A Study To Assess The Prevalence Of Tularemia (Rabbit Fever) Among Farmers Residing At Thirubuvanai, Puducherry.

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ABSTRACT:
Tularemia also known as "rabbit fever", "hunters disease", "deerfly fever", "tick fever", "O'Hara's Disease" and "Francis' Disease", tularemia is a common zoonotic disease in Turkey and throughout the world. The disease has started to gain more and more importance, especially in recent decades in Turkey due to a very high number of the cases and spread throughout the country. Tularemia has recently become a significant re-emerging disease in the world because of the important role of bacteria in biological terrorism agents. Out of the 50 farmers who were interviewed, Majority of the farmers 16(30%) of study population were in the age group are 40-50years.Majority of the farmers were female 31(62%). Majority of the farmers were higher secondary 31(62%). Majority of the farmers were Unemployed and Self employment 22(44%).This present study was to assess the prevalance of tularaemia (rabbit fever) among former at selected community area, kalitheerthalkuppam Puducherry. A description research design was selected and quantitative research approach was adopted for this study. The samples were selected by using convenient sampling technique at kalitheerthalkuppam Puducherry. The data was collected for the period of 1 week after obtaining formal permission from the ethical committee of Sri Manakula Vinayagar Nursing College. Majority of the farmers 28(56%) had high level of prevalence, and 22 (44%) had Moderate level of prevalence. The mean and standard deviation of level of prevalence of tularaemia among fattner at selected community area is (20.66+2.939) respectively.

I. INTRODUCTION :
"The farmer has to be an optimist or he wouldn't still be a farmer."

- will rogers
Tularemia also known as "rabbit fever", "hunters' disease", "deerfly fever", "tick fever", "O'Hara's Disease" and "Francis' Disease", tularemia is a common zoonotic disease in Turkey and throughout the world. The disease has started to gain more and more importance, especially in recent decades in Turkey due to a very high number of the cases and spread throughout the country . Tularemia has recently become a significant re-emerging disease in the world because of the important role of bacteria in biological terrorism agents. Bioterrorism using anthrax has occurred in the United States, and an increase in tularemia cases has been the result of global warming, wars, natural disasters, human travel and animal movements .

OBJECTIVES:
• To assess the prevalence of tularaemia among farmer at selected community area.
• To determine the causes of tularaemia in farmer at selected community area.
To find out the association between the prevalence of tularaemia with selected demographic variables.
ASSUMPTION:
• The farmer those who have bacterial infection may have chance to develop tulaaemia.

II. REVIEW OF LITERATURE
SabanGurcan et al.2007: the studywas conducted Edward Francis.The incubation period is about 3-5 days, but may vary between 1 to 21 days, and symptoms vary based on the mode of infection. Infections by F. tularensis subsp. tularensis are generally presented as ulceroglandular form and cause more severe diseases leading 5-60% mortality in untreated patients. Streptomycin or gentamycin (for 10-14 days) are the first choise antibiotics for the treatment. The first published tularemia epidemic in Turkey had been reported in 1936 from Thrace region (Luleburgaz town), and the second was in 1945 again in the same location. The reliable data were obtained after 2005 because of the inclusion of this infection into Group C of notification system of communicable diseases by Turkish Ministry of Health. A total of 431 confirmed cases were reported from various provinces according to data of the year 2005.

III.   MATERIAL AND METHOD

This chapter deal with methodology adopt to assess the prevalence of tularemia (rabbit fever) among farmers residing at thirubuvanai, puducherry.

SECTION A : Demographic variables

SECTION B : Assessment of the level of prevalence of tularemia among farmers residing at thirubuvanai, puducherry.

RESEARCH APPROACH: the quantitative research approach was adopted for this study.

RESEARCH DESIGN: the descriptive research design was adopted for this study.

SETTING OF THE STUDY: the study was conducted in selected community area, puducherry.

POPULATION : the target population for the study include all the adolescence.

SAMPLES: Tularemia patient at selected community area, puducherry. Who fulfills the inclusion criteria.

SAMPLE SIZE: In this study, the sample size consists of 50 members.

SAMPLE TECHNIQUE: A purposive sampling technique was adopted for this study. Criteria for sampling selection:

INCLUSION CRITERIA:

-Both male and female to tularemia patient available at time of Data collection.

-Both male and female who are willing to participate in data collection.

EXCLUSION CRITERIA:

The patient who is not willing to participate in study.

IV.   RESULT

Out of the 50 farmers who were interviewed, Majority of the farmers 16(30%) of study population were in the age group are 40-50years. Majority of the farmers were female 31(62%). Majority of the farmers were higher secondary 31(62%). Majority of the farmers were Unemployed and Self employment 22(44%). All of the farmers were Both Vegetarian and non Vegetarian 50(100%). Majority of the farmers Monthly Income were 21(42%) Rs 5000-10,000. Majority of the farmers were Middle Class 36(72%). All of the farmers were Hindu 50(100%). All of the farmers were Married 50(100%). Majority of the farmers were Nuclear family 29(58%). All of the farmers were Rural 50(100%). All of the farmers were not had previous family history of tularemia 50(100%). All of the farmers were low Incidence of tularemia 50(100%). Majority of the farmers were 5-10 year of working in the agricutural field 25(50%). Majority of the farmers, Sources and information about Tularemia were Health worker 39(78%).

Description of the demographic variables among farmers.

SL.NO	DEMOGRAPHIC VARIABLES		FREQUENCY (N)	PERCENTAGE (%)
1	**Age in years**			
	a)	20-40years	5	10
	b)	40-50years	16	30
	c)	50-60 years	15	32
	d)	Above 60 years	14	28
2	**Sex**			
	a)	Male	19	38
	b)	Female	31	62
3	**Educational status**			
	a)	illiterate	19	38
	b)	Higher secondary	31	62
	c)	Graduate	0	0
	d)	Post graduate	0	0
4	**Occupation**			
	a)	Employed	6	12
	b)	Unemployed	22	44
	c)	Business	0	0

	d)	Self employment	22	44
5	**Type of food intake**			
	a)	Non.vegetarian	0	0
	b)	Vegetarian	0	0
	c)	Both	50	100
	d)	Spicy food	0	0
6	**Income**			
	a)	1000-5000	25	50
	b)	5000-10000	21	42
	c)	10000-15000	2	4
	d)	Above 20000	2	4
7	**Socio economic status**			
	a)	Poor socio economic status	12	24
	b)	Middle class	36	72
	c)	Higher class	2	4
	d)	Very high class	0	0
8	**Religion**			
	a)	Hindu	50	100
	b)	Muslim	0	0
	c)	Christian	0	0
	d)	Others	0	0
9	**Marital status**			
	a)	Married	50	100
	b)	Unmarried	0	0
	c)	divorced	0	0
	d)	Widow	0	0
10	**Type of family**			
	a)	Large family	0	0
	b)	Small family	6	12
	c)	Joint family	15	30
	d)	Nuclear family	29	58
11	**Residency**			
	a)	Urban	0	0
	b)	Rural	50	100
	c)	Semi-urban	0	0
	d)	Tribal	0	0
12	**Previous family history of tularemia**			
	a)	Yes	0	0
	b)	No	50	100
13	**Incidence of tularemia**			
	a)	Low	50	100
	b)	Moderate	0	0
	c)	High	0	0
	d)	Very high	0	0
14	**Year of working in the agricutural field**			
	a)	1-5 year	8	16
	b)	5-10 year	25	50
	c)	10-20 years	4	8
	d)	Above 20 year	13	26
15	**Sources and information about tularemia**			
	a)	Mass media	0	0
	b)	Newspaper	0	0
	c)	Health worker	39	78

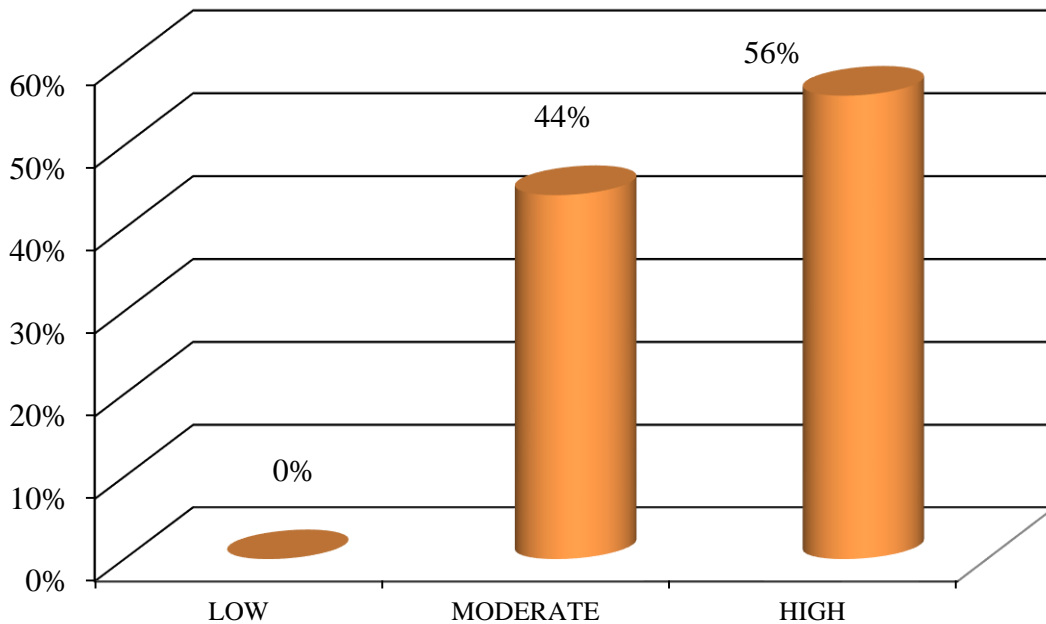|			
d)	Family friends	11	22
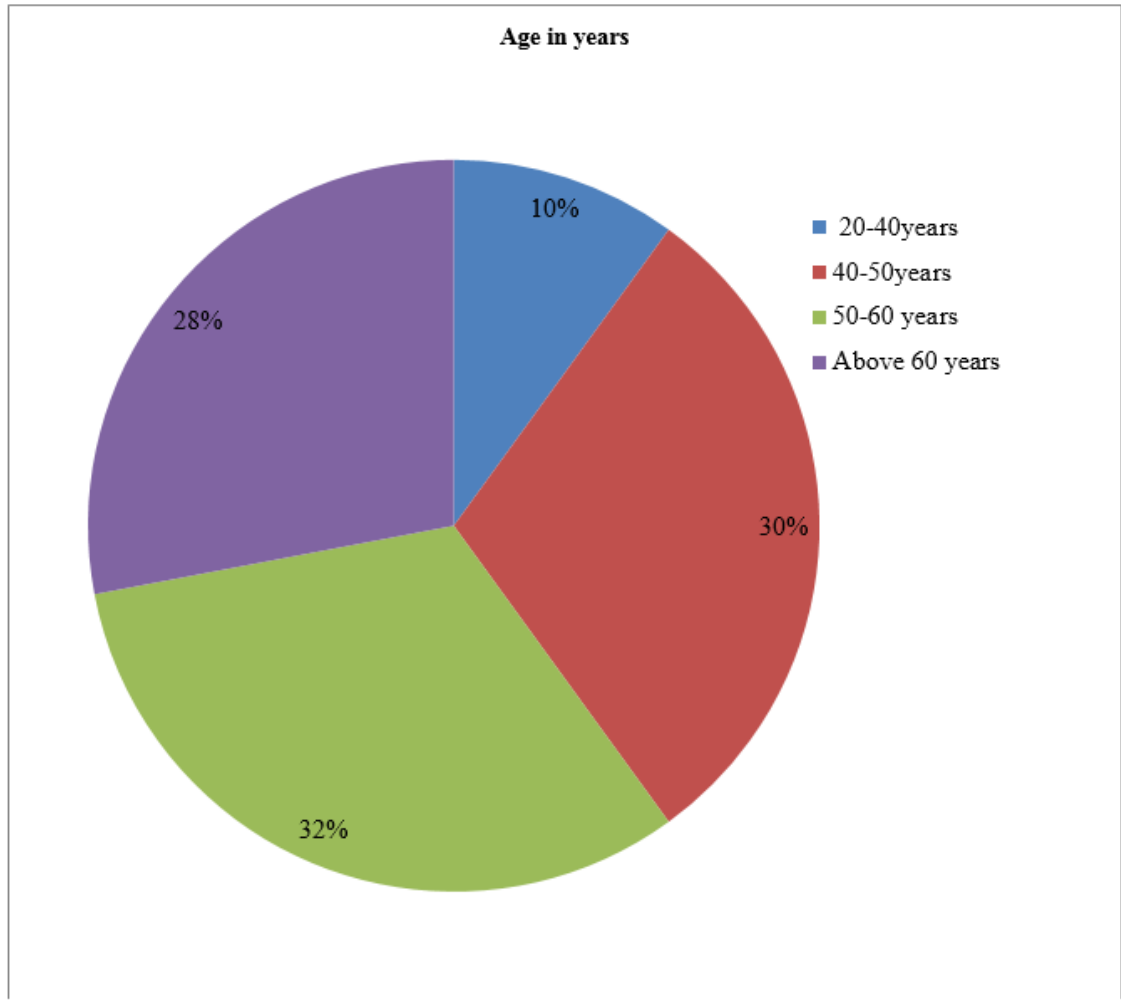
Frequency and percentage wise distribution oflevel of prevalence of tularaemia among farmer at selected community area.

(N = 50)

LEVEL OF PREVALENCE	FREQUENCY (n)	PERCENTAGE (%)
LOW	0	0
MODERATE	22	44
HIGH	28	56
Total	50	100
Mean+Standard deviation	20.66+2.939	

Level of prevalence of tularaemia among farmer at selected community area

Association between the level of prevalence of tularaemia with selected demographic variable (N=50)

SL. NO	DEMOGRAPHIC VARIABLES	LEVEL OF PREVALENCE				Chi-square X^2 and P-Value
		MODERATE		HIGH		
		N	%	N	%	
1	**Age in years**					X^2=7.67 **Df=3** **p =0.005** ***S**
	20-40years	2	9.1	3	10.7	
	40-50years	5	22.7	11	39.3	
	50-60 years	11	50	4	14.3	
	Above 60 years	4	18.2	10	35.7	
2	**Sex**					X^2=0.141 Df=1 p =0.707 NS
	Male	9	40.9	10	35.7	
	Female	13	59.1	18	64.3	
3	**Educational status**					X^2=0.045 Df=1 p =0.833 NS
	illiterate	8	36.4	11	39.3	
	Higher secondary	14	63.6	17	60.7	
	Graduate	0	0	0	0	
	Post graduate	0	0	0	0	
4	**Occupation**					**X^2=12.40**
	Employed	3	13.6	3	10.7	

	Unemployed	12	54.5	10	35.7	**Df=2**
	Business	0	0	0	0	**p =0.000**
	Self employment	7	31.8	15	53.6	****S**
5	**Type of food intake**					
	Non.vegetarian	0	0	0	0	
	Vegetarian	0	0	0	0	CONSTANT
	Both	22	100	28	100	
	Spicy food	0	0	0	0	
6	**Income**					
	1000-5000	11	50	14	50	X^2=2.87
	5000-10000	8	36.4	13	46.4	Df=3
	10000-15000	1	4.5	1	3.6	p =0.412
	Above 20000	2	9.1	0	0	NS
7	**Socio economic status**					
	Poor socio economic status	7	31.8	5	17.9	X^2=4.45 Df=2
	Middle class	13	59.1	23	82.1	p =0.108
	Higher class	2	9.1	0	0	NS
	Very high class	0	0	0	0	
8	**Religion**					
	Hindu	22	100	28	100	
	Muslim	0	0	0	0	
	Christian	0	0	0	0	CONSTANT
	Others	0	0	0	0	
9	**Marital status**					
	Married	22	100	28	100	
	Unmarried	0	0	0	0	CONSTANT
	divorced	0	0	0	0	
	Widow	0	0	0	0	
10	**Type of family**					
	Large family	0	0	0	0	X^2=0.888 Df=2
	Small family	2	9.1	4	14.3	p =0.641
	Joint family	8	36.4	7	25	NS
	Nuclear family	12	54.5	17	60.7	
11	**Residency**					
	Urban	0	0	0	0	
	Rural	22	100	28	100	
	Semi-urban	0	0	0	0	CONSTANT
	Tribal	0	0	0	0	
12	**Previous family history of tularemia**					
	Yes	0	0	0	0	CONSTANT
	No	22	100	28	100	
13	**Incidence of tularemia**					
	Low	22	100	28	100	
	Moderate	0	0	0	0	CONSTANT

	High	0	0	0	0	
	Very high	0	0	0	0	
14	**Year of working in the agricultural field**					X^2=1.84 Df=3 p =0.606 NS
	1-5 year	5	22.7	3	10.7	
	5-10 year	9	40.9	16	57.1	
	10-20 years	2	9.1	2	7.1	
	Above 20 year	6	27.3	7	25	
15	**Sources and information about tularemia**					X^2=0.334 Df=1 p =0.563 NS
	Mass media	0	0	0	0	
	Newspaper	0	0	0	0	
	Health worker	18	81.8	21	75	
	Family friends	4	18.2	7	25	

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

The table 3 depicts that the demographic variable,Age in years,and Occupation had shown statistically significant association betweenlevel of prevalence of tularaemia with selected demographic variables.
The other demographicvariable had not shown statistically significant association between the level of prevalence of tularaemia with selected demographic variables respectively.

V. CONCLUSION AND RECOMMENDATION

A study was to assess the prevalance of tularaemia (rabbit fever) among former at selected community area,kalitheerthalkuppam Puducherry. The .findings of the study revealed that out of 50 sample Majority of the farmers 28(56%) had high level of prevalence, and 22(44%) had Moderate
level of prevalence.

NURSING IMPLICATION: 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 prevalence rate of Tularemia. Community mass health education programme can be conducted.

NURSING ADMINISTRATION: Through the research findings on tularemia is inadequate among farmers. The nurse administrator can educate in community area among farmers about the information regarding Tularemia.

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 RESEARCH: The finding of the study help the nurses and student to develop their inquiry by providing baseline. the general aspect of the study result can be made by further replication of the study.The research should conduct periodic review of research finding and disseminate the finding through conference, seminar, publication in journals and World wide Web.

RECOMMENDATION:Based on finding of the present study the following recommendation have been made, The same study can be conducted in community setting .The study can be replicated with the large samples for better generalization.

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