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A study to assess the knowledge on prevetion and management of snake bite among rural people at selected village

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ABSTRACT

Snake-bite is a life-threatening medical emergency. It occurs frequently among rural people, especially those working in the fields. In India, an estimated 35 000–50 000 lives are lost annually due to snake-bite, Quasi experimental research design was adopted to conduct this study, 100 samples of knowledge for snake bite were selected with no non-probability purposive sampling technique was used the inclusive criteria of knowledge for snake bite, who speak Tamil and English patients who willing to participate in the study, the data collected using the tools consists of demographic variables. Almost every people have knowledge about snake bite among 100, 80 people ever spread information about snake bite.

Keywords: Snakebite, Snake, Knowledge.

INTRODUCTION

Snake bites depends on numerous factors, including the species of snake, the area of the body bitten, the amount of venom injected, and the health conditions of the victim. Feelings of terror and panic are common after snakebite and can produce a characteristic set of symptoms mediated by the autonomic nervous system, such as a racing heart and nausea. Bites from non-venomous snakes can also cause injury, often due to lacerations caused by the snake's teeth, or from a resulting infection. A bite may also trigger an anaphylactic reaction, which is potentially fatal. First aid recommendations for bites depend on the snakes inhabiting the region, as effective treatments for bites inflicted by some species can be ineffective for others. The most common symptoms of all snakebites are overwhelming fear, panic, and emotional instability, which may cause symptoms such as nausea and vomiting, diarrhea, vertigo, fainting, tachycardia, and cold, clammy skin, Television, literature, and folklore are in part responsible for the hype surrounding snakebites, and a victim may have unwarranted thoughts of imminent death [1].

Most snakebite, whether by a venomous snake or not, will have some type of local effect. There is minor pain and redness in over 90% of cases, although this varies depending on the site. Bites by vipers and some cobras may be extremely painful, with the local tissue sometimes becoming tender and severely swollen within 5 minutes. This area may also bleed and blister and can eventually lead

to tissue necrosis. Other common initial symptoms of pit viper and viper bites include lethargy, bleeding, weakness, nausea, and vomiting. Symptoms may become more life-threatening over time, developing into hypotension, tachypnea, severe tachycardia, severe internal bleeding, altered sensorium, kidney failure and respiratory failure [2].

According to WHO snake bite is an important medical problem but it is also a neglected extrinsic injury in tropical and subtropical developing countries. South Asia, Southeast Asia, Sub-Saharan Africa, and Latin America, are most affected regions in the world. Adult males belonging to the occupation like farmers, plantation workers, herdsmen, and other outdoor workers who has little knowledge of snakes were frequently bitten by snakes but high risk group who were in regular contact with snakes because of their adequate knowledge about the snake and their habits were less bitten [3].

Care-givers need better training and supervision for immediate prevention and management of snakebite, and national guidelines should be fed by evidence-based data generated by well-designed research studies. Poorly informed rural populations often apply inappropriate first-aid measures and vital time is lost before the victim is transported to a treatment center, where cost of treatment can constitute an additional hurdle. The deficiency of snake bite prevention and management in India is multi-causal and requires joint collaborative efforts from researchers, public health authorities [4].

Since farmers are more vulnerable persons for snake bites as they spend most of their time in field, and due to lack of medical facilities and misconceptions about first aid prevention and management of snake bite. Mortality rate is increased. So there is a need assess the knowledge about the prevention and management and first aid of snake bite [5].

OBJECTIVES

- To assess the level of knowledge on prevention and management of snakebite among rural people.
- To determine the association between knowledge on prevention and management of snake bite with demographic variables among rural people.

MATERIAL AND METHODS

Quasi experimental research design was adopted to conduct this study, 100 samples of knowledge for snake bite were selected with no non-probability purposive sampling technique was used the inclusive criteria of knowledge for snake bite, who speak Tamil and English patients who willing to participate in the study, the data collected using the tools consists of demographic variables The data was collected using the tools which consist of two sections, demographic variables and self-structured questionnaire to assess the level of knowledge on prevention and management of snake bite with demographic variables among rural people.

The questionnaire was used to get the demographic variable such as gender, age, education, occupation, family members bitten by snake, source of health information

The study investigators explained to the samples about the study's objectives, rational and requirement of consent to participate in the study. The investigators then provided instructions for filling the questionnaire, and then guided the samples. The understanding of each question was checked by asking the samples to repeat the meaning. During the filling of questionnaires, the investigators helped the samples throughout and helped simplifying the meaning of each question, clarifying doubts and checking for completeness of filling up the questionnaire.

Chi-square test was used to test the association between categorical variables. $P < 0.05$ was taken as statistically significant.

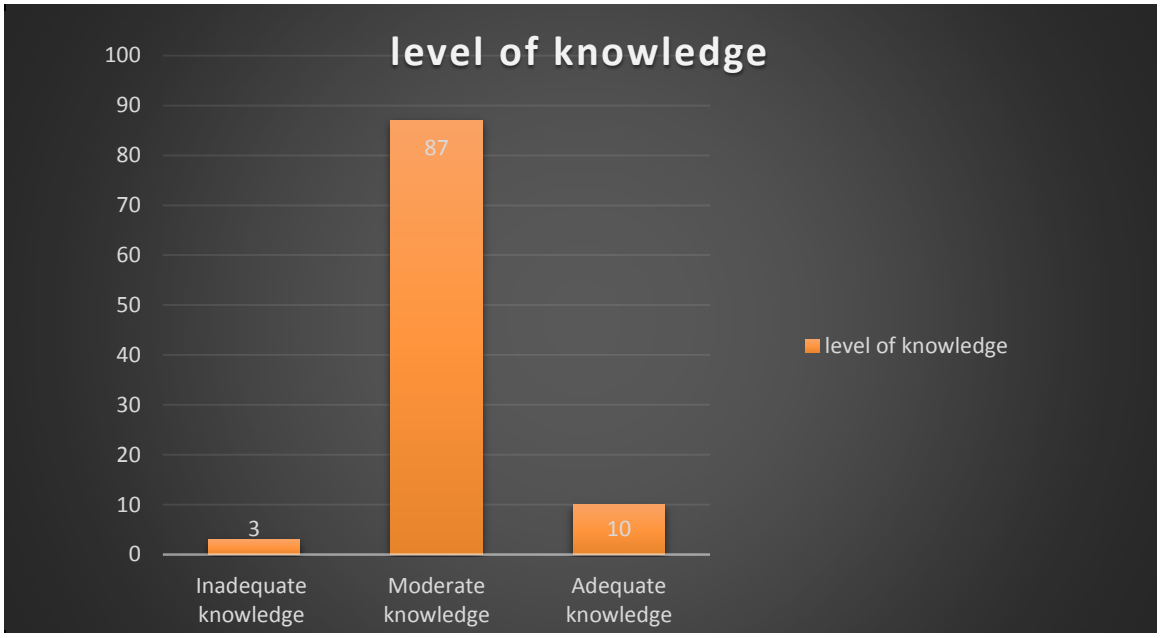

Figure 1: level of knowledge onprevention and management of snake bite in kalambakkam village among rural people.

Table -1Presentation of Frequency and percentage distribution of demographic variables of rural people at selected village n= (100)

S. No	Demographic variable	Frequency	Percentage
1	Gender		
	a) Male	46	46%
	b) Female	54	54%
2	Age		
	a) 20-29 years	18	18%
	b) 30-39 years	22	22%
	c) 40-48 years	33	33%
	d) Above 50 years	27	27%
3	Education		
	a) Illiterate	41	41%
	b) Primary school	19	19%
	c) Middle school	10	10%
	d) High school	16	16%
	e) Above	14	14%
4	Occupation		
	a) farmer	31	31%
	b) factory workers	6	6%
	c) housewife	33	33%
	d) others	30	30%
5	Family members bitten by snake		
	a) yes	17	17%
	b) no	83	83%
6	Source of health information received from		
	a) relatives	27	27%
	b) friends	13	13%
	c) media	17	17%
	d) health workers	43	43%

Table 2: The association between demographic variables with the level of knowledge on prevention and management of snake bite at selected village.

S.No	Demographic variables	Inadequate knowledge		Moderate knowledge		Adequate knowledge		Chi-square value and p value
		No	%	No	%	No	%	
1	Gender							X^2=2.753
	a) Male	-	-	42	42%	5	5%	df=2
	b) Female	3	3%	45	45%	5	5%	NS
2	Age							
	a) 20-29 years	1	1%	15	15%	1	1%	X^2=2.188
	b) 30-39 years	1	1%	19	19%	2	2%	df=6
	c) 40-48 years	-	-	29	29%	4	4%	NS
	d) Above 50 years	1	1%	22	22%	3	3%	
3	Education							
	a) Illiterate	-	-	38	38%	4	4%	X^2=6.873
	b) Primary school	1	1%	16	16%	2	2%	df=8
	c) Middle school	1	1%	9	9%	-	-	NS
	d) High school	1	1%	12	12%	3	3%	
	e) Above	-	-	12	12%	1	1%	
4	Occupation							
	a) farmer	-	-	28	28%	3	3%	X^2=5.257
	b) factory workers	-	-	5	5%	1	1%	df=6
	c) housewife	1	1%	26	26%	5	5%	NS
	d) others	2	2%	28	28%	1	1%	
5	Family members bitten by snake	-	-	15	15%	3	3%	X^2=1.668
	a) yes	3	3%	72	72%	7	7%	df=2
	b) no							NS
6	Source of health information received from							X^2=21.451
	a) relatives	1	1%	23	23%	3	3%	df=6
	b) friends	2	2%	9	9%	2	2%	S
	c) media	-	-	12	12%	5	5%	
	d) health workers	-	-	43	43%	-	-	

RESULTS & DISCUSSION

Out of 100 samples in rural area, that majority of the people had moderate adequate knowledge 87(87%) and 10% of adequate knowledge and 3% are inadequate knowledge on prevention and management of snake bite at selected village among rural people the mean deviation of knowledge on prevention and management of snake bite is 11.39 and the standard deviation of Knowledge on prevention and management of snake bite among rural people is 113.89.there was an association between the demographic variable and knowledge on prevention and management of snakebite among rural people in kalambakkam. There was statistically significant found between the source of information and the level of knowledge on prevention and management of snakebite among rural people at selected village.

That majority of the people had moderate adequate knowledge 87(87%) and 10% of adequate knowledge and 3% are inadequate knowledge on prevention and management of snake bite in kalambakkam village among rural people.(FIGURE 1)

That majority of the people54 (54%) are females and 46(46%) were males. Most of them are age group of 20-29 years 33(33%) and above 50 years 22(22%) most of them were illiterate for about 41% and 16 are high school most of the people were house wife 30% and 31% are farmers 83% family members are never bitten by snake where else 17% family members are bitten by snake most of them receiving the source of information by health workers 43% and 27% by relatives.(TABLE 1)

That there was an association between the demographic variable and knowledge on prevention

and management of snakebite among rural people in kalambakkam. There was statistically significant found between the source of information and the level of knowledge on prevention and management of snakebite among rural people at selected village.(TABLE 2)

Which is similar findings by **Krishnaleela.G et al, (2018)** a cross–sectional study was conducted in rural area of Tirunelveli district. 200 adults were included in our study. Data on knowledge, attitude and practice were collected by the trained personnel using a predesigned structured questionnaire for the period of three months from June 2017 to August 2017.60.5% of the study population can't identify the snake. 54% of them had knowledge on availability ofASV.62% of study subjects had no knowledge on complications of snake bite. It was also found that most of them had practice of tying tourniquet above the site of bite, sucking blood from the site, washing with soap and water.62.5% preferred hospital treatment for snake bite only 12% preferred traditional practices and 59.5% believed that ASV is effective. Knowledge on identification of snake and on ASV is low and still some people follow harmful practices like taking to traditional healers and applying native medicine so steps must be taken to improve their knowledge and to prevent harmful practices.

Another similar study by **Karthick al, (2017**) the study was conducted to assess the knowledge on prevention and first aid measures of snake bite among farmers. Snake is a global health problem associated with high morbidity and mortality. In India, snake bite is mainly on occupational health hazard associated with farming. Understanding awareness and perception in risk population on the preventive measure, first aid and treatment for snake bite becomes pivotal in designing snake bite prevention and control program. Descriptive design. Purposive sampling method was used. A total of 30 weavers participated in the study. Venous clinical severity score assessment was used to assess the prevention and first aid measures of snake bite for data collection. Result: In this out of 30 samples 14(46.66%) were adequate, 16(53.34%) were moderate and 0(0%) were inadequate.

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