



A study to evaluate the effectiveness of structured teaching programme on prevention of Malaria among adults at selected Urban Slum Bangalore, Karnataka

Dr. G Nagarathnamma^{1*}, S Hemavathy²

¹ Professor, Government College of Nursing, Fort, Bangalore, Karnataka, India

² Principal, Government College of Nursing, Fort, Bangalore, Karnataka, India

Abstract

The study was under taken to evaluate the effectiveness of structured Teaching program among adults in selected urban centre, Bangalore. Formulated appropriate objectives and hypothesis, research tool was constructed and tool was subjected to content validity and reliability by using split half technique and reliability was found 0.98 hence tool was found feasible. Descriptive survey approach was adopted to collect information. One group pre-test post-test design, and selected 50 adults through purposive sampling technique as study samples. Knowledge was assessed before and after intervention, the study findings were analyzed that significant difference was found in post-test knowledge and practice scores hence conducted study was effective. Significant association was found in between practice scores and family income, hence study was concluded that samples are independent with their age, sex, religion. Type of family, education and occupation, but samples are depends on family income.

Keywords: malaria, teaching program, urban centre, Bangalore

Introduction

Communicable diseases are the deadly diseases, which affect the common population today. Among the many communicable diseases, Malaria is a protozoan disease, which has demonstrated devastating impact in almost whole of India.

Among many health problems, Malaria is one of the common diseases in community. Malaria is the disease responsible for very high mortality and morbidity. Malaria is related to breeding of mosquitoes, caused by sporozoan of the genus plasmodium and transmitted to man by species of infective female anopheles mosquitoes called vectors or carriers^[1].

It is a flu like illness with high fever and chills, sore throat, muscle pain, head ache, weakness. If malaria is not treated it leads to cerebral malaria. Malaria can be diagnosed Rapid diagnostic test (RDT). Malaria parasites produces chemicals (proteins) called antigens, RDT detects antigens in the blood. it can be treated by anti-malarial drugs like chloroquine and primaquine. At the time of independence 1947 out of 330 millions population, 75 millions people were infected with malaria every year. In 2016 91 countries and territories had on going malaria transmission and estimated that 3.2 billion people nearly half of the world population were on risk and 216 million cases estimated and 4,45000 deaths occurred around world wide. In 1953 the government of India launched malaria control programme, this program proved highly successful and number of cases declined about 2 million by 1958 and then program was changed malaria eradication program in 1958. by 1961 malaria incidence dropped. further 49,151 cases with no deaths., malaria elimination in India was carried out in phased manner because various parts of the country differ in their endemic due to difference on their eco epidemiological settings, socio economic condition, health system development and malaria control accomplishment.

India has set a target of being Malaria free by 2027 and eliminating disease by 2030. World malaria day is celebrated on April 25th of every year to bring incidence to less than 1 case per 1000 population per year by 2024 and put an end to malaria.

Hence the urban and rural community population needs awareness about the Malaria disease and its prevention.

Statement of the Problem

“A study to evaluate the effectiveness of structured teaching programme on prevention of Malaria among adults at selected Urban Slum Bangalore.”

Objectives

1. Assess the knowledge and practices of adults regarding prevention of Malaria.
2. To develop structured teaching programme on prevention of Malaria.
3. To conduct structured teaching programme on prevention of Malaria.
4. To compare the findings with selected variables like age, sex, religion, type of family, type of house, education, occupation, income and source of health information.
5. Evaluate the effectiveness of Structured teaching programme.

Hypothesis

- H₁:** The post test knowledge scores of adults will be Significantly higher than the pretest knowledge scores. after the implementation structured Teaching program
- H₂:** The post test practice scores of adults will be Significantly higher than the pretest practice scores.
- H₃:** There will be significant association between the

knowledge and practice Scores of adults with selected demographic variables like age, sex, religion, education, type of family, occupation and income.

Limitations

1. Adults who belongs to, Gavipuram, Guttahalli.
2. Adults above 20 years and below 44 years of age
3. Adults who are available during the period of data collection.
4. Adults who are willing to participate in the study
5. Adults who are able to understand Kannada and English.

Conceptual frame work

1. The conceptual frame work represents a less formal attempt at organizing a phenomena conceptual models deals with concepts that are used as building blocks and provide a conceptual perspective regarding interrelated phenomena which are closely structured (Polit & Hungler 1999) [8].
2. This study is intended to evaluate the effectiveness of Structured teaching programme in terms of improving the knowledge and practice of adults receiving Health teaching on Malaria prevention. Conceptual frame work selected for this study was based on general system theory as postulated by Von Ludwig Bertalanfly, in this theory main focus is on the discrete parts and their inter relationship(Marcia Stanhope, 2004) [9].

According to Von Ludwig Bertalanfly the system acts as a whole dysfunction of a part causes a symptom disturbance rather than loss of a single function, in all system activity can be resolved into an aggregation of feed back circuits such as Input, through put and output. The feedback circuits helps in the maintenance of an intact system.

In this study effective of Structured teaching programme is tested by inter related elements such as Input, through put and output from the feed back efficiency of the input, such as Structured teaching programme regarding Malaria prevention will be assessed. The process of teaching as through put will be assessed in terms of its effectiveness.

Methodology

Research Approach: Descriptive survey approach

Research Design: One group pre-test post-test design

Variables under study

Independent variables

- Structured teaching Programme

Dependent Variables: Knowledge among adults

Attributed variables

- Age, sex, religion, type of family, type of house, educational level, occupation, total family income, and sources of Health information.

Sample and sample size: 50 adults in selected urban health centre

Sampling technique: purposive sampling technique

Purposive sampling technique, it is a type of non-probability

sampling approach was found to be appropriate for the present study.

Inclusion criteria

- Adults of the particular area under age group between 20 – 44 years
- Adults who are present during data collection period
- Adults who are understand Kannada or English
- Adults who are willing to participate in the study.

Exclusion criteria

- Adults who are not available during the period of data collection
- Adults who are not willing to participate
- Adults who are below 20 years

Description of the tool

The interview schedule was constructed in three section with a total number of 42 items.

Section I: Includes 10 items related to the demographic variables of the respondents about age, sex, religion, type of family, type of house, occupation, education, income and source of health information.

Section II: Consist of 22 items related to knowledge in Malaria prevention under 10 areas.

Section III: Consists of 10 items to identifying the practices of adults towards Malaria prevention under 3 areas.

Procedure for data collection

Prior permission was obtained from the medical officer, LUFWC, Gavipuram Guttahalli, Urban slum to conduct study, purposive sampling technique was adopted to select the study -sample.

Investigator personally visited each respondent, introduced herself to the adults and explained the purpose of the study and ascertained the willingness of the participants, the respondents were assured anonymity and confidentiality of the information provided by them, interviews conducted during their leisure time.

A comfortable place was selected and the participants were made comfortable and relaxed.

Data was collected through interview schedule, approximately 2 to 3 adults were interviewed per day and about 45 minutes to 1 hour with each adults.

Results

The findings was presented under the following sections

Section I: - Analysis of background characteristics of the subjects.

Section II: - Analysis of effectiveness of STP on knowledge.

Section III: Analysis of effectiveness of STP on practice.

Section IV: -(A): Association between knowledge and practice scores and selected variables like age, sex, type of family, occupation, education, religion and income

(B): Association between practice scores and selected variables like Age, Sex, Education, type of Family and Income.

Table 1: Distribution of subjects by type of family, type of house and source of health information and sex

Characteristics	Category	Subjects				Total	
		Male		Female		Number	Percentage
		NO.	%	NO.	%		
Type of Family	Nuclear	19	65.5	18	85.7	37	74
	Joint	5	17.2	3	14.3	8	16
	Extended	5	17.2	0	0	5	10
Total		29	100	21	100	50	100
Type of House	Kachha	10	34.5	15	71.4	25	50
	Semi Pucca	13	44.8	6	28.6	19	38
	Pucca	6	20.7	0	0	6	12
Total		29	100	21	100	50	100
Source of Information	Radio and T.V	28	96.6	21	100	49	98
	Mass health education program	1	3.4	0	0	1	2
Total		29	100	21	100	50	100

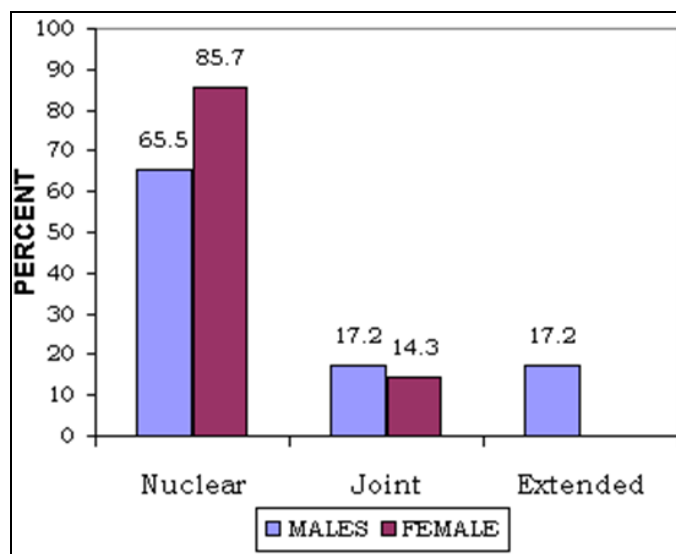


Fig 1: Distribution of subjects by family type and sex

Table 2: Description and Comparison of pretest and post test knowledge scores.

Variable	Number of Subjects	Min Score	Max Scores	Mean	Median	SD	t Value P Value
Pretest	50	7	17	11.72	11.0	2.6	t=21.53*
Post test	50	17	21	19.54	19.5	0.93	P<0.001

* Significant

Section III: Analysis of effectiveness of STP on practice.

Table 3: Description and Comparison of pretest and posttest practice scores.

Variable	Number of Subjects	Min Score	Max Scores	Mean	Median	SD	t Value P Value
Pretest	50	3	8	5.4	5	0.88	t= 16.73
Posttest	50	4	9	8.08	8	0.85	P<0.001

Table 4: Association between pretest knowledge scores of subjects and education

Education	Knowledge Score		X ²	df	Level of significance
	<=Median	> Median			
Illiterate / Primary	13	9	0.79	1	P = 0.37
Secondary & above	13	15			

Table 5: Association between pretest knowledge scores of subjects and occupation

Occupation	Knowledge Scores		X ²	df	Level of significance
	<= Median	> Median			
Not employed	16	14	0.05	1	P= 0.82
Employed	10	10			

Table 6: Association between pretest knowledge scores of subjects and income

Income	Knowledge Scores		X ²	df	Level of significance
	<=Median	> Median			
< 3000	20	19	0.04	1	P= 0.85
> 3000	6	5			

Table 7: Association between pretest practice scores of subjects and Income

Income	Practice Scores		X ²	df	Level of significance
	<= Median	> Median			
3000 or less	31	8	4.93	1	P< 0.003
> 3000	5	6			

Major findings of the study

- 30% Of the samples were on 25-29 years, 90% were belongs to Hindu, 50% sample were living in kaccha house, 60% were unemployed, 98% were getting health information through radio and television
- Overall knowledge scores of adults were found 53% and practices scores of adults were found 54% before implementation of STP.
- Overall knowledge scores of adults were found 88% and practices scores of adults were found 84% after implementation of STP.
- There is no significant association found between gain in knowledge and selected demographic variables selected variables like age, sex, type of family, education, occupation and income.
- There was no significant association found between gain in practice scores with demographic variables except with the income of the adult.
- The STP was effective in increasing the knowledge and practice of adults
- Overall findings reveals that knowledge and practices of adults regarding Malaria prevention was not adequate before implementation of STP but it showed improvement

in gain in knowledge and practice scores after the implementation of STP towards Malaria prevention. The association between gain in knowledge score and selected demographic variables was computed by using Chi-square test. It was found that there was no significant association between gain in knowledge score and the selected demographic variables.

Association between gain in practice scores and selected demographic variables

It was found that there was no significant association between gain in practice score and related variables. But it was found there was a significant association was found between gain in practice score and income of the subjects' family ($\chi^2 = 4.93$, $p < 0.003$). Hence it shows that knowledge and practice of the subjects is independent of their age, sex and educational status, religion, type of family and occupation. But it is dependent on income of the family.

Conclusion

The study was conducted to assess knowledge and to evaluate the effectiveness STP on prevention of malaria knowledge and practice scores was increased in post test after implementation of STP. Hence stated hypothesis was proved and it was found significant association with demographic variable in income with their practice scores. Hence stated hypothesis was proved. So sample are independent of their age, sex, education, religion, type of family, and occupation but samples depends on the income their family

Recommendations

- A similar study may be conducted on a large sample for wider Generalization.
- A study can be done to assess the knowledge and practices of basic health worker regarding Malaria prevention.
- Video assisted teaching program. can be conducted among nursing students and Staff Nurses to adopt preventive measures in the hospital
- comparative study may be conducted to compare the findings of rural and urban adults, regarding Malaria prevention.
- Workshops and training can be conducted among school teachers, anganwadi worker, to create awareness among rural population to adopt personal protective and environmental measures in daily living against malaria.

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