A STUDY TO ASSESS THE KNOWLEDGE ABOUT EFFECT OF PAPAYA LEAF ON DENGUE FEVER AMONG WOMEN IN SELECTED PHC WITH A VIEW TO PREPARE AN INFORMATION GUIDE SHEET

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ABSTRACT

Dengue is one of the major public health concerns and an emergent disease and contributes annual outbreaks in India. Objectives: To assess the level of knowledge regarding effect of papaya leaves on dengue fever among women under Makkalakootta PHC. To find association between knowledge and selected background factors among women under Makkalakootta PHC. Methodology: A descriptive approach was adopted for this study. The 80 samples were collected by convenient method at Makkalakootta PHC. The data were collected by administering knowledge questionnaire and were analyzed using descriptive and inferential statistics. Results: The obtained mean percentage was related to effect of papaya leaf on dengue fever was M =87.5 % (SD = 2.48). There is association with selected background factors like Education, History of dengue fever, frequency, and awareness about effect of papaya leaf on dengue Hospitalization due to dengue fever. Interpretation and conclusion: Findings of the study showed that the samples have good knowledge regarding effect of papaya leaf on dengue fever.

KEYWORDS: Knowledge, Papaya Leaf, Dengue fever, PHC.

INTRODUCTION

Dengue is the most common mosquito borne arboviral disease affecting human being and is a leading cause of morbidity and mortality in the tropics and subtropics region. It belongs to flaviviridae family and is transmitted by the mosquitoes Aedes egypti. It produces a wide spectrum of clinical illness ranging from an asymptomatic or mild febrile illness, dengue hemorrhagic fever which results from severe thrombocytopenia.[1]

Carica papaya is a member of the Caricacea and is a dicotyledons polygamous and diploid species. It is originated from Southern Mexico, Central America and the Northern part of South America. It is now cultivate in many tropical countries such as India, Bangladesh, Indonesia, Srilanka, Philippines, West Indies and Malaysia. A well designed placebo controlled randomized trials from India are being published to evaluate the efficacy of Carica papaya leaf extract (CPLE) in improving platelet count in 300 patients across 5 centers in India with dengue. The result indicate that CPLE had significant increase (p<0.01) in platelet count over the 5 days therapy duration in dengue patient compared to control group.[2]

The papaya leaf is globally consumed either in its fruit form or in the form of juices, jams and crystallized dry fruits. The ripe fruit is said to be a source of vitamin A, vitamin C and calcium. There are many commercial products derived from the different parts of the papaya plant, the most prominent being papain and chymopapain which is produced from the latex of the young fruit, stem and the leaves .Papaya leaves have been used in medicine for centuries .Recent studies have shown its beneficial effects as an anti-inflammatory agent, for its wound healing properties, Anti-tumor as well as immunomodulatory effects and as an anti-oxidant, A toxicity study (acute, sub-acute and chronic toxicity).[3]

The incidence of dengue has grown dramatically around the world in recent decades. The actual number of dengue cases are under reported and many cases are misclassified. One recent estimate indicates 390 million dengue infection per year (95%credible interval 284 -528 million) of which 96 million manifest clinically .Another study of prevalence of dengue estimate that 3.9 million people in 128 countries are at risk of infection with dengue. Member state in 3 WHO regions regularly reports the annual number of cases. The number of cases reported increased from 2.2 million in 2010 3.3 million in 2016.[4]

The juice or pulp made from this plant has been found to be effective not only in fighting symptoms of dengue fever but also curing it. The papaya leaf extract is given to the patients who have dengue fever to increase the platelet count in the blood. Other than curing dengue fever it also has anti-tumor effects also. The extract is made from raw leaves and gave twice a day to have tremendous increase in the platelet count.[5]

An open labeled randomized controlled trial was conducted to investigate the platelet increasing property of Carica papaya leaf extract (CPLE) in patients with dengue fever at Bangalore. A randomized sampling was done on 30 subjects in patients with thrombocytopenia associated with dengue. The result showed that CPLE had significant increase in platelet count (p<0.0003) over the therapy duration in dengue fever patients for 75%. There were few adverse events related to GI disturbance like nausea and vomiting. Thus this study concluded that carica papaya leaf extract does significantly increase in the platelet count in patient with thrombocytopenia with fewer side effects and good tolerability.[6]

Statement of the problem
A study to assess the knowledge about effect of papaya leaf on dengue fever among women in selected PHC with a view to prepare an information guide sheet.

Objectives
To assess the level of knowledge regarding effect of papaya leaves on dengue fever among women under Makkalakootta PHC.

To find association between knowledge and selected background factors among women under Makkalakootta PHC.

METHODS AND MATERIALS

Hypothesis
H_1- There will be a significant association between selected background factors and knowledge of women regarding effect of papaya leaf on dengue fever.
1. **Research approach:** Descriptive approach was adopted to accomplish the objectives of the study.
2. **Research design: -** Descriptive survey design
3. **Population: -** In this study population consist of women.
4. **Sample: -** Sample selected for this study are women from Makkalakoota P HC.
5. **Sample size: -** A total of 80 women from Makkalakoota P HC.
6. **Sampling technique: -** In this study non probability convenient sampling methods was used.
7. **Dependent variables**: - Knowledge on effect of papaya leaf on dengue fever.
8. **Demographic variable:-**Age, education, family income, history of dengue fever, frequency of dengue fever, awareness about effect of papaya leaf on dengue, hospitalization due to dengue fever.

Sampling criteria
Inclusion criteria
- Women who are between 20-50 years.
- Women's under Makkalakootta PHC.
- Women who knows to read and write English and Kannada.

Exclusion criteria
➢ Women who are uncooperative
➢ Women's who are not willing to participate in study
➢ Women who are available during study

Method of data collection
Data collection technique and instruments
Data collection tool involves the assignment of numbers to represent the amount of an attribute present in an object or person, using a specific set of rules and measures the variables of interest of study accurately, precisely and sensitively.

Method of data collection
The investigator established good rapport with samples. Oral consent from each participant was obtained after collecting background data and knowledge questionnaire administered regarding effect of papaya leaf on dengue fever.

Tool used for the study: - The investigation developed the tool as follows,
Section I
It consists of 8 demographic variables such age, religion, education, marital status, Type of Family, Income, Dietary pattern and Source of Information.

Section II
This part consist of questionnaire regarding knowledge of women regarding effect of papaya leaf on dengue fever. Samples are given with a questionnaire containing 20 questions, where they have to answer each. Each questions carries **1** mark for right answer and **0** marks for wrong answer. The inference made is that if score is,
Between 10 -30% has poor knowledge.
Between 31 − 70% has moderate knowledge.
Between 71 − 100% has good knowledge.

Plan for data analysis
Data analysis was planned using descriptive and inferential statistics.
1. Background data of women's were analyzed by using frequency and percentage distribution.
2. Association between knowledge regarding effectiveness of papaya leaf on dengue fever with the background factors were analyzed by using Chi-square.

RESULTS

Analysis of the study finding are categorized and presented under the following headings,

Section I: Data on background factors of women under Makkalakootta PHC.

Section II: Data on knowledge regarding effect of papaya leaf on dengue fever among women under Makkalakkootta PHC.

Section III: Data on association between women knowledge with selected background factors.

Section I: Data on background factors among women under study.

Table -1: Frequency and percentage distribution of women according to demographic characteristics, N=8.

FACTORS	CATEGORY	FREQUENCY	PERCENTAGE
Age	20 – 35years	53	66.25%
	36- 50 years	27	33.75%
Education	1 -12th std	60	75%
	Above 12th	20	25%
Family income	0 – 10000	45	56.25%
	Above 10000	35	43.75%
History of dengue fever	Yes	18	22.5%
	No	62	77.5%
Frequency	Nil	62	77.5%
	Once	18	22.5%
Awareness about effect of papaya leaf on dengue fever	Yes	58	72.5%
	No	22	27.5%
Hospitalization due to dengue fever	Yes	18	22.5%
	No	62	77.5%

Section II : Data on knowledge regarding effect of papaya leaf on dengue fever among women.
Table 2: Mean, maximum score, mean percentage, median and standard deviation of knowledge regarding effect of papaya leaf on dengue fever among women. N =80

Knowledge	Maximum score	Mean	Mean percentage	Median	S D
Effect ofpapaya leaf on dengue fever	20	17.5	87.5%	18	2.48

Section III: Analysis of association between knowledge score with selected background factor
Table 3: computed Chi-square value have no association with selected background factor. N= 80.

Demographic variables	Category	Frequency <median	Frequency >median	DF	Table value	x^2
Age	20- 35 yrs	25	27			
	35-50yrs	19	9	1	3.841	2.86(NS)
Education	1-12th Std	29	31			
	Above 12th	17	3	1	3.841	8.23(S)
Family income	0-10000	22	23			
	> 10000	17	18	1	3.841	0.0013(NS)
History of dengue fever	Yes	18	5			
	No	17	40	1	3.841	15.56(S)
Frequency of dengue fever	Nil	17	40			
	Once	18	5	1	3.841	15.56(S)
Awareness on effect of papaya leaf on dengue	Yes	17	41			
	No	17	5	1	3.841	14.99(S)
Hospitalization due to dengue fever	Yes	18	5			
	No	17	40	1	3.841	15.56(S)

S = Significant
NS = Not significant

Hence the research hypothesis (H1) accepted in case of selected background factors such as Education, History of dengue fever, frequency, awareness about effect of papaya leaf on dengue, hospitalization due to dengue fever and rejected in case of Age, Family income.

DISCUSSION
The findings of the study indicate that the women have good knowledge regarding effect of papaya leaf on dengue fever.

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