10-20 years	1	25	25	54.3	
	D) >20 years	0	0	0	0	
17	Sources and information about Tularemia					CONSTANT
	A) Newspaper	0	0	0	0	
	B) Television	0	0	0	0	

C) Family members	4	100	46	100
D) don't know	0	0	0	0

*-p < 0.05 significant, *-p < 0.001 highly significant, NS-Non significant

V. CONCLUSION AND RECOMMENDATIONS:

- The present study was conducted to a study to evaluate the effectiveness of planned teaching programme on prevention and control of tularemia among farmers at selected area, Kalitheerthalkuppam Puducherry. A descriptive research design was adopted this study. The data was collected for the period of 1 week after obtaining formal permission from the ethical committee of Sri Manakula Vinayagar Nursing College. The nature and purpose of the study was explained to selected clients and get informed consent obtained from the participants. Each clients was selected through purposive sampling method and to evaluate the prevention and control of tularemia. The collected data were computerized and analyzed. The analysis was done using both descriptive and inferential statistics.
- The findings of study revealed data collected from to evaluate the effectiveness of planned teaching programme on prevention and control of tularemia among farmers at selected area Kalitheerthalkuppam at Puducherry. Shows that, the mean score effectiveness of planned teaching programme of knowledge on prevention and control of tularemia among farmers in the pre-test was 6.06 ± 3.65 and the mean score in the post- test was 26.58 ± 3.333 . The calculated *paired 't' test* value of $t = -28.49$ shows **statistically highly significant** difference of effectiveness of planned teaching programme of knowledge on prevention and control of tularemia among farmers.

NURSING IMPLICATIONS:

- The findings of the study have implication related so nursing practice, nursing administration, nursing education, nursing research.

NURSING PRACTICE:

- Further studies can be conducted to reduce the prevention and control of Tularemia. Community mass health Education programme can be conducted.

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 wellbeing.

NURSING ADMINISTRATION:

- The nurse administrator can educate in community area among farmers about the information regarding Tularemia.

VI. RECOMMENDATIONS:

- A similar study can be conducted by large number of sample in future This study will also conduct in another health care setting

BIBLIOGRAPHY:

BOOK REFERENCE:

- [1]. PedsoN.Acha, Borisszyfres Zoonoses and communicable diseases 3rd edition, Pan American Sanitary Bureau(USA).
- [2]. G.MDhaar,IRobbani, Foundations of community medicine, 2nd edition Elsevier publications.
- [3]. Marcia Stonhope, Jeonette Loncoster, Community and public health nursing, 6th edition, Mosbypublications.
- [4]. K.Park, Essentials of community health nursing, 5th edition, M/SBanarsidas Bhanot publications.
- [5]. Vidya Ratan Handbook of Preventive and social lmedicine, 9th edition, Jaypee publications
- [6]. BT Basavanthappa, A textbook of preventive and social medicine, 2nd edition, Jaypeepublications
- [7]. K.Park, textbook of Preventive and social medicine, 19th edition, M/S Banarsidas Bhanotpublications.
- [8]. K.KGulani, Community healthnursing, 1stedition, Kumarpublishinghouse.A.P.JAIN and co, A text book of introduction to nursing research, 1stedition(2005).ASHISH.K.Atextbookofstatisticalinnursing, 3rd edition.
- [9]. Abdellah, G.Faye, Eugene Levene, Better Patient Care Through NursingResearch London: TheMacMillion Publishing Company.
- [10]. American Holistic Nurses Association. Position onthe role of Nurses inthePracticeofComplementaryand AlternativeTherapies.
- [11]. Basavanthappa BT – 2006- Community health nursing – First edition –Published byJaybeebrother'smedicalpublishers.
- [12]. Polit FD, Beck CT. Nursing Research: Generating and Assessing EvidenceforNursingPractice. 8thed. Philadelphia: Lippincott, Williams and Wilkins Publications; 2004.

- [13]. LipponCott (1998) Manual of Nursing Practices 8th edition, Ed.Lippincott, Williams &Wilkins, publications, US.
- [14]. C.R.KOTHARI, textbook of research, methodology, 1st edition
- [15]. Kothari CR, Research methodology-methods and techniques. 2nd edition New.
- [16]. Burns Nancy, Grovek Susane The Practice of Nursing Research-Conduct, Critique and Utilization, 2nd ed. Philadelphia(us); WB Saunders Company.
- [17]. DR.E.Vijay (prof) 2007–community medicine–Third edition– published by B I publication pvt. ltd.
- [18]. k.park– 2009– Prevention and social medicine–20th edition–published by M/S Bhasidasbhanot.
- [19]. Kasthurisundararap–2005-Community health nursing–fourth edition published by B I publication pvt. Ltd.
- [20]. I.Clement–2009–Basic concept of Community health nursing–second edition published by Jaybee brothers medical publishers.
- [21]. Irene Kamenidow A text book of statistical in nursing 1 st edition.

JOURNAL REFERENCE

- [22]. Deadly diseases and epidemics; Tularemia; Susan Hutton Siderovski; forwarded by David Hey mann; World Health Organization.
- [23]. Francisella tularensis; biology; pathogenicity; epidemiology and biodefense; editors- Yousef
- [24]. Abu Kwaiq, Dennis W. Metzger, Francis Nano; Anders Sjøstedt, Richard Titball; Annuals of New York Academy of Sciences; volume 1106
- [25]. Francisella tularensis; outer membrane protein A (FopA) as a Protective Antigen in Mice for Tularemia; Anthony J. Hickey; UMI dissertation publishing; 1938.
- [26]. Tularemia; a 3-in-1 medical reference; medical dictionary, bibliography and annotated research guide; Icon health publications.
- [27]. Red Book Atlas of Infectious Diseases; 2nd edition; editor: Carol J. Baker, MD, Faap; American Academy of Diseases.
- [28]. Zoonoses and Public Health; exploring public health at the interface of humans, animals and environment; editor: Mary Torrence; volume 63; number 3; May 2015.
- [29]. Journal of Infectious Disease and Therapy; Gimenez-Garcia, et al., J Infect Dis Ther 2016; 4:3
- [30]. Re-emergence of Tularemia in Turkey; Halis Akalin, Safiye Helvacı, Suna Gedikoglu; International Journal of Infectious Diseases (2009); Elsevier publications.
- [31]. Indian journal of community medicine
- [32]. The American journal of nursing
- [33]. Journal of BMC Public Health
- [34]. Journal of Nursing Research Society of India
- [35]. Journal of Nursing Research Gate
- [36]. Journal of Science Director
- [37]. Journal of Education and Health Promotion
- [38]. Pakistan journal of nutrition 2009
- [39]. Online Journal of Health and Allied Sciences
- [40]. Nitte University Journal of Health Science
- [41]. Global Journal of Pharmacy & Pharmaceutical Sciences
- [42]. International Journal of Recent Scientific Research

NET REFERENCE:

- [43]. <http://www.google.com>
- [44]. <http://www.pubmed.com>
- [45]. <http://www.srjournals.com>
- [46]. <http://www.superbabyonline.com>
- [47]. <http://www.ncbi.gov>
- [48]. <http://www.dx.doi.org>
- [49]. <http://www.ajner.com>
- [50]. <http://www.medgagate.com>
- [51]. <http://www.medline.com>