

THE EFFECTIVENESS OF INFORMATION BOOKLET ON THE KNOWLEDGE OF FARMER REGARDING VECTOR BORNE DISEASES AND THEIR PREVENTION AT SELECTED RURAL AREAS.

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ABSTRACT

Vectors of human disease are typically species of mosquitoes and ticks that are able to transmit virus, bacteria, or parasite to humans and other warm-blooded hosts. For the purposes of this discussion, a disease that is transmitted to humans, plants, or animals by any agent, arthropod, or fomite is a vector-borne disease. The present study focuses on improving the knowledge of farmers regarding vector borne illness. The farmers are the most susceptible community in the rural area that are prone to develop the disease.

Key Words: Vector, Host, Species, Disease.

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INTRODUCTION

A Vector is an organism that can transmit infectious agents from one infected person or animal to another. Vector borne diseases are responsible for an enormous amount of morbidity and mortality across the globe, although the heaviest burden falls on countries in tropical and subtropical areas. Weather (both temperature and rainfall) has an enormous effect on the prevalence of disease and on its range and geographical distribution. Scientists are concerned that climate change will extend the range of vector-borne diseases and increase the severity of seasonal epidemics.

The perspective of infectious diseases, vectors are the transmitters of disease-causing organisms; that is, they carry pathogens from one host to another. By common usage, vectors are normally considered to be invertebrate animals, usually arthropods, but they may also include fomites, which are defined as "any inanimate object that may be contaminated with disease-causing microorganisms and thus serves to transmit disease" (Hardy Diagnostics, 2007), or rodents, which carry the agent from a reservoir to a susceptible host.

Vectors is defined as an arthropod any living carrier that transports an infectious agent to a susceptible individual. 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. The epidemiology of these vector borne diseases varies considerably on account of ecology, vector bionomics, economic, socio-cultural and behavioural factors. Generally, the high-risk areas for VBDs are rural and tribal areas and urban slums inhabited by the poor, marginalized and vulnerable groups with limited access to quality health care, communication and other basic amenities in those focal areas.

NEED FOR THE STUDY

The epidemiological study indicates that there is a need for prevention of vector borne disease as it harms the health of the people living in rural area. Most of the death occurs due to the vector borne illness in rural area.

The study also reveals that unawareness regarding the vectors and disease spread by them is a great factor for greater incidence of disease. If the people in the rural are educated, it can help the people to get rid of the problem.

By keeping the above information in consideration, it is felt that there is a need to develop a medium that are helpful in improving the knowledge of farmers. The researcher has selected the information booklet to spread the information among the farmers as a medium.

The present study will assess the effectiveness of information booklet as well as the language whether easily understandable, presentation of information also. If the information booklet is found to be effective; it can support the health system in reducing the vector borne illness.

OBJECTIVES OF THE STUDY

1. To assess the knowledge of farmers regarding vector borne diseases and their
2. prevention before administering information booklet.
3. To develop and distribute an information booklet.
4. To assess the knowledge of farmers regarding vector borne diseases and their prevention after administering information booklet.
5. To evaluate the effectiveness of information booklet.
6. To find out the association between knowledge with the selected demographic variables of

HYPOTHESES

H₀: The information booklet will not be effective in improving the knowledge of farmers regarding vector borne diseases and their prevention.

H₁: The information booklet will be effective in improving the knowledge of farmers regarding vector borne diseases and their prevention.

H₂: The pretest knowledge level will be significantly associated with selected demographic variable.

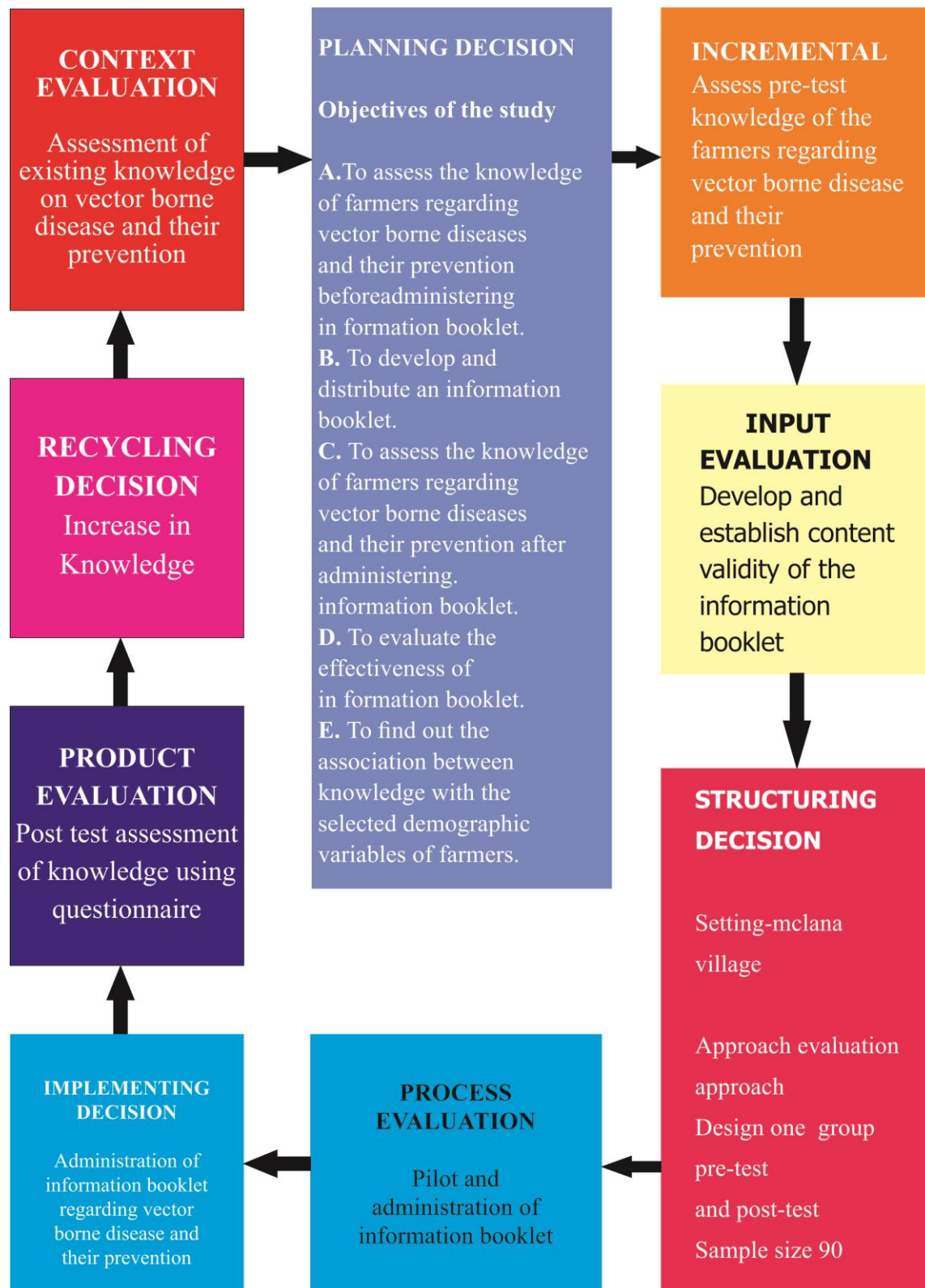


Fig: 1. BASED ON MODIFIED STUFFLE BEAMS MODEL

RESEARCH METHODOLOGY

This chapter deals with the methodology adopted for the study. The research methodology involves the systematic procedure by which the researcher starts from the initial identification of the problem to the final conclusion. For every piece of research work, adopting methodology is very vital.

ETHICAL CONSIDERATION

1. Researcher has obtained approval from appropriate review boards to conduct the study.
2. Confidentiality of the data is maintained strictly.
3. Researcher duly explained the purpose of the study.
4. Only the samples who had signed the consent form are included in the study.

RESULT

This chapter presents the analysis and interpretation of data collected for this study. Its main purpose is to summarize and organize the data in a meaningful way, so as to interpret and provide answers to the question raised in the study

Section - 1: Demographic data**Table 1: Distribution of farmers according to their demographic characteristics (N = 90)**

S.N.	Demographic	particulars	Frequency	Percentage
1	Age	Up to 20 yrs.	9	10
		21 — 40 yrs.	18	20
		41 — 60 yrs.	45	50
		61 yrs. and above	18	20
2	Gender	Male	77	85.56
		Female	13	14.44
3	Types of house	Kachcha	56	62.22
		pakka	34	37.78
4	Education status	Up to primary	23	25.55
		Secondary	45	50.00
		Other	22	24.45
5	Monthly income	Up to 10,000	26	28.89
		11,000 — 20,000	48	53.33
		21,000 — 30,000	16	17.78
		31,000 & above	0	0
7	Drainage system	Open	62	68.89
		Close	28	31.11
8	Defecation	Open	52	57.78
		Use toilet	38	42.22

Section — II: Analysis of pre-test knowledge score**Table 2: Distribution of farmers according to their pre-test knowledge level** (N=90)

S. N.	Knowledge level	frequency	percentage
1	Poor	9	10
2	Average	55	61.11
3	good	26	28.89

Table 2 shows the pre-test knowledge level of farmers. Among the farmers, 61.11% had the average knowledge level, 10% have poor level of knowledge and 28.89% farmers have good knowledge.

Table 3: Mean and standard deviation of pre-test score

S. No	parameter	Mean	Standard deviation
1	Pre-test knowledge	16.20	5.05

Table 3 shows that the mean value of pre-test knowledge score is 16.20 and standard deviation is 5.05

Section — III: Analysis of post-test knowledge score**Table 4: Distribution of farmers according to their post-test knowledge level** (N = 30)

S. No	Knowledge level	Frequency	Percentage
1	Poor	0	0
2	Average	57	63.33
3	good	33	36.67

Table 4 shows the post-test knowledge level of farmers. Among the farmers, 63.33% had the average level of knowledge, 36.67% had good level of knowledge.

Table 5: Mean and standard deviation of post test score

S. No	parameter	Mean	Standard deviation
I	Post-test knowledge	20.92	3.12

Table 5 shows that the mean value of post-test knowledge score is 20.92 and standard deviation is 3.12

Section-IV**Table 6: Comparison of mean value of pre and post-test knowledge score**

SN	parameter	pre test	Post test	t - value	P value
1	mean	16.20	20.92	11.69	<0.0001
2	Standard deviation (S.D.)	5.05	3.12		

Table 6 shows the mean value and standard deviation of pre and post-test knowledge score. Table shows that the mean value of post-test score is greater than the mean value of pre-test score. It predicts that the knowledge score was increased after the intervention. It means information booklet was effective in improving the knowledge.

Section- V

Table 7: Association of pre-test knowledge score with demographic variable

Demographic variables	χ^2 value	P
Age	4.39 χ^2 table = 12.59	0.622 >0.05
Gender	4.63 χ^2 table = 5.99	0.098 >0.05
Types of house	0.64 χ^2 table = 5.99	0.72 >0.05
Education	12.62 χ^2 table = 9.48	0.013 <0.05*
Income	8.19 χ^2 table = 12.59	0.08 >0.05
Drainage	0.85 χ^2 table = 5.99	0.65 >0.05
Methods of defecation	0.67 χ^2 table = 5.99	0.71 >0.05

Table 7 shows that p-value corresponding to the demographic variable is greater than 0.05 except for education. It predicts that no demographic variable shows association with pre-test knowledge score except education. It means education is associated with pretest score.

CONCLUSION

The study shows that farmers living in rural areas are having lack of knowledge regarding vector borne disease and their prevention. The majority of farmers have average level of knowledge among selected participants. Lack of Knowledge is causing increased chances of getting suffered from vector borne disease. This results in reduced health status and work efficiency of farmers.

As per the review, Information booklet is effective in improving the knowledge. This information technique is used in the present study to see its effect on knowledge level of farmers. When the information booklet was given to the farmers, they started to get knowledge through it. The knowledge level of farmers was assessed before and after the intervention. Analysis of data shows that the mean score was high in the post-test, and the difference between mean score of pre and post-test was found significant statistically. It represents that information booklet was effective in improving the knowledge level. In the present study, information booklet was given for 5 days. By means of information booklet, the knowledge among farmers can be increased regarding health and hygiene. This can be a better tool for the health workers to spread awareness among the people of rural area.

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