

# A study to assess the effectiveness of planned teaching programme on knowledge of B.Sc. nursing 1 year students regarding malaria in Granthamm College of Nursing science in Bada gao Gwalior, Madhya Pradesh

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**Abstract:** Malaria is a mosquito-borne disease caused by a eukaryotic parasite of the genus plasmodium. It is wide spread in tropical and subtropical regions. The conceptual frame work used for this study is based on Imogene King goal Attainment Theory. The research design used for this study was one group pre-test post-test design. Data collected by using Non probability convenient sampling method. The data was collected to assess the effectiveness of the planned teaching program on 60 students B.Sc. Nursing I Year. Highest percentage of students is in the age group of 17-18 years. Most of them are from Urban region of living and religion is mostly hindus. The highest percentage of family type is nuclear. Most of them witnessed and experienced Malaria in their life time. Pre- test revealed that 47.4% of samples have the knowledge regarding malaria. After implementation of structural teaching programme regarding febrile convulsions the knowledge level reached to 88.6%. While pre-test mean knowledge score is 47.4 and post test mean knowledge score is 88.6. Significant difference ( $p < 0.05$ ) is found between pre-test and post-test score.

**Key words:-** Assess, Effectiveness, Knowledge, malaria, B.Sc. I year students and planned teaching programme.

## 1. INTRODUCTION:

Malaria is one of the oldest recorded diseases in the world. In the 18th century Italian people associated it with “bad-air” “malaria” from which the name is derive. Malaria is a mosquito-borne disease caused by a eukaryotic parasite of the genus plasmodium. It is wide spread in tropical and subtropical regions, including parts of the Americas (22 countries), Africa. Each year, there is approximately 350-500 million cases of malaria killing between one and three million people, the majority of whom are young children in sub-Saharan Africa, malaria is commonly associated with poverty. Five species of the plasmodium parasites can infect humans, the most serious forms of the disease are caused by plasmodium malaria causes milder disease in humans that is not generally fatal. A fifth species, plasmodium knowlesi, is a parasite that causes malaria in macaques but can also infect humans.

Malaria is naturally transmitted by the bite of female Anopheles mosquito when a mosquito bites an infected person a small amount of blood is taken, which contains malaria parasites. These develop within the mosquito and about one week later, when the mosquito takes its next blood meal, the parasites are injected with mosquito's saliva into the persons being bitten. After a period of between two weeks and several months spent in the liver, the malaria parasites start to multiply within red blood cells, causing symptoms that include fever and headache.

## 2. OBJECTIVES:

- To assess the knowledge of B.Sc. nursing 1 year students regarding malaria.
- To evaluate the effectiveness of planned teaching programme regarding malaria of B.Sc nursing 1 year students.
- To associate the socio-demographic variables and knowledge score of B.Sc. nursing 1 year students regarding malaria

## 3. ASSUMPTIONS:

- B.Sc. nursing 1 year students may have minimum knowledge on malaria.
- Knowledge level of B.Sc. nursing 1 year students regarding malaria will be improved by the PTP.
- B.Sc. nursing 1 year students can prevent malaria if they know to identify the risk factors of malaria

#### 4. HYPOTHESIS:

**H<sub>1</sub>** - The mean post test knowledge score of B.Sc. nursing 1 year students after PTP will be significantly higher their mean pretest knowledge score at 0.05 level of significantly.

**H<sub>2</sub>**: There will be a significantly association between knowledge scores among the B.Sc. nursing 1 year students and selected demographic variables

#### 5. RESEARCH APPROACH:

A quantitative research approach is used for this study.

- **Research Design**

Pre experimental design (one group pre-test- post test design was adopted for the study)

- **Setting**

The study is conducted in Granthamm college of Nursing sciences, bada gaon, Morar, Gwalior.

- **Population**

In the present study, the population is the B.Sc. Nursing I year students.

- **Sample**

In this study the sample comprised of 60 students of B.Sc. Nursing I year studing in Granthamm college of Nursing sciences, Gwalior.

- **Sampling Technique**

A Non probability convenient sampling technique was used to select 60 students of B.Sc. Nursing I year.

- **Data collection instrument**

In this study data collection instrument are:-

Section A: Demographic variables

Section B: standard tool

**Table-1 Association of the selected demographic variable with pre-test knowledge scores on malaria among B.Sc. nursing 1<sup>st</sup> year students.**

Variable	Category	Knowledge (present)		chi square value	Different	Critical
		Below median	Above median			
Age (yrs)	17-18	22	11	7.098*	2	5.99
	19-20	10	14		2	5.99
	Above 20		3			
Religion	Hindu	22	15	1.632**	2	5.99
	Muslim	7	8			
	Christian	3	5			
Resident	Rural	14	22	2.367**	2	5.99
	Urban	10	14			
Type of family	Nuclear	14	15	0.599**	2	5.99
	Joint	12	9			
	Extended	6	4			
Previous experience	Yes	10	14	2.188**	1	3.84
	No	22	14			
Source of information	Health professional	16	9	4.778**	3	7.82
	Community health centre	8	6			
	Friends, family & mass media	8	13			
Father's occupation	Skilled	23	24	1.715**	2	5.99
	Unskilled	4	2			
	Professionals	3	4			

\*Signification at 5% level.

\*\*not significant

Table 1. Depicts, significant association of age and type of family with pre- test knowledge scores. Chi-square ( $\chi^2$ ) value is higher than the table value at 5% level of significance, hence research hypothesis is accepted and hull hypothesis is

rejected. And no significant association of selected demographic variable religion, resident, father's occupation, previous experiences, sources of information with pre-test knowledge scores. Chi square ( $\chi^2$ ) value is less than the table value at 5% level of significance, hence research hypothesis is rejected and null hypothesis is accepted.

**Table (2) Association of the selected demographic variable with post –test knowledge scores on Malaria among the students of B.Sc. nursing 1<sup>st</sup> year.**

Variable	Category	Knowledge (post-test)		Chi-square value	df	Critical Value
		Below median	Above Median			
Age	17-18	25	8	0.267**	2	5.99
	19-20	19	5			
	Above 20	2	1			
Religion	Hindu	30	7	1.254**	2	5.99
	Muslim	10	5			
	Christian	6	2			
Resident	Urban	31	5	0.823**	2	5.99
	Rural	20	4			
Type family	Nuclear	22	7	0.475**	2	5.99
	Joint	17	4			
	Extended	7	3			
Father's occupation	Skilled worker	5	2	4.066**	3	7.82
	Unskilled worker	4	2			
	Professionals	39	8			
Previous experience	Yes	19	5	0.14**	1	3.84
	No	27	9			
Source of information	Health professional	20	5	0.359**	3	7.82
	Community health center					
	Friends, family & mass media					

\*Signification at 5% level.

\*\*not significant

Table 10- depicts, no significant association of selected demographic variables age, religion, education, father's occupation, type of family, resident, previous experiences, source of information with post-test knowledge scores. Chi – Square value is less than the table value at 5% level of significance, hence research hypothesis is rejected.

**Table -3: Overall Pre-test and Post test Mean knowledge score on malaria.**

Aspects	Sample (n)	Max. Score	Range Score	Knowledge Score			Paired 't' test
				Mean	Mean %	S.D (%)	
Pre Test	60	30	8 – 21	14.23	47.4	12.8	23.07*
Post Test	60	30	23 - 29	26.57	88.6	6.4	
Enhancement	60	30	12 – 33	12.33	41.1	13.8	

\*Significant at 5% level,

$t = (0.05, 59df) = 1.96$

**Table 3:-** Depicts the overall mean knowledge scores of pre-test and post test, which reveals the post – test mean knowledge score was higher (88.6%) with SD of 6.4 when compared with pre- test mean knowledge score value, which was 47.4% with Standard Deviation of 12.8%.

The statistical paired 't' test implies that the difference in the Pre-Test and Post Test knowledge score found statically significant at 5% level. The post test mean knowledge enhancement was 41.1% with a paired 't' value of 23.07, hence research hypothesis is accepted and null hypothesis is rejected.

## 6. RECOMMENDATIONS:

On the basis of present study the following recommendations are formed for future study:-

- A study can be conducted to find out the perception of community members regarding the cleanliness to prevent Malaria.
- A comparative study can be carried out between the rural and urban individuals with a control group design.
- A study can be conducted to find out the knowledge and skills of health care workers regarding the management of Malaria to reduce the hospital stay.
- A similar study can be conducted in community and anganwadi.

## 7. CONCLUSION:

On the basis of the findings of the study, The knowledge of students of B.Sc. Nursing students was less when assessed during pre-test, after the introduction of planned teaching program in post test the knowledge was increased. The significant difference between pre-test post-test weight score was demonstrated by using "t" test it was found that intervention was effective for B.Sc. Nursing I year students to acquire knowledge regarding Malaria. This study proved that there was significant association between the pre-test knowledge score and post-test knowledge score and selected variable family type.

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