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"A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION BOOKLET ON THE KNOWLEDGE OF FARMERS REGARDING VECTOR BORNE DISEASES AND ITS PREVENTION IN SELECTED RURAL AREAS UDAIPUR DISTRICT"

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ABSTRACT: Vector borne disease are posing a great threat globally, it is an increasing trend globally and India is not an exemption. The farmers have less knowledge about the vector borne diseases. Present study is aimed to assess the effectiveness of information booklet on knowledge regarding vector borne diseases among farmers residing in selected rural areas of Udaipur district. H1: There will be significant difference between pre –test and post-test knowledge scores of the farmers regarding vector borne diseases and its prevention. H2: There will be significant association between pre-test knowledge scores and selected demographic variables. The method adopted for the present study was evaluative approach. As the study aimed at assessing the effectiveness of information booklet on knowledge of farmers. The conceptual framework for the study was developed on the basis of Health Promotion Model, proposed by Nola J. Pender, Murdagh C.L, Parsons M.A identifies factors that enhance or decrease health promotion Behaviour. The setting areas of the study were Dhaneriya garh & Sapetiya village. In this study 60 literate farmer samples were drawn by using simple random method. The pre- test knowledge was collected by using structured knowledge close ended questionnaire after this information booklet was administered than after 7 days post-test was taken. The data was analysed using descriptive and statistical analysis.

The knowledge of vector borne diseases among farmers was assessed. The mean posttest knowledge score is 20.18(84.08. %) which was greater than the mean pre- test knowledge score 10.6 (44.17%).and the enhancement in the knowledge of respondents is 9.58 (47.5%).The post- test knowledge score was significantly higher than the mean pre-test knowledge score with ‘t’ value of 27.28,df 59 at 0.05 level of significance. This indicated that there was difference in pre- test and post- test knowledge score of respondents and information booklet was effective in improving the knowledge score of farmers regarding vector borne diseases and its prevention. There was a significant association between pre -test knowledge scores and socio demographic variables like age in years, educational status, monthly income of family , previous knowledge about vector borne diseases and their prevention & land status whereas no association was found with, gender, source of information & source of water.

Index Term: Assess, Knowledge, Farmers, effectiveness, Vector borne diseases, Information booklet**.**

I. INTRODUCTION

Every year over 1 million people all around the world die due to vector borne diseases. Focusing mainly on the increasing threat of viral and parasitic infections caused by insects, this year’s World Health Day (April 7) highlights ‘Prevention of vector borne diseases.’ Vector-borne diseases are illnesses caused by pathogens and parasites in human populations. Distribution of these diseases are determined by a complex dynamic of environmental and social factors. Globalization of travel and trade, unplanned urbanization and environmental challenges such as climate change are having a significant impact on disease transmission in recent years. Some diseases, such as Malaria, Dengue, Chikungunya, Japanese Encephalitis (JE), Kalaazar and Lymphatic filariasis are emerging in countries where they were previously unknown.

The Vector-borne diseases (VBDs) are a group of communicable diseases transmitted by mosquitoes and other vectors. People suffer from a significant disease burden from these diseases in local and focal areas of India, which is reflected in the form of morbidity and mortality from top 6 vector borne diseases Malaria, Dengue, Chikungunya, Japanese Encephalitis (JE), Kala-azar and Lymphatic filariasis.

Malaria in man caused by four distinct species of the malaria parasite, p.falcifparum, P.malaria, and p.ovale which are carried by various species of Female Anopheline Mosquito. Malaria is a seasonal disease with symptoms of fever, chills, 2 severing, and headache. In most part of the India maximum prevalence is from July to November

Japanese encephalitis is a viral (Flavivirus-a group B arbovirus) disease that spreads through infected Culiacan mosquito; C.vishnui and C.gelidus along with some anophelines have been incriminated

Dengue is common in tropical and sub-tropical regions of the world. In the recent years, transmission of dengue has significantly increased in urban areas as well as in rural areas and has become a major public health concern

Chikungunya is viral disease transmitted to humans by infected mosquitoes. It is transmitted to humans by Aedes mosquito (mainly Aedes aegypti) in the daytime. Its affects all age’s groups.

1.1. PROBLEM STATEMENT

“A study to assess the effectiveness of information booklet on the knowledge of farmers regarding vector borne diseases and its prevention in selected rural areas of Udaipur district.”

1.2.OBJECTIVES

1. To assess pre-test knowledge of farmers regarding vector borne diseases and its prevention. 2. To prepare and administer the information booklet regarding vector borne diseases and its prevention to the farmers.

3 To assess the effectiveness of information booklet on knowledge of farmers regarding vector borne diseases and its prevention.

4. To find out the association between pre-test knowledge scores and selected demographic variables.

1.3. HYPOTHESIS

H1: There will be significant difference between pre –test and post-test knowledge scores of the farmers regarding vector borne diseases and its prevention.

H2: There will be significant association between pre-test knowledge scores and selected demographic variables.

1.4. CONCEPTUAL FRAMEWORK

Good research generally integrates research findings into an orderly coherent System. Such as integration typically involves identifying or developing an appropriate conceptual framework. Conceptualization is a process of forming ideas, designs and plans. A conceptual model or conceptual framework broadly explains phenomena of interest, expresses assumption and reflects a philosophical stance and it explain the relationship between the variable in the diagrammatic representation. The conceptual framework for the study was developed on the bases of Health Promotion Model. Health Promotion can be defined as behaviour motivated by the desire to increase well-being and actualize human health potential. Health Promotion Model (revised 2002) proposed by Nola J.Pender, Murdagh C.L, Parsons M.A identifies factors that enhance or decrease health promotion Behaviour. It explains the likelihood that healthy life style patterns or healthy Behaviours will occur and it is useful to the nurse as a framework for client Assessment. It states that individuals are likely to change their behaviour to feel better physically, psychologically, socially and spiritually

Individual Characteristics and Experience

This depends on the target behaviour for health promotion. This model is flexible in The sense that the characteristics that are relevant to the particular health behaviour can be selected.

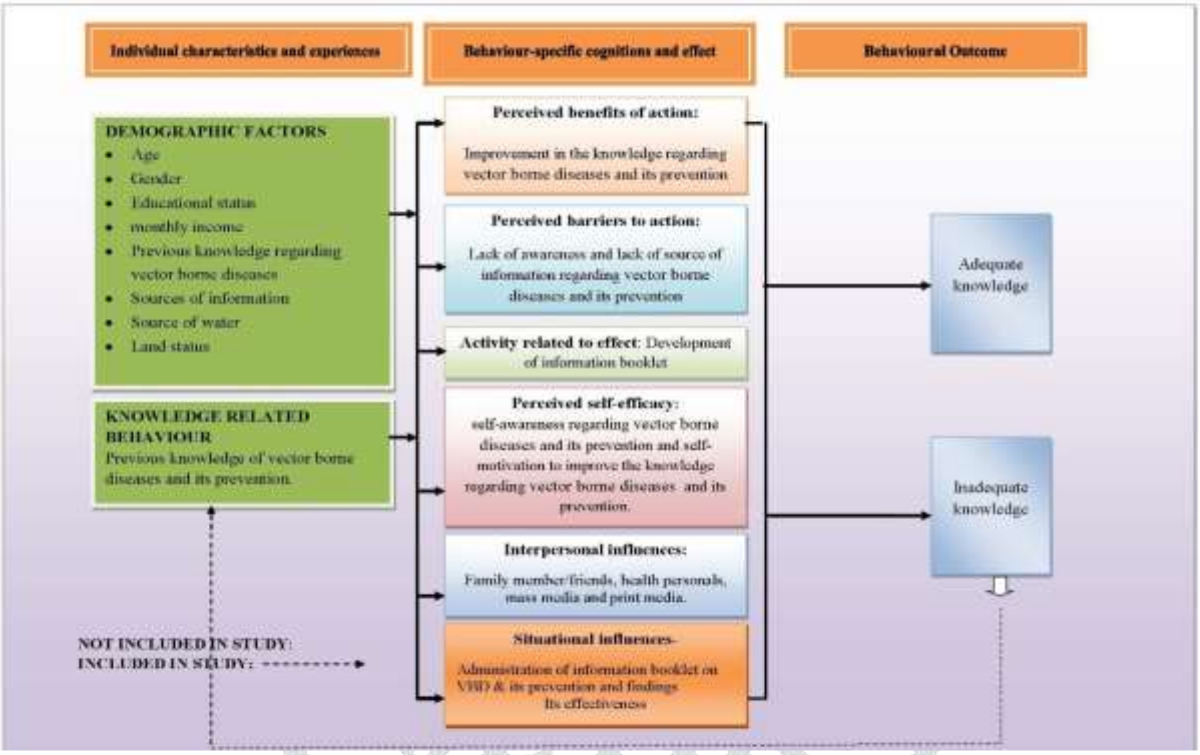
This includes personal factors and prior related behaviour.

- **Demographic factors**: These factors are categorized as biological, psychological and socio-cultural. Some personal factors may influence the behaviour change. In this study personal factors are age in years, gender, educational status, monthly family income, any knowledge regarding vector borne diseases , if yes, from where did they get information about vector borne diseases.
- **Knowledge related behaviour**: It includes previous knowledge and skill in health promoting actions. In this study prior related behaviour includes previous knowledge of vector borne diseases and its prevention.
- **Perceived benefits of action**: Anticipated benefits or an outcome of action effect the persons plan to engage in health promoting behaviour's and may facilitate continuous practice. In this study perceived benefits of action are Improvement in the knowledge regarding vector borne diseases and its prevention.
- **Perceived barriers to action**: Person's perceptions about available time, inconvenience, expense and difficulty in performing the activity may act as barriers. In this study perceived barriers to action are Lack of awareness and 11 lack of source of information regarding vector borne diseases and its prevention.

Behaviour Outcome

It is affected by commitment to plan of action commitment and Health promoting behaviour which is directed towards attaining positive health outcomes for the client resulting in his/her improved health, enhanced functional ability and better quality of life. In this it may evident in two forms inadequate knowledge or adequate knowledge of farmers regarding vector borne disease and its prevention .If inadequate knowledge is there the whole thing is to be given a rethought and re planning is needed which is not although he part of the study.

Conceptual Model addresses the Correlation between vector borne diseases and its prevention among farmers. It is a way of Understanding and predicting the farmers knowledge in relation to their health. This model helps the investigator to understand the level of knowledge regarding vector borne diseases and its prevention 12 among the farmers, in order to assess the effectiveness of information booklet on knowledge of farmers regarding vector borne diseases and its prevention. So, the investigator felt that Pender's Health Promotion Model is suitable as conceptual framework for this study to Correlative study on vector borne diseases and its prevention among the farmers.



SUMMARY

The present study is organized under following sections:

Chapter 1: Presented Introduction, Back ground of the study, Need of the study, Statement of the problem, Objective, Hypothesis, Assumption, Delimitation, and Operational Definition& Conceptual Framework.

Chapter 2: Deals with review of literature.

Chapter 3: Deals with Research Methodology including Research Approach, Research Design, Study Setting, Sample and Sampling Technique, Development of Data Collection Tool, Intervention, Procedure for Data Collection and the Plan for Data Analysis.

Chapter 4: Deals with Data Analysis and Interpretation Chapter 5: Deals with Discussion

Chapter 6: Deals with Summary Conclusion, Implication & Recommendation.

RESEARCH METHODOLOGY

Research Design

It is the overall plan for obtaining answer to the questions being studied and for handling some of the difficulties encountered during the research process.

Setting of the Study

It refers to the physical location and conditions in which data collection takes place in the study. The present study has been conducted in Dhaneriagarh village of Udaipur

Population

Population refers to the entire aggregate of individuals or objects having common characteristics. In the present study the population consists of farmers of selected rural areas of Udaipur district

Sample and Sample Size

The samples selected for the present study comprises of 60 farmers of rural areas from Dhaneriagarh village of Udaipur district.

Sampling Criteria

The following criteria are set to select the samples: Inclusion Criteria

- Farmers present at the time of data collection.

- Farmers willing to participate in the study.

- Farmers able to read and write Hindi.

Exclusion Criteria

- Farmers not available during the period of data collection.
- Farmers not able to read and write Hindi**.**

Description of the tool:

The structured knowledge close ended questionnaire consists of two parts:

Part I: Consist of selected socio-demographic variables like age in years, gender, educational status, monthly income of family, any knowledge regarding vector borne diseases and if yes from where did they get the information, Land status & Source of water.This section comprised of 8 items.

Part II: Consist of structured knowledge close ended questionnaire on prevention of vector borne diseases among farmers. This section consists of 24 items on selected aspects. The selected aspects are:

- Introduction of vector borne diseases.(6)
- Causes of vector borne diseases. (2)
- Sign and symptoms of vector borne diseases (5)
- Prevention of vector borne diseases. (11)

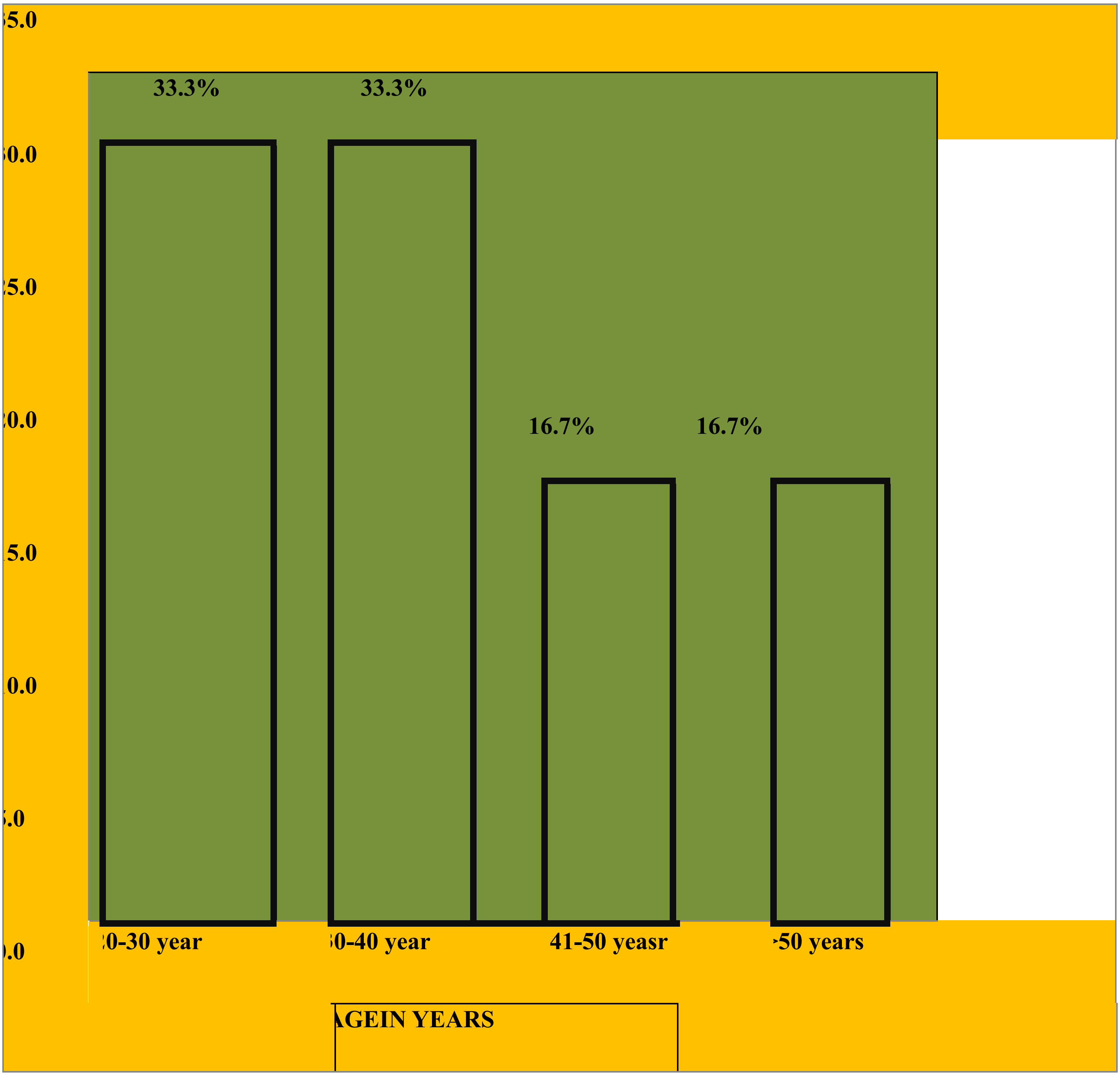
DATA ANALYSIS AND INTERPRETATION
SECTION- I

Description of Demographic Variables of Respondents

Table 4.1 Distribution of Respondents According to Age in Years

N=60

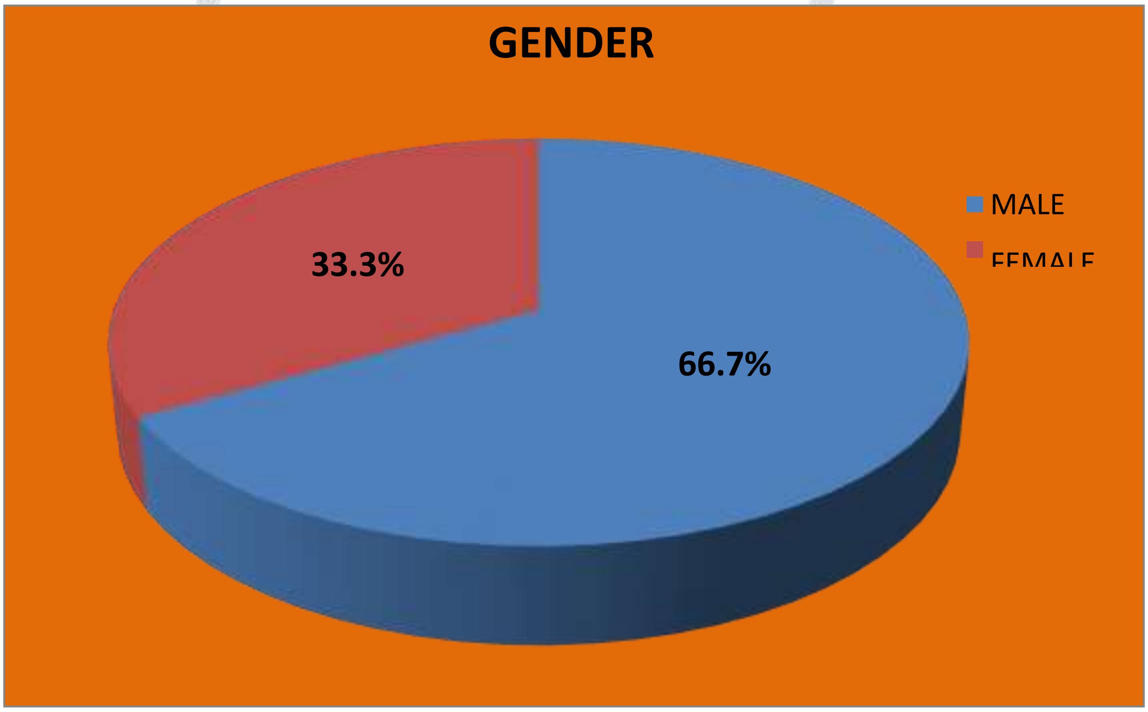
Age in years	Frequency	Percentage
21-30	20	33.3%
31-40	20	33.3%
41-50	10	16.7%
Above 50	10	16.7%
Total	60	100.0


5.0
0.0
5.0
0.0
5.0
0.0
.0
.0
33.3%
33.3%
16.7%
16.7%
0-30 year
0-40 year
41-50 yeasr
50 years
GEIN YEARS

Distribution of Respondents According to Gender

N= 60

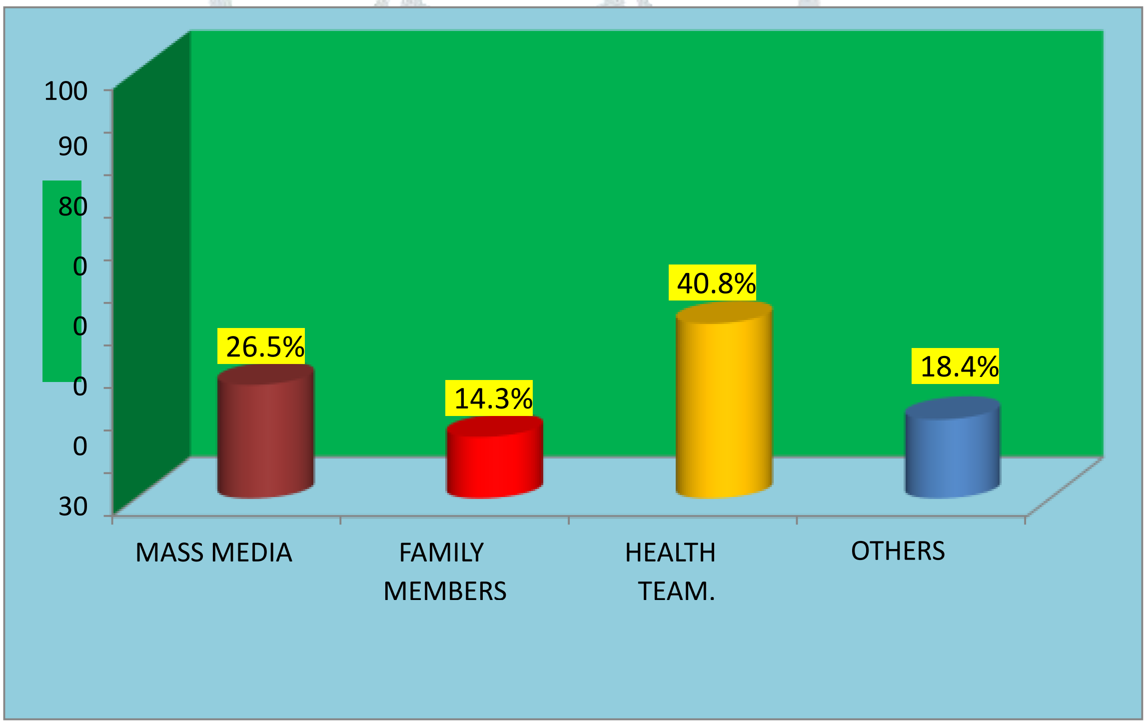
Gender	**Frequency**	**Percentage**
Male	40	66.7%
Female	20	33.3%
Total	**60**	**100%**



Distribution of Respondents According to Source of Information

N=49

Source of Information	**Frequency**	**Percentage**
Mass Media	13	26.5%
Family Members	7	14.3%
Health Team.	20	40.8%
Others	9	18.4%
Total	**49**	**100%**



SECTION-II

Comparison of Mean Pre-Test and Post -Test Knowledge Scores This section examined the data pertaining to following Objectives and Hypothesis.

Objectives

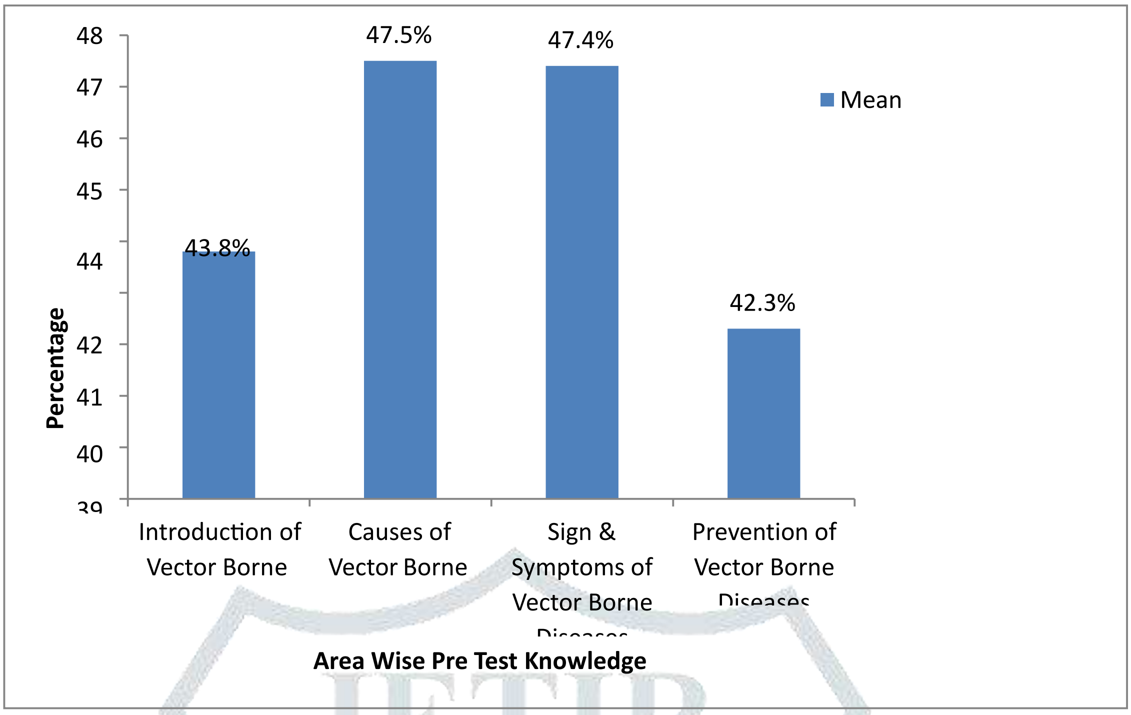
1. To assess pre-test knowledge of farmers regarding vector borne diseases and its prevention.
2. To assess the effectiveness of information booklet on knowledge of farmersregarding vector borne diseases and its prevention.

H_1: There will be significant difference between pre –test and post-test knowledgescores of the farmers regarding vector borne diseases and their prevention.

Area Wise Pre-Test Knowledge Scores

N = 60

Area	**Mean**	**Mean Percentage**	**Standard Deviation**
Introduction of Vector Borne Diseases	.63	3.8%	.99
Causes of Vector Borne Diseases	.95	7.5%	.59
Sign & Symptoms of Vector Borne Diseases	.37	7.4%	.16
Prevention of Vector Borne Diseases	.65	2.3%	.06



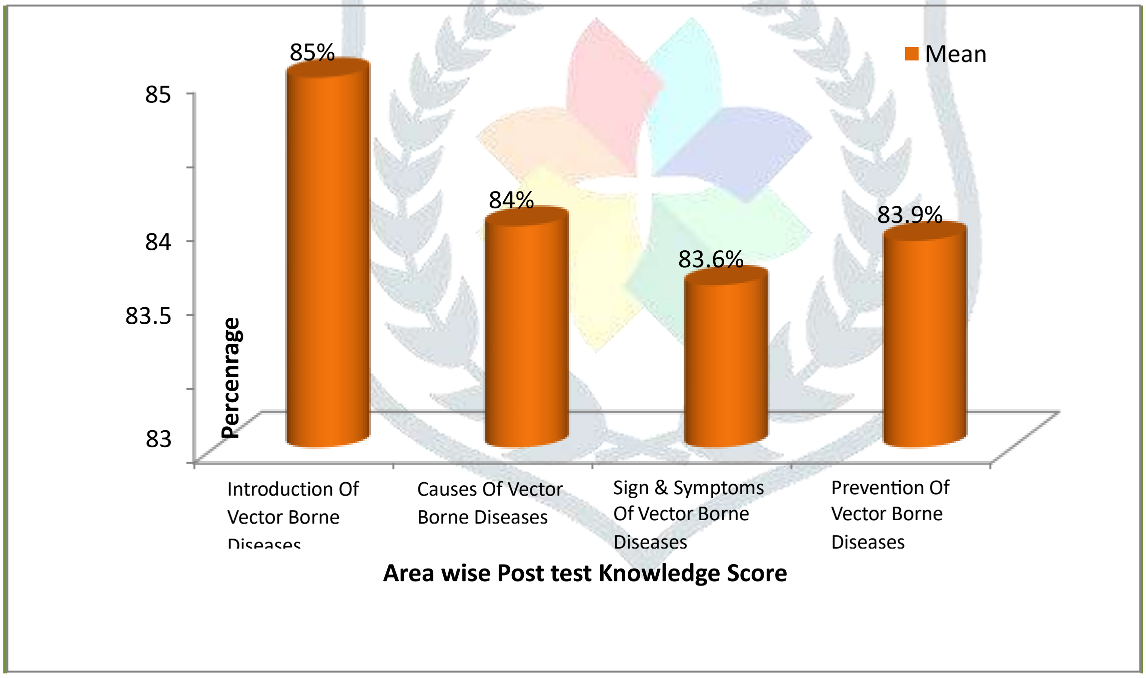
Area Wise Pre-Test Knowledge Scores

revealed that the pre-test knowledge scores on Prevention of Vector Borne Diseases was highest 4.65 with SD 2.6 and mean percentage was found to be 42.3%.The mean pre-test knowledge scores on Introduction of Vector Borne Diseases was 2.63with SD 0.99; mean percentage was found to be 43.8% The mean pre-test knowledge scores on Sign and Symptoms of Vector Borne Diseases was 2.37 with SD 1.16 and mean percentage was found to be 47.4%& least mean pre test scores was in the area of causes of vector borne diseases was 0.95 with SD 0.59 & mean percentage was found to be 47.5%.

Area Wise Post-Test Knowledge Scores

N=60

Area	Mean	Mean Percentage	Standard Deviation
Introduction Of Vector Borne Diseases	.1	5	.02
Causes Of Vector Borne Diseases	.68	4	.47
Sign & Symptoms Of Vector Borne Diseases	.17	3.4	.67
Prevention Of Vector Borne Diseases	.23	3.9	.19



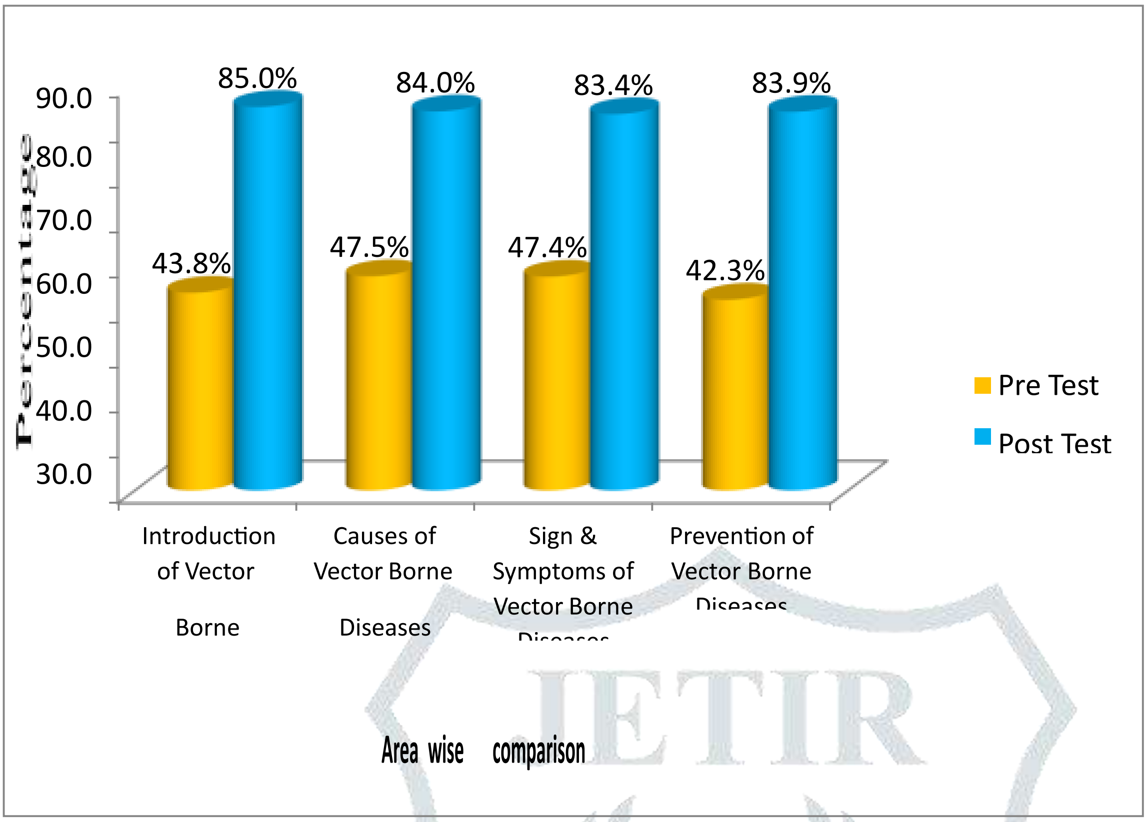
Area Wise Post-Test Knowledge Scores

that the pre-test knowledge scores was in the area of Prevention of Vector Borne Diseases was highest 9.23 with SD 1.19and mean percentage was found to be 83.9%.The mean post-test knowledge scores on Introduction of Vector Borne Diseases was 5.1with SD 1.02; mean percentage was found to be 85 The mean pre-test knowledge scores on Sign and Symptoms of Vector Borne Diseases was 4.17 with SD 0.67 and mean percentage was found to be 83.6% &the least score was in the area of mean pre-test knowledge scores on Causes of Vector Borne Diseases was 1.68 with SD 0.47 and mean percentage was found to be 84%.

Area Wise Comparison of Pre-Test and Post-Test KnowledgeScores
N=60

. No.	reas	re-Test Knowledge Scores		ost-Test Knowledge Scores		lean Difference	- Value	f	evel Of Signifi ance
		lean	D	lean	D				
.	ntroduction of Vector Borne iseases	.63	.99	.1	.02	.47	9.11	9	
.	auses of Vector Borne iseases	.95	.59	.68	.47	.73	.28	9	
.	ign & ymptoms of ector Borne Diseases	.37	.16	.17	.67	.8	1.86	9	
.	revention of ector Borne Diseases	.65	.06	.23	.19	.58	7.89	9	

* S- Significant at P< 0.05 level



Area Wise Comparison of Mean Percentage of Pre-Test and Post-Test Knowledge Scores

there was significant difference in the area wisemean pre-test and post-test knowledge scores in all areas at p<.05 level of significance. This indicated that there was significant difference in area wise mean pre- test and mean post- test knowledge score.

SECTION-III

Association between Pre-Test Knowledge Scores and Selected Socio-Demographic Variables

This section examined the following Objective and Hypothesis.

Objective 4 .To find out the association between pre-test knowledge scores andselected demographic variables.

H$_2$**:** There will be significant association between pre-test knowledge scores andselected demographic variables.

Association between Pre -Test Knowledge Scores and Age ofRespondents

N=60

ge in Years	**ledian**		**'otal**	**value χ**	**)f**	**lesult**
	median(10)	**median(10)**				
0-30	)	1	0	.96		
1-40		2	0			
1-50			0			
bove 50			0			
'otal	**2**	**8**	**0**			

* S- Significant at P< 0.05 level

that the calculated Chi square value (5.96) was more thanthe tabulated value with df 3 which revealed that there was statistically significant association between age of respondents and pre-test knowledge scores. The highest knowledge was found in the age group 31-40 years and least among more than 50 years age group.

Association between Pre-Test Knowledge Scores and Gender ofRespondents

N=60

ender	**ledian**		**'otal**	**alue**	**)fχ**	**lesult**
	median(10)	**median(10)**				
lale	0	0	0	.536		IS
'emale	2		0			
'otal	**2**	**8**	**0**			

* NS- Not Significant at P> 0.05 level

that the calculated Chi square value (0.536) was lesser than the tabulated value with df 1 which revealed that there was statistically no significant association between pre-test knowledge scores and gender of respondents. The knowledge of male respondents was higher than female respondents.

Association between Pre-Test Knowledge Scores and EducationalStatus of Respondents N=60

ducational status	**ledian**		**'otal**	**alue**	**)f χ**	**lesult**
	median(10)	**median(10)**				
'ormal	0	)	0			

Primary	16	10	26	18.74	3	S	
Secondary	[illegible]	[illegible]	14				
Hr. secondary & above	[illegible]	[illegible]	10				
Total	**[illegible]2**	**[illegible]8**	**[illegible]0**				

* S- Significant at P< 0.05 level

that the calculated Chi square value (18.74) was more than the tabulated value with df 3 which revealed that there was statistically significant association between pre-test knowledge scores and educational status of respondents. The highest knowledge was among primary educated and least knowledge among formally educated respondents.

Association between Pre-Test Knowledge Scores with MonthlyIncome of Respondents

N=60

Ionthly Income (In Rs.)	**Iedian**		**Total**	**χ alue**	**Df**	**Result**
	median(10)	**median(10)**				
5000	8	[illegible]	2	1.32	[illegible]	[illegible]
001-10000	[illegible]	7	6			
0001-15000	[illegible]	[illegible]	[illegible]			
15000	[illegible]	[illegible]	[illegible]			
Total	**2**	**8**	**0**			

* S- Significant at P< 0.05 level

that the calculated Chi square value (11.32) was more than the tabulated value with df 3 which revealed that there was statistically significant association between pre-test knowledge scores with monthly income. The highest knowledge was with monthly income of more than 5001-10000and least knowledge with monthly income of below 15000.

Association between Pre-Test Knowledge Score with Previous Knowledge Regarding Vector Borne Diseases

N=60

revious Knowledge	**Iedian**		**Total**	**χ alue**	**Df**	**Result**
	median(10)	**median(10)**				
Yes	3	6	9	.39	[illegible]	[illegible]
No	[illegible]	[illegible]	1			
Total	**2**	**8**	**0**			

* S- Significant at P< 0.05 level

that the calculated Chi square value (4.39) was more than the tabulated value with df 1 which revealed that there was statistically significant association between pre-test knowledge score with previous knowledge regarding vector borne diseases. The previous knowledge of respondents with YES response, regarding vector borne diseases was higher than the respondents from NO response.

Association between Pre-Test Knowledge Score with Source ofInformation

N=49

ource of Information	ledian		'otal	alue	)f	Result
	median(10)	median(10)				
lass Media	[illegible]	[illegible]	3			
)ther	[illegible]	[illegible]	[illegible]			
'amily Members	[illegible]	[illegible]	[illegible]	.46	[illegible]	IS
lealth Team	[illegible]	2	0			
'otal	**3**	**6**	**9**			

NS- Not Significant at P> 0.05 level

that the calculated Chi square value (2.46) was more than the tabulated value with df 3 which revealed that there was statistically no significant association between pre-test knowledge score and source of information. The highest knowledge was from Health team and least knowledge was from family members.

Association between Pre-Test Knowledge Scores with Land Status

N=60

.and Status	ledian		'otal	alue	)f	Result
	median(10)	median(10)				
)wn	0	6	6			
3orrowed	[illegible]	[illegible]	[illegible]			
.eased	[illegible]	[illegible]	[illegible]	.75	[illegible]	[illegible]
Rented	[illegible]	[illegible]	[illegible]			
'otal	2	8	0			

* S- Significant at P< 0.05 level

that the calculated Chi square value (9.75) was more than the tabulated value with df 3 which revealed that there was statistically significant association between pre-test knowledge scores with land status. The highest knowledge was from Own land and least knowledge was from Borrowed land.

Association between Pre-Test Knowledge Score with Source of Water

N=60

Source of water	**Median**		**Total**	**χ^2 value**	**Df**	**Result**
	≤median(10)	**>median(10)**				
Pond	[illegible]	[illegible]	5			
Canal	[illegible]	[illegible]	5			
Well	18	18	36	3.63	3	NS
Tube well	5	3	14			
Total	**32**	**28**	**60**			

*NS- Not Significant at P> 0.05 level

that the calculated Chi square value (3.63) was more than the tabulated value with df 3 which revealed that there was statistically no significant association between association between pre-test knowledge score with source of water. The highest knowledge was found among well and least knowledge was amongpond&canal.

Analysis revealed that there was a significant association between pre- test knowledge scores and socio demographic variables like age in years, educational status, monthly income of family, previous knowledge about vector borne diseases and their prevention & land status whereas no association was found with, gender, source of information & source of water. Hence H_2 stated that there will be significantassociation between pre-test knowledge scores and selected demographic variables was accepted with some variables and rejected with some variables Hence H_2 is partially accepted.

DISCUSSION

The Findings of the Study are discussed under the Following Headings Section I: Description of Socio-Demographic Variables of Respondent

Age in Years: The majority of the respondents with equal percentage 33.3% were in the age group of 21-30 years, 31-40 years, & equal percentage 16.7% were in the age group of 41-50 years, 50 years above.it depicts that inclination of young people is increasing towards farming.

Gender: The Majority of the respondents 66.7 % were males & 33.3 % were females.

. This can be attributed to the fact that more male are prone to be affected with than female as they move more farming, horticulture and other works.

Educational Status: The majority of the respondents 43.3% were primary educated, 16.7% were higher secondary & above educated, 23.3% were secondary educated,and 16.7% had formal education. As it evident that low level education leads to unhygienic and ignorant habits which lead to various diseases like VBD.

Monthly Family Income: The majority (43.3%) of the respondents had monthly Income of 5001-10000 Rs, 36.6% had monthly Income of <5000 Rs. & equal 10%had monthly income of 10001-15000 Rs. & above 15000 Rs.

Previous Knowledge Regarding Vector Borne Diseases: The majority of the respondents 71.7% had previous knowledge regarding vector borne diseases and18.3% had no previous knowledge regarding vector borne diseases.

Source of Information:The majority of the respondents 40.8% got information from Health team, 26.5%, from mass media, 18.4% from other source of information and least 14.3% from family members.

Land Status: The majority of the respondents 76.7% had their own land, 6.7% had borrowed land, and equal percent 8.3% had leased and rented land.

Source of Water: - Majority of the respondents 60% used well water, 23.3% tubewell water, equal percent 8.3% pond &canal water as a source of water.

Section II: Comparison of Mean Pre-Test and Post- Test Knowledge Scores This section examined the data pertaining to following Objectives and Hypothesis.**Objectives**

1. To assess pre-test knowledge of farmers regarding vector borne diseases andits prevention.

3. To assess the effectiveness of information booklet on knowledge of farmersregarding vector borne diseases and its prevention.

H_1: There will be significant difference between pre –test and post-test knowledgescores of the farmers regarding vector borne diseases and their prevention.

Area Wise Pre- Test Knowledge Scores

The mean pre-test knowledge scores on Introduction of Vector Borne Diseaseswas 2.63with SD 0.99, mean percentage was found to be 43.8%. The mean pre-test knowledge scores on Causes of Vector Borne Diseases was 0.95with SD 0.59 and mean percentage was found to be 47.5%. The mean pre-test knowledge scores onSign and Symptoms of Vector Borne Diseases was 2.37 with SD 1.16 and mean percentage was found to be 47.4%. The mean pre-test knowledge scores on Prevention of Vector Borne Diseases was 4.65 with SD 2.6 and mean percentage was found to be 42.3%.

Area Wise Post - Test Knowledge Scores

The mean post-test knowledge scores on Introduction of Vector Borne Diseases was 5.1with SD 1.02, mean percentage was found to be 85%. The mean pre- test knowledge scores on Causes of Vector Borne Diseases was 1.68 with SD 0.47and mean percentage was found to be 84%. The mean pre-test knowledge scores on Sign and Symptoms of Vector Borne Diseases was 4.17 with SD 0.67 and mean percentage was found to be 83.6%. The mean pre-test knowledge scores on Prevention of Vector Borne Diseases was 9.23 with SD 1.19and mean percentage wasfound to be 83.9%.

Area Wise Comparison of Mean Percentage of Pre-Test and Post-Test Knowledge Scores

There was significant difference between area wise mean pre-test and post-testknowledge scores in all areas at $p<.05$ level of significance. This indicated that there was significant difference in area wise mean pre- test and mean post- test knowledge score.

Overall Knowledge Level Scores

The comparison of pre and post-test level of knowledge among respondents regarding vector borne diseases. In the pre- test most of the respondents had no adequate knowledge on vector borne diseases and its prevention, 41.7% respondents had inadequate knowledge, 58.3% had moderately adequate knowledge & no one had adequate knowledge level while in post- test 65% respondents had adequate knowledge, 35% had moderately adequate knowledge & no one had inadequate knowledge level regarding vector borne diseases and its prevention.

Effectiveness of Information Booklet by Comparing Mean Pre-Test Knowledge and Mean Post-Test Knowledge Scores

The mean post- test knowledge score is 20.18(84.08. %) Which was greater than the mean pre -test knowledge score 10.6 (44.17%). the above table also depicts that the enhancement in the knowledge of respondents is 9.58 (47.5%).The post- test knowledge score was significantly higher than the mean pretest knowledge score with 't' value of 27.28,df 59 at 0.05 level of significance. This indicated that therewas difference in pre- test and post- test knowledge score of respondents and information booklet was effective in improving the knowledge score of farmers regarding vector borne diseases and its prevention therefore H_1 Stated that there is a significant difference between pre- test and post- test knowledge score of farmers regarding vector borne diseases and its prevention was accepted.

Section III: Association between Pre-Test Knowledge Scores and SelectedSocio-Demographic Variables

This section examined the following Objective and Hypothesis.

Objectives

4. To find out the association between pre-test knowledge scores and selecteddemographic variables.

H_2: There will be significant association between pre-test knowledge scores and selected demographic variables.

With Regards to Age

On data analysis regarding knowledge of VBD & its prevention among in different age groups it was found that the calculated Chi square value (5.96) was morethan the tabulated value with df 3 which revealed that there was statistically significant association between age of respondents and pre-test knowledge scores The highest knowledge was found in the age group 31-40 years and least among more than50 years age group.

With Regards to Gender

On data analysis regarding knowledge of VBD & its prevention among in different gender it was found the calculated Chi square value (0.536) was lesser than the tabulated value with df 1 which revealed that there was statistically no significant association between pre-test knowledge scores and gender of respondents. The knowledge of male respondents was higher than female respondents.

With Regards to Educational Status

On data analysis regarding knowledge of VBD & its prevention among in different educational status it was found that the calculated Chi square value (18.74) was more than the tabulated value with df 3 which revealed that there was statisticallysignificant association between pre-test knowledge scores and educational status of respondents. The highest knowledgewas among primary educated and least knowledge among formally educated respondents.

With Regards to Monthly Income

On data analysis regarding knowledge of VBD & its prevention among in different monthly income it was found that the calculated Chi square value (11.32) was more than the tabulated value with df 3 which revealed that there was statisticallysignificant association between pre-test knowledge scores with monthly income. The highest knowledge was with monthly income of more than 5001-10000 and least knowledge with monthly income of below 15000.

With Regards to Previous Knowledge

On data analysis regarding knowledge of VBD & its prevention among in different previous knowledge it was found that the calculated Chi square value (4.39) was more than the tabulated value with df 1 which revealed that there was statisticallysignificant association between pre-test knowledge score with previous knowledge regarding vector borne diseases. The previous knowledge of respondents with YES response, regarding vector borne diseases was higher than the respondents from NO response.

With Regards to Source of Information

On data analysis regarding knowledge of VBD & its prevention among in different source of information it was found that the calculated Chi square value (2.46) was more than the tabulated value with df 3 which revealed that there was statistically no significant association between pre-test knowledge score and source of information. The highest knowledge was from Health team and least knowledge was from family members.

With Regards to Land status

On data analysis regarding knowledge of VBD & its prevention among in different land status it was found that there the calculated Chi square value (9.75) was more than the tabulated value with df 3 which revealed that there was statistically significant association between pre-test knowledge scores with land status. The highest knowledge was from Own land and least knowledge was from Borrowed land.

With Regards to Source of water

On data analysis regarding knowledge of Vector borne diseases & its prevention among in different Source of water it was found that the calculated Chi square value (3.63) was more than the tabulated value with df 3 which revealed that there was statistically no significant association between association between pre-test knowledge score with source of water. The highest knowledge was found amongwell and least knowledge was among pond&canal.

Analysis revealed that there was a significant association between pre- test knowledge scores and socio demographic variables like age in years, educational status, monthly income of family, previous knowledge about vector borne diseases and their prevention & land status whereas no association was found with, gender, source of information & source of water. Hence H_2 stated that there will be significantassociation between pre-test knowledge scores and selected demographic variables was accepted with some variables and rejected with some variables Hence H_2 is partially accepted.

The present study was conducted to assess the existing knowledge of farmers and effectiveness of information booklet on the knowledge of farmers regardingvector borne diseases and their prevention in selected rural areas of Udaipur district.

Objectives

1. To assess pre-test knowledge of farmers regarding vector borne diseases andits prevention.

2. To prepare and administer the information booklet regarding vector bornediseases and its prevention to the farmers.

3 To assess the effectiveness of information booklet on knowledge of farmersregarding vector borne diseases and its prevention.

4. To find out the association between pre-test knowledge scores and selecteddemographic variables.

Hypothesis: The study attempted to examine the following Hypothesis

H_1: There will be significant difference between pre –test and post-test knowledgescores of the farmers regarding vector borne diseases and their prevention.

H_2: There will be significant association between pre-test knowledge scores and selected demographic variables.

Methodology

The research approach adopted for the present study was evaluative approach. Research design used was pre-experimental, one group pre-test post -test design.The simple random sampling technique was chosen to select 60 farmers of Dhaneriagarhof Udaipur district.

The conceptual framework for the study was based on Health Promotion Model, proposed by Nola J.Pender, Murdagh C.L, and Parsons M.A which identifies factors that enhance or decrease health promotion Behaviour.

Review of literature and related studies helped the researcher and to collect the appropriate and relevant information to support the study design, the methodologies, Conceptual frame work, development of the tools and information booklet and also helped to plan for the analysis of data.

The tool developed and used for data collection was structured knowledge close ended questionnaire which comprised of two parts-

PART I: It consists of 8 items on demographic variables.

PART II: Itconsists of 24 items regarding vector borne diseases and its prevention.

The selected aspects are: Introduction of vector borne diseases (6) Causes of vector borne diseases (2), Sign and symptoms of vector borne disease (5), Prevention vector borne diseases (11).

Experts established content validity of the tool and information booklet. The tool was found to be reliable and valid. The information booklet regarding “vector borne diseases& its prevention” was prepared which was in Hindi.

The pilot study was conducted on 13 July 2016 to 20 July 2016 to find the feasibility of the study. The purpose of the pilot study was- To find out the feasibility of conducting the final study. Six farmers were selected randomly who were excludedin the main study and teaching strategy was tested for effectiveness.

The final study was conducted between 8 September 2016 to 19 September 2016 using structured knowledge close ended questionnaire schedule followed by information booklet. Post-test was conducted by the same structured knowledge close ended questionnaire after 7 days. The collected data was recorded, grouped, tabulated and interpreted according to the Objectives of the study descriptive and inferential statistics were used for an analysis. The data analyzed was grouped under 3 sections.

Major Findings Related to Socio-Demographic Variable of the Respondents

1. Majority equal (33.3%) of the respondents were from age group of 21-30 years &31-40 years and least equal (16.7%) from 41-50 years and 50 years above.
2. Majorities (66.7%) of the respondents were Males and (33.3%) were Female.
3. Majority (43.3%) of the respondents were Primary educated and least equal (16.7%) from formal education and Hr. secondary and above.
4. Majority (43.3%) of the respondents were from the income group of 50001- 10000 Rs, and least equal (10%) from above more than 10001- 15,001 Rs.and15000 above
5. Majority (71.7%) of the respondents had previous knowledge and (18.3%) hadno knowledge regarding vector borne diseases.
6. Majority (40.8%) of the respondents got information from health team and least (14.3%) from family member.

7. Majority (76.7%) of the respondents had their own land and least (6.7%) had borrowed land.

8. Majority (60%) of the respondents use well water and least equal (8.3%) use pond & canal water as a source of water.

Major Findings Related to Comparison of Mean Pre and Post Test Knowledge Scores

- The mean pre-test knowledge scores on vector borne disease were 44.17% andthe mean pre-test knowledge scores in the area of knowledge on vector borne disease was 10.6.

- The mean post-test knowledge scores on vector borne disease were 84.08% and the mean post-test knowledge scores in the area of knowledge on vector borne disease was 20.19.

- There was significant difference in the area wise mean pre-test and post-test knowledge scores in all areas at $p<.05$ level of significance. This indicated thatthere was significant difference in area wise mean pre-test and mean post- test knowledge score.

Effectiveness of Information Booklet by Comparing Mean Pre-Test Knowledge and Post-Test Knowledge Scores

- The mean post- test knowledge score is 20.18(84.08. %) Which was greater than the mean pre -test knowledge score 10.6 (44.17%). the above table also depicts that the enhancement in the knowledge of respondents is 9.58 (47.5%).The post -test knowledge score was significantly higher than the mean pretest knowledge score with 't' value of 27.28,df 59 at 0.05 level of significance. This indicated that there was difference in pre -test and post- test knowledge score of respondents and information booklet was effective in improving the knowledge score of farmers regarding vector borne diseases andits prevention thereforeH_1 Stated that there is a significant difference between pre- test and post- test knowledge score of farmers regarding vector borne diseases and its prevention was accepted.

Major Findings Related to Association between Pre-Test Knowledge Scores and Selected Socio-Demographic Variables

1. There was statistically significant association between age of respondents and pre-test knowledge scores. The highest knowledge was found in the age group 31-40 years and least among more than 50 years age group. The calculated chi
– square value was 5.96 at df 3.
2. There was statistically no significant association between gender of respondents and pre-test knowledge scores. The knowledge of male respondents was higher than female respondents. The calculated chi – square value was 0.536 at df 1.

3. There was a statistically significant association between educational status andpre-test knowledge scores of the respondents. The highest knowledge was among primary educated and least knowledge among formally educated respondents.The calculated chi – square value was 18.74 at df 3.

4. There was a statistically significant association between monthly income (in rupees) and pre-test Knowledge Scores of the respondents. The highest knowledge was with monthly income of more than 5001-10000and least knowledge with monthly income of below 15000.The calculated chi – square value was 11.32 at df 3.

5. There was statistically significant association between previous knowledge of respondents regarding vector borne diseases and pre-test knowledge scores. The previous knowledge of respondents with YES response, regarding vector borne diseases was higher than the respondents from NO response. The calculated chi – square value was 4.39 at df 1.

6. There was a statistically no significant association between source of information and pre-test Knowledge Scores of the respondents. The highest knowledge was from Health team and least knowledge was from family members.The calculated chi – square value was 2.46 at df 3.

7. There was a statistically significant association between Land Status and pre- test Knowledge Scores of the respondents. The highest knowledge was from Own land and least knowledge was from Borrowed land.The calculated chi – square value was 9.75at df 3.

8. There was a statistically no significant association between Source of water and pre-test Knowledge Scores of the respondents. The highest knowledge was found among well and least knowledge was among pond&canal.Thecalculated chi – square value was 3.63 at df 3.

There was a significant association between pre- test knowledge scores and socio demographic variables like age in years, educational status, monthly income of family , previous knowledge about vector borne diseases and its prevention & land status whereas no association was found with, gender, source of information & source of water. Hence H_2 stated that there will be significant association between pre-test knowledge scores and selected demographic variables was accepted with some variables and rejected with some variables Hence H_2 is partially accepted.

6.2 CONCLUSION

The knowledge of the farmers regarding Vector borne disease & its preventionbefore the administration of the information booklet was very low. The information booklet significantly increased the knowledge of farmers regarding prevention of Vector borne disease. The knowledge of farmers were not influenced by selected socio-demographic variables such as gender, source of information & source of wateron the knowledge regarding Vector borne disease and the knowledge of farmers were influenced by selected socio- demographic variables such as age, educational status, monthly income, previous knowledge about diseases and itys prevention & land status.Hence it can be concluded that kind of teachings should be conducted from time to time to educate the community and the risk people like farmers so that their knowledge regarding prevention of this diseases can be enhanced and which will reduce mortality and morbidity associated with Vector borne disease and also reduce hospital burden.

NURSING IMPLICATIONS

The findings of the study have implication in the areas of nursing education, practice, administration and research.

Implications for Nursing Practice

The role of nurses in the health care industry is a vital aspect in society. They shoulder the responsibility of promoting health, preventing illness and rehabilitation. Many people in community are at increased risk of vector borne diseases and it is increasing the hospital burden. Therefore it is important for nurses working in clinical areas for health educating the farmers and other common people to use preventive strategies against this deadly vector borne diseases .The finding of study can be

helpful in conducting health education which in turn will reduce the burden of health care members.

Implication for Nursing Education

Nursing education plays an important role in preparing the nurse for thewellbeing of the people. Nursing educators have the responsibility of equipping the students with adequate knowledge so that the latter can provide quality care. Facts taught to nursing students should be accurate, up-date and periodically refreshed with the latest trends and practices in every aspects of nursing so that they could bringforth a confident and well qualified bunch of professionals. Hence to achieve the above objectives, the findings of study will provide to the nurses additional knowledge and learning opportunities. Nursing Schools, Colleges and teachers shouldcome forward and encourage the students to provide information booklet on vector borne diseases and its prevention among farmers.

Implication for Nursing Administration

Administration plays a major role in regulating and coordinating the laws. Thequality of an administrator is determined by the quality of her subordinates. A nursingadministrator has a significant role in encouraging and motivating the nurses toimprove their knowledge in order to keep in pace with the changing needs of the society. Nurse administrator needs to encourage and plan for staff development program related to vector borne diseases and its prevention. So that the staff can educate and increase the

farmers and other community peoples knowledge and enhance their capability to fight against vector borne diseases.

Implication for Nursing Research

The essence of research is to build a body of knowledge in nursing as it is an evolving profession. The findings of the present study serve as the basis for the professionals and the students to conduct further studies. The generalization of the study result can be made by replication of the study. In India only a few research studies have been done on assessment of knowledge of farmers regarding vector borne diseases and its prevention. All nursing personnel must join hands to provide scientifically listed materials of programme to evolve a time bound plan for the most good knowledge and safety practices.

Limitations of the Study

- This research study is limited to selected villages of Udaipur district.
- This research study is limited to literate farmers.

6.4 RECOMMENDATIONS

- A similar study can be undertaken with a large sample to generalize the result.
- A comparative study on knowledge of farmers on vector borne diseases and itsprevention.
- Specific protocol should be developed for farmers on the vector borne diseasesand its prevention.