

# "EFFECTIVENESS OF PLANNED TEACHING PROGRAM ON KNOWLEDGE WITH RESPECT TO DENGUE AND ITS PREVENTION AMONG SCHOOL STUDENTS "

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**Abstract:** A study was embraced to evaluate the initial information with respect to dengue and its prevention among the school students and to check impact of planned teaching program in regards to dengue and its prevention on knowledge of school students. Study comprised of 100 school students of Sangli, Miraj and Kupwad Corporation area. Non probability convenient sampling technique was utilized in current study. The tool used was Questionnaire and was separated into two determinations comprising of demographic factors and question's identified with anticipation of dengue. 12 specialists set up the content validity of the instrument. Pre-experimental research design was used for the study. Pre-test mean score indicated 23 students had poor knowledge and 77 of students had normal knowledge and after instillation of planned teaching program, 58 students demonstrated normal knowledge score and 67 per cent demonstrated good knowledge, which delighted effectiveness of planned teaching program. It was seen that there was significant difference between pre-test and post-test information scores of school students with respect to dengue and its avoidance after planned teaching and There was no significant association between demographic variables with pre-test knowledge score at  $>0.05$  level.

**Key words:** Effectiveness, Planned Teaching Programme, Dengue, Knowledge, School Students.

## INTRODUCTION:

Dengue fever is the most widely recognized among arthropod conceived malady; this illness influences tropical and subtropical districts of metropolitan and per metropolitan zone as per world wellbeing report. The dengue and dengue haemorrhagic fever is a serious influenza like ailment that influences baby, small kids and grown-up only here and there causing mortality. The infection is sent however the nibbles of tainted female mosquito. Human is gained with dengue infection contamination from the chomp of a tainted aedes mosquito, mosquito is tainted when they nibble tainted human and afterward send disease to others the dependable mosquito are aedes aegypti and aedes albopictus. Aedes mosquito after their first side effects show up aedes aseptic is a day time feeder, its pinnacle gnawing periods is promptly toward the beginning of the day and later in the night prior to tidy. Female aedes aegypti chomps various individuals during each taking care of period. The geographic dissemination and number of cases has expanded extraordinarily in most recent 30 years. There was pandemic of dengue in 1998 which was accounted for from 56 nations in the course of the last 10 to 15 years dengue has become a main source of clinic affirmations and demise among kids close to loose bowels and ARI. In the South East Asian area around 95 per cent of dengue passing's happen in youngsters under long term. The manifestations normally keep going for 2 to 3 days after a hatching time of 4 to 10 days.

The recuperation that is described by presents Clinical highlights like extreme migraine, body ach, muscles and joint torment, queasiness, retching, rashes. The mosquito breed generally in synthetic holders like pottery containers, metal drum, show, reservoirs utilized for home grown water stockpiling, disposed of plastic(s), food compartment utilized like car, tires, coconut shells and different things that gather water. In India dengue is broadly predominant as endemias and here and there as pandemic. Each of the four generalizations (1 to 4) of dengue infection is found as causative agent. Dengue is one of the significant general medical issues which can be controlled with dynamic investment of the network. There is a need to sort out wellbeing mindfulness programs about dengue and its avoidance to sharpen the network to partake in coordinated vector control programs expressed, "Wellbeing training in school is one of the elements of general wellbeing medical caretaker or wellbeing specialist". On the off chance that youngsters are instructed, they will take the data to their folks and when they would apply this information to their own families to improve the wellbeing status. World wellbeing association expressed that a compelling school wellbeing system can be one of the most practical speculation a country can make to at the same time improve training and wellbeing that can likewise advance school wellbeing program as a vital way to forestall significant wellbeing hazard among kids and to connect with the instructive segment in exertion to change the instructive, social, monetary and political condition that influence hazard.

## Need for the Study:

Dengue is restoratively pertinent infection that is normal in heat and humidifies. The infection itself is a solitary abandoned RNA infection. It is spread by the mosquito Aedes Aegypti. It causes dengue fever and dengue haemorrhagic fever. One can't get the second without having had the first. This is exceptionally intriguing part of dengue contamination that depends on the host, s insusceptible reaction. It is likewise why immunization for dengue is viewed as an unsafe recommendation. In Maharashtra absolute around 1000 passing cases were accounted for in August 2018 from Jan 2018 to Dec 2018. Sangli enterprise zone discovered 530 associated understanding with dengue out with which 373 patient were dengue positive. The Sangli Civil for example Padmabhusan Vasantdada Patil Shashkiyarungalay, Sangli had 177 paediatric patients determined to have dengue in 2018. Various components have

been embroiled for this harmless ascent in pervasiveness, for example, human populace development, expanded travel and wasteful vector control, spontaneous urbanization just as expanded development of individuals. There is no particular drug or antibody for its treatment. Accordingly, WHO and CDCP suggested network instructive missions that stress on lessening vector rearing locales as a powerful method of dengue anticipation. Keeping away from mosquito nibbles is successful approach to make mindfulness in school.

Ms. Mini Rani Mary Beth revealed Acute mesenteric lymphadenitis is a very much characterized element dengue fever keeps on being a worldwide worry in sub-tropical nations for as long as many years where 2.5 billion populaces are in danger .It is clearly the most huge test since 1980s and has become a significant general wellbeing worry in Asia pacific (with 70 % event rate), Middle-East, Africa, the Caribbean and South America. World wellbeing Organization characterizes dengue fever as the most well-known arthropod brought into the world transmittable malady brought about by four flaviviral serotypes through the transmission by female *Aedes aegypti* and *Aedes albopictus*.

One of a contaminated mosquito sends any of the four viral serotypes from viraemic to vulnerable people. Dr. Separate, K.R. (2015) clarified that younger students are a significant gathering since they regularly from a high extent. The youngster invests a large portion of the energy in the school between the ages 6 to 15 years. School must be viewed as a ground-breaking channel for connecting the general wellbeing data it offers a chance to set them up.

### RESEARCH PROBLEM STATEMENT:

“A study to assess the effectiveness of planned teaching programme on knowledge dengue and its prevention among school students of selected Schools of Sangli, Miraj, Kupwad Corporation area”.

### Research Objectives:

1. To assess the existing knowledge regarding dengue and its prevention among the school student.
2. To assess the effectiveness of plan teaching program regarding dengue and its prevention on knowledge of school student
3. To find out association of pre-test knowledge score with selected demographic variables.

### Operational Definition:

1. **Assess:**

In this study, “Assess means that gathering data through structured questionnaire”.

2. **Effectiveness:**

In this study, “Effectiveness refers to important amendment in information as determined by amendment in pre-test and post-test score”.

3. **Planned teaching Programme:**

In this study, “Planned teaching Programme refers to supply data concerning dengue fever and its interference among school student through systematic teaching programme”.

4. **Knowledge:**

In this study, “Knowledge refers to correct response of school students concerning dengue fever and its interference through self-structured questionnaire”.

5. **School Students:**

In this study, “School students seek advice from youngsters poring over lecturers and of 12-14 years older.”

### HYPOTHESES:

**Ho:** There will be no huge contrast between pre-test and post-test knowledge scores of school students with respect to dengue and its prevention.

### RESEARCH METHODOLOGY

#### Research approach:-

The flow of the study was to assess the viability of planned teaching program on level of information among students with dengue; henceforth quantitative approach was embraced to achieve the goal of the investigation.

#### Research Design:-

Pre-experimental one group pre-test and post-test design was adapted to for investigation.

#### Variables:-

The study addresses couple of variables i.e. dependent variable and independent variables.

**Dependent Variable:** Knowledge of school Student

**Independent Variable:** Planned Teaching Program Regarding Dengue and its Prevention.

**Study Setting:** Samples were taken from progressive school, Miraj and Wanlesswadi High School, Sangli.

**Population:** School students were selected to assess the knowledge of school Student regarding dengue and its prevention.

**Sample:** School students

**Sample size:** 100 School students.

**Sample technique:** In this study, the sampling technique, non-probability, convenient sampling technique was used.

**Sampling criteria:-**

**Inclusive criteria:**

- a. School students who were 12-14 years of age.
- b. School students who were available at time of data collection.

**Exclusion Criteria**

- a. School students who were present for pre-test but absent for post-test.

**Data Collection Tool:**

The data collection tool was comprised of-

**Section I** – Demographic variables.

**Section II** – Structured Knowledge questionnaires.

**Validity:** Content Validity is the degree to which an instruction measures what it is intended to measure. To ensure the content validity 12 experts have validated the tool. 8 experts were from Child health nursing, 4 were from Community health nursing.

**Ethical Considerations:**

To maintain the ethical boundaries in the study, Permission was taken from the Principal of concerned schools, the willing participants in the study were been given consent letter and the confidentiality of the received data was maintained.

**Reliability**

The reliability of a quantitative data is a major concern for assessing its quality and adequacy. Essentially the reliability of knowledge is the degree of consistency of dependability with which an instruction measures the attribute it is designed to measure

In this study, the reliability was measured by using Split half method. The tool was found to be reliable as “r” was greater than 0.07 i.e.  $r = 0.78114$  and the tool was found to be reliable.

**Procedure for Data Collection:**

Prior permission has been taken from concerned School Authority i.e. the Principal. The willingness of the participants in the study was checked by consent letter. The Pre-test was administered by Pre-test. On same day Planned Teaching Program was given and on 7th day Post-test with same tool.

**Plan for Data Analysis**

1. Demographic data will be analysed using description statistics frequency and percentage distribution.
2. Inferential statistics, unpaired test, will be used to find the effectiveness of knowledge with selected demographic variables.

**Pilot study**

A pilot study is small scale version of the major study, the function of the study obtained information for improving the projector assessing its feasibility. The pilot study was conducted in progressive school miraj to assess the feasibility of the study with 10 samples of the study. Prior permission was obtained from concerned authority. Data was collected by using the tool for pilot study. Pilot study did not show any major deficient feasibility of the study .So no correction was made after the pilot study.

**ANALYSIS AND INTERPRETATION OF DATA**

The analysis and interpretation of findings are given in following section,

Section 1: Frequency and percentage distribution of selected demographical characteristics.

Section 2: Pre-test knowledge before conducting planned teaching programme

Section 3: Effectiveness of planned teaching programme.

Section 4: Association with selected demographic variables.

**Section I - Frequency and percentage distribution of demographic variables.****Table No.1: Frequency and percentage distribution of Age, Sex and Area with samples****n=100**

Sr. No	Variables	Frequency (f)	Percentage (%)
1.	<b>Age</b>		
	a) 12 years	35	35
	b) 13 years	45	45
2.	<b>Sex</b>		
	a) Male	47	47
	b) Female	53	53
3.	<b>Area</b>		
	a) Urban	91	91
	b) Rural	9	9

Table No 1. Shows maximum samples with 45% belongs to age of 13 years. In Females, school students were more with 53% than male i.e. 47%. Urban localities were more with 91% and Rural Area 9%.

**Table No.2**  
**Frequency and Percentage Distribution Of Dengue In Family Member, Information Of Dengue And Mosquito Breeding Area.**  
 n=100

Sr.no	Variables	Frequency (f)	Percentage (%)
4	Dengue In Family Member		
	a) Yes	14	14
	b) No	86	86
5	Information Of Dengue		
	a) Yes	30	30
	b) No	70	70
6	Mosquito Breeding Area		
	a) Yes	74	74
	b) No	26	26

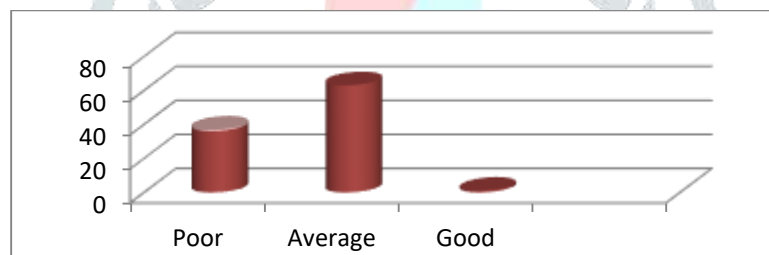
Table No. 2 shows that 14% school students reported that there were no family members diagnosed with dengue while 86% reported that there was no family history of dengue. Result shows that 30% students had knowledge regarding dengue and 70% students did not have idea about dengue. Result also shows that 74% of school students live in mosquito breeding area, which gives a huge risk of disease.

## SECTION II – FREQUENCY AND PERCENTAGE DISTRIBUTION PRE-TEST KNOWLEDGE SCORE.

**Table no 3**  
 Pre Test Knowledge

n=100

Grading	Frequency	Percentage (%)
Poor (0-6)	36	36
Average (7 - 12)	63	63
Good (13 - 18)	1	1



**Fig no 2: Pre-test Knowledge**

Table no.3 and figure No.2 shows that, 36 % of school students had poor knowledge score, 63% had Average Knowledge Score And 1% had Good Knowledge Score. Whereas, 7.48 was mean Pre-test score. It is evident that more efforts are necessary to improve the knowledge regarding Dengue in among School's Student.

## SECTION III: Frequency and Percentage Distribution Post-Test Knowledge Score.

**Table no.4**  
 Post-test Knowledge Score

n=100

Grading	Frequency (f)	Percentage (%)
Poor (0-6)	1	1
Average(7-12)	69	69
Good (13 - 18)	29	29

Table no.4 shows, 69% of School students had Average knowledge score (69), 29% have Good knowledge score, 1% have poor knowledge score. Which concludes 12.26 was the post-test mean score. This suggests that there is marked increase in post-test knowledge score.

## SECTION IV: Comparison between Pretest and Posttest Knowledge Score.

Table No 5

n=100

TEST	MEAN	MEAN %	'p' VALUE
PRE TEST SCORE	7.48	41.50 %	P<0.005
POST TEST SCORE	12.26	68.10%	

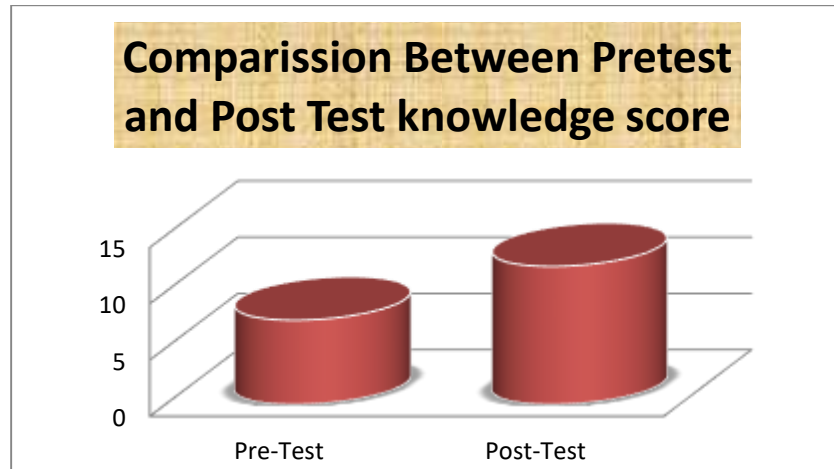


Fig no 3: Comparison between pre-test and post-test mean

Table no.5 and figure no.3 shows that, mean value of pre-test knowledge score is 7.48 and post-test knowledge score is 12.26. This suggests that there is statistically significant increase in post test score so planned teaching programme on Dengue in High School Student children among was effective.

## SECTION V: Association between Demographic Variables with Pre-Test Knowledge Score.

Table no.5: Association with demographic variables and pre-test

n=100

Sr. no.	Demographic Variable	Chi-Square	p value	Remark
1	Age	2.858	0.596	No Significant association
2	Sex	1.703	0.427	No Significant association
3	AREA	4.033	0.142	No Significant association
4	FAMILY ILL MEMBER	2.744	0.254	No Significant association
5	INFORMATION ON DENGUE	0.517	1	No Significant association
6	MOSQUITO BREEDING AREA	0.874	0.801	No Significant association

Table no.5 indicates there is no significant association between age, sex, area, family ill member with dengue and mosquito breeding area and pre-test knowledge score as calculated 'p' value is more than tabulated 'p' (0.05) value. Thus it shows that there is no significant association between pre-test knowledge score and selected demographic variables.

## RESULT AND CONCLUSION

**Pre-test:** The result of test before giving and education was dominant with average knowledge score as 63 school students scored in between 7-12 knowledge score, 36% school students had poor knowledge which gives a danger sign in preventing contact with dengue and very less with only 1% of school student showed good knowledge score.

**Effectiveness of Planned teaching Programme:** The pre-test mean knowledge score regarding dengue and its prevention was 7.48 which indicate average knowledge score. The post-test knowledge score was 12.26 which prove significant increase in knowledge score as compared to pre-test knowledge score and hence indicates that the planned teaching programme was effective.

**Association with selected demographic variables:** The demographic variables, like Age, Gender, Area, Dengue ill patients in family, Previous information regarding dengue and its prevention within mosquito breeding area of school student was found that there was no significant association between demographic variables with pre-test knowledge score at >0.05 level.

Each scenario in the investigation realized that Dengue is brought about by mosquito nibble. During introducing arranged training it was discovered that the examples were confounded between dengue, jungle fever and chikungunya and furthermore understood that right measures are not taken to decimate mosquito, in certainty the school understudies were made mindful to decrease the mosquito rearing territory. The ignorance was unmistakably observed about dengue and its avoidance among school, understudies. An itemized survey of writing, conversation with specialists from particular nursing field and arrangement of tool was finished. The current investigation demonstrated that planned teaching was compelling in improving the information on understudies for better anticipation of infection. After the Pretest the questions of the school students were being cleared, where school students gave a positive reaction to keep up the solid climate and evade mosquito rearing in their environmental factors. Support was being given in cleaning the house encompassing, unloading the trash in fitting way, shielding self as well as other people from mosquito chomp and including the character in anticipation of Mosquito rearing. It was seen that there was significant difference between pre-test and post-test information scores of school students with respect to dengue and its avoidance after planned teaching and Null hypothesis was rejected.

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