KNOWLEDGE AND PRACTICE REGARDING MOSQUITO-BORNE DISEASES AMONG THOZHILURAPP PADATHI WORKERS UNDER NADATHARA GRAMAPANCHAYATH

Mrs. Deepthi T.B [1] ,Ms. Aksa K Santhosh[2] ,Mr. Jibin George [3] ,Ms. Anagha.M [4] , Ms.Mercia Samuel [5] ,Ms. Ancitta James [6] ,Ms.Krishnendu M.P [7] ,Ms. Gamana.[8]

Lecturer [1], Fourth Year B. Sc. Nursing Students [2-8]
Aswini College Of Nursing, Thrissur

ABSTRACT

Vector-borne diseases are transmitted by vectors carrying infectious pathogens between humans or from animals to humans. This study assesses the knowledge and practices related to mosquito-borne diseases among National Rural Employment Guarantee Act (NREGA) workers, providing at least 100 days of employment in the unskilled sector in rural areas. The objectives include evaluating knowledge and practices, examining the correlation, and exploring associations with demographic variables. The research, focusing on NREGA workers in Nadathara Panchayat, Thrissur district, Kerala, employs a quantitative and descriptive design. From 100 purposively sampled workers, results indicate that 90% had moderate knowledge, while 25% demonstrated good practices. Positive correlation ($r = 0.227*$) was observed between knowledge and practices, and significant associations were found with variables such as prior exposure to communicable diseases ($\chi^2 = 13.79$).

Keywords: *knowledge, practice; mosquito, Thozhilurappu padhathi workers*

INTRODUCTION

"If you think you are too small to make a difference, try sleeping with a mosquito around."
—   **Dalai Lama**

Human beings are affected with different kinds of illnesses during their lifespan, and diseases which can be transmitted through vectors are some of them. Vector-borne diseases have long been associated with significant human illness and death.. So, a well devised educational programme would be extremely pivotal in tackling the endangerment of the health of rural workers with high exposure to vectors like mosquitoes.[1]

NEED AND SIGNIFICANCE OF THE STUDY

Thus there is a need for conducting a study to assess the knowledge and practice regarding mosquito-borne diseases among workers who are not only exposed to vectors but are also in contact with a larger section of the population by virtue of the unorganised sector of work they belong to, causing them to take up all kinds of work involving all kinds of activities.

STATEMENT OF THE PROBLEM

A study to assess the knowledge and practice regarding mosquito-borne diseases among Thozhilurappu padhadhi workers under Nadathara Grama Panchayath, Thrissur District.

OBJECTIVES OF THE STUDY

1) To assess the knowledge regarding mosquito-borne diseases among the workers.

2) To assess the practice regarding mosquito-borne diseases among the workers.

3) To find out the correlation between knowledge and practice regarding mosquito borne diseases among the workers.

4) To find out the association between knowledge regarding mosquito-borne diseases among the workers with their selected demographic variables.

5) To find out the association between practice regarding mosquito-borne diseases among the workers with their selected demographic variables

HYPOTHESIS

H_{01}: There is no significant correlation between knowledge and practice of the subjects with their selected demographic variables.

H_1: There is a significant correlation between knowledge and practice regarding mosquito borne diseases among the subjects, with their selected demographic variables.

H_{02}: There is no significant association between knowledge regarding mosquito borne diseases among the workers with their selected demographic variables.

H_2: There is a significant association between knowledge regarding mosquito-borne diseases among the workers their demographic variables.

H_{03}: There is no significant association between practice regarding mosquito borne diseases among the workers with their selected demographic variables.

H_3: There is a significant association between practice regarding mosquito-borne diseases among the workers with their selected demographic variables.

METHODOLOGY

Research Approach

The research approach adopted for this study is quantitative.[33]

Research Design

A descriptive research design was used for this study.

Settings of the study

The setting of this study was rural area under the jurisdiction of ward 11 of Nadathara Grama Panchayat, Thrissur.

The sample population of the present study comprised of 100 worker, who are residing in ward 11 of Nadathara Grama Panchayath, Thrissur who fulfilled the inclusion criteria.

Sample size

Sample size for the study comprises 100 workers who are residing in ward 11 of Nadathara Grama Panchayat.

Criteria For Sample Selection

The following criteria were adopted for the selection of samples for this study.

Inclusion Criteria: This study includes subjects who.

1. Living nadathara panchayath

2. Were willing to participate in this study

3. can understand Malayalam.

Exclusion Criteria: This study excludes NREGSE workers who :-

- Are outside the Nadathara Grama Panchayat.
- Are not willing to participate in this study.
- Cannot read and write Malayalam.
- Sampling Technique

For the present study the sampling technique adopted was non probability purposive sampling**.**

Description of the tool

The structured questionnaire to assess the knowledge and practice regarding mosquito-borne diseases among the workers under Nadathara Grama Panchayath, Thrissur District.

Part 1: Demographic profile of the workers.

This part consists of demographic variables such as age, gender, religion, type of family, education, marital status, colour of ration card (denoting economic status), source of information on mosquito-borne diseases.

Part 2: A knowledge-based questionnaire regarding mosquito-borne disease.

This part consists of 20 questions regarding mosquito-borne diseases. Each question has 4 alternatives with one correct answer. Each correct response was given one mark and the wrong answer carried none. The maximum score was 20.

Part3: A practice oriented questionnaire regarding mosquito-borne disease.

This part consists of 15 practice oriented questions regarding mosquito-borne disease. Each question contains two alternatives with positive and negative statements.

Procedure for the collection of data

To conduct this study in Nadathara Grama Panchayat, a formal written permission was obtained the from college authorities for conducting the study outside of the campus. A formal written permission was obtained from the President of Nadathara Grama Panchayat prior to data collection for conducting this study in the rural areas. The data collection period was between 12-10-22 to 15-10-22 Before collecting data from the samples, the investigators introduced themselves developed rapport. The investigators explained the purpose of the study and an informed consent was obtained from respondents, individually. Demographic data was collected from the samples. Then the questionnaires were distributed to the samples and 15 minutes were provided to complete the questionnaire and resolution of concerns.

Section A: - A description of the demographic profile of the respondents.

Table 1: Frequency and percentage of distribution of the respondents according to Age and Religion.

Sl No	Demographic variables	Frequency (n)	Percentage (%)
1	Age in years 18-27 28-37 38-47 <=48	00 05 34 61	00 05 34 61
2	Religion Hindu	77	77

| | Christian | 21 | 21 |
| | Muslim | 2 | 2 |

Sl No	Demographic variables	Frequency (n)	Percentage (%)
3	Type of family Nuclear		
	Joint	58	58
	Extend	39	39
		3	3
4	Marital Status		
	Married	65	65
	Unmarried	16	16
	Widow	17	17
	Divorced	2	2
5	Educational Status		
	Illiterate	25	25
	Primary	56	56
	Secondary	16	16
	Others	3	3
6	Colour of the ration card		
		17	17
	White	23	23
	Blue	15	15
	Yellow	45	45
	Pink		

Table 3: Frequency and percentage distribution of respondents according to prior exposure to communicable diseases, history of hospitalization for fever in past one year, participation of awareness program and source of information regarding mosquito borne disease.

Sl No	Demographic Variables	Frequency (n)	Percentage (%)
7	Prior exposure to the communicable disease		
	Yes	20	20
	No	80	80

Table 2: Frequency and percentage of distribution of respondents according to type of family, marital status, educational status, and colour of the ration card.

8	History hospitalization for fever in past one year	13	13
		87	87
	Yes		
	No		
9	Participation of awareness regarding mosquito borne disease	31	31
		69	69
	Yes		
	No		
10	Source of information regarding mosquito borne disease	33	33
		50	50
		12	12
	News paper	5	5
	Television		
	Internet		
	Others		

Section B: - Description of the level of knowledge among the respondents regarding mosquito borne diseases.

Table 4: Frequency and percentage distribution of level of knowledge regarding mosquito borne diseases among the respondents.

Level of knowledge	Frequency (n)	Percentage (%)
Inadequate	8	8
Moderate	90	90
Adequate	2	2

Section A: - A description of the demographic profile of the respondents.

Table 1: Frequency and percentage of distribution of the respondents according to Age and Religion.

(N=100)

Sl No	Demographic variables	Frequency (n)	Percentage (%)
1	Age in years		
	18-27	00	00
	28-37	05	05
	38-47	34	34
	<=48	61	61
2	Religion		
	Hindu	77	77
	Christian	21	21
	Muslim	2	2

Table 2: Frequency and percentage of distribution of respondents according to type of family, marital status, educational status, and colour of the ration card.

Sl No	Demographic variables	Frequency (n)	Percentage (%)
3	Type of family		
	Nuclear	58	58
	Joint	39	39
	Extend	3	3
4	Marital Status		
	Married	65	65
	Unmarried	16	16
	Widow	17	17
	Divorced	2	2
5	Educational Status		
	Illiterate	25	25
	Primary	56	56
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	Others	3	3
6	Colour of the ration card		
	White	17	17
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7	Prior exposure to the communicable disease		
	Yes	20	20
	No	80	80
8	History hospitalization for fever in past one year		
	Yes	13	13
	No	87	87
9	Participation of awareness regarding mosquito borne disease		
	Yes	31	31
	No	69	69
10	Source of information regarding mosquito borne disease		
		33	33
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	News paper	12	12

	Television Internet Others	5	5

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Table 4: Frequency and percentage distribution of level of knowledge regarding mosquito borne diseases among the respondents.

(N=100)

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Inadequate	8	8
Moderate	90	90
Adequate	2	2

Section C: - Description of practice of the respondents regarding mosquito borne diseases.

Table 5: Frequency and percentage distribution of level of practice among the respondents.

Level of practice	Frequency	Percentage
Good practice	25	25
Adequate practice	66	66
Inadequate practice	9	9

Table 6: Correlation between knowledge and practice regarding mosquito borne disease among the respondents.

(N=100)

Variables	n	r value	p value

Knowledge	100	0.227*	0.05
Practice			

* Significant at the level of 0.05

Table 7: Association between knowledge regarding mosquito borne disease among the respondents with their selected demographic variables.

Sl No	Demographic Variables	X^2	TV
1	Age in years	2.95^{ns}	12.59
2	Religion	1.86^{ns}	9.49
3	Type of family	1.90^{ns}	9.49
4	Marital status	1.96^{ns}	12.59
5	Educational status	4.57^{ns}	12.59
6	Color of ration card	7.35^{ns}	12.59
7	Prior exposure to communicable disease	13.78^*	5.99
8	History of hospitalization with fever	1.36^{ns}	5.99
9	Source information	5.07^{ns}	12.59
10	Prior awareness regarding mosquito borne diseases	1.76^{ns}	5.99

Significant at 0.05 level

Table 8: Association between practice regarding mosquito borne disease among the respondents with their selected demographic variables.

Sl No	Demographic variable	X^2	TV
1	Age in years	3.75^{ns}	12.59

2	Religion	3.07^{ns}	9.49
3	Type of family	0.93^{ns}	9.49
4	Marital status	4.57^{ns}	12.59
5	Educational status	13.35^{*}	12.59
6	Colour of ration card	5.82^{ns}	12.59
7	Prior exposure to communicable disease	1.30^{ns}	5.99
8	History of hospitalization with fever	0.85^{ns}	5.99
9	Source of information	4.44^{ns}	12.59
10	Prior awareness regarding mosquito borne diseases	9.60^{*}	5.99

Significant at 0.05 level

DISCUSSION

The findings of the are discussed in reference to the objectives.

Objective 1: To assess the knowledge regarding mosquito-borne diseases among beneficiaries of NREGSE.

The analysis of the study shows that among 100 workers 90(90%) had moderate knowledge ,2(2%) had adequate knowledge and 8(8%) had inadequate knowledge regarding mosquito- borne diseases.

Objective 2: To assess the practice regarding mosquito-borne diseases among the respondents.

The study revealed that there is a significant association between the practice regarding mosquito-borne diseases among NREGSE workers and demographic variables such as the colour of ration card (economic status).

Objective 3: To find out the correlation between knowledge and practice regarding mosquito-borne diseases among the workers.

The present study depicts there is correlation between knowledge and practice regarding mosquito-borne diseases. The 'r' value is 0.227^{*} which is significant at the level of 0.05 and it is concluded that there is a positive correlation found between knowledge and practice regarding mosquito-borne diseases among the respondents.The correlation between knowledge and practices showed that there is a strong positive correlation (r = 0.73, p<0.001) between knowledge and practice of non-livestock households and positive correlation (r = 0.58, p<0.001) between knowledge and practice of livestock households.[38]

Objective 4: To find out the association between knowledge regarding mosquito-borne diseases among the workers with their selected demographic variables.

The study findings revealed that there is a significant association between the knowledge regarding mosquito-borne diseases among the workers with their selected demographic variables such as previous experience with communicable diseases (X^2 value=13.78^{*}, TV=5.99).Hence the research hypothesis was accepted and null hypothesis was rejected.

Objective 5: To find out the association between practice regarding mosquito-borne diseases among the workers with their selected demographic variables.

The study findings revealed that there is a significant association between the practice regarding mosquito-borne diseases among padhathi workers with their selected demographic variables. There is a

significant association between the practice regarding mosquito-borne diseases among the respondents with their selected demographic variables such as educational status (X^2=13.35*, TV=12.59) and prior awareness of mosquito borne diseases (X^2=9.60, TV=5.99).So the research hypothesis of the present study was accepted and null hypothesis was rejected.

CONCLUSION

Most of the respondents had poor knowledge of mosquito-borne diseases. The practice of the workers concerning the prevention of mosquito-borne diseases may improve as their knowledge increases. Hence the study identified the need for education regarding mosquito-borne diseases for increasing awareness.   Thus the questionnaire method of data collection helped the respondents gain awareness about the diseases and acquaint themselves with the practices they are supposed to follow in day to day life. They can easily identify the different practices for the prevention of mosquito-borne diseases and practice those in their daily lives.

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