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“A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING ON THE KNOWLEDGE REGARDING PREVENTION OF DENGUE FEVER AMONG THE STUDENTS OF SCHOOL IN SELECTED AREA.”

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Abstract: BACKGROUND AND PURPOSE: Dengue fever is a mosquito-borne viral infection. Female mosquitoes, mainly *Aedes aegypti* and, to lesser chances, *Aedes albopictus*, transmit the dengue virus. These mosquitoes also transmit the chikungunya, yellow fever, and Zika viruses. Dengue fever is an acute febrile disease caused by infection with one of the serotypes of the dengue virus. It is a mosquito-borne disease caused by the genus *Aedes*. Dengue is also known as Break bone Fever, Hemorrhagic Fever, Dandy Fever, and Infectious Thrombocytopenic Purpura. 3.8 billion people dwelling in 128 countries are perceived to be in danger of dengue infection. According to the WHO, every year about 20,000 deaths occurred on account of dengue globally. **OBJECTIVES:** 1) To assess the pre-test knowledge regarding dengue fever among students of schools in selected area. 2) To deliver the planned teaching program regarding knowledge of dengue fever. 3) To assess post-test knowledge regarding dengue fever among the students of school selected area. 4) To determine the association between the pre-test knowledge and socio-demographic variables. **DESIGN:** Design used study was “Quasi experimental study” (only pre-test post-test design) was adapted for this study. **RESULT:** In this present study, out of 100 students, age of them were differ from the Age group of 13-16yr, age 13yr 21%, age 14yr 49%, age 15yr 25%, age 16yr 25%.

Gender Female 50% & Male 50%, Education 7th std 25%, 8th std 25%, 9th std 25%, 10th std 25%, Occupation students 100%, Religion Hindu 81%, Buddhist 13%, Muslin 6%, Address Aurangabad 100%. The calculated „t“. Value regarding definition of Dengue fever was 7.7 which was greater than the table value ($7.7 > 2.02$). So, it was significant at ($p > 0.05$) level The calculated „t“ value regarding causes of Dengue fever was 14.6 which was greater than the table value ($14.6 > 2.02$). So, it was significant at ($p > 0.05$) level. The calculated „t“ value regarding mode of transmission of Dengue fever was 9.8 which was greater than the table value ($9.8 > 2.02$). So, it was significant at ($p > 0.05$) level. The demographic variables like Age ($0.53 < 0.913$), Gender ($4.29 > 0.038$), Educational status ($0.47 < 0.925$), Religion ($0.50 < 0.780$). Pretest knowledge level was assessed among school children that resulted, mean was 5.2; standard deviation 1.6, the overall knowledge mean percentage was 33.33 that show the school children were in inadequate knowledge. Posttest level of knowledge was assessed. It was about mean 9.9 and standard deviation adequate knowledge after planned teaching programme. Comparison of pre and posttest level of knowledge was analyzed by using paired „t“ test. Calculated“ value was 23 ($23 > 0.05$) which was greater than table value. So, it was significant at $p > 0.005$ level.

Index Terms - Effectiveness of planned teaching programme, Dengue fever.

I. RESEARCH METHODOLOGY

Research methodology involves systemic procedure which includes research design, the setting the sample, criteria for sample selection, sample technique development and description of tool and testing of the tool, the procedure for data collection and the plan for data collection.

3.1 Population and Sample

The term population refers to the aggregate (or) totality of all the objects, subjects (or) members that conform to a set of specifications.

All students were the population for the study.

(Polit and Hungler, 1999).

3.2 Data and Sources of Data

It refers to the aggregate of cases which conform to the designed criteria which is accessible to the researcher as the pool of subjects (or) objects. In this study the population consists of students of school of selected area.

According to Polit and Hungler (2005), “A population is the entire aggregation of cases in which a researcher is interested”.

Target population It refers to the population that the researcher wishes to make a generalization. In this research the target population was Students.

Accessible population It refers to the aggregate of cases which conform to the designed criteria which is accessible to the researcher as the pool of subjects (or) objects. In this study the population consists of students of school of selected area.

The hypothesis (H₂)

H₁: The mean post-test knowledge score is higher than the mean pre-test knowledge score on Dengue fever among students.

H₂: Mean post-test knowledge score is higher than the mean pre-test knowledge score on prevention of Dengue fever among students.

IV. RESULTS AND DISCUSSION

Review of literature for the present study has been organized under the following sections:

Section I: Literature review related to prevalence and causes of Dengue fever.

Section II: Literature review related to signs and symptoms of Dengue fever.

Section III: Literature review related to prevention of Dengue fever

Section IV: Literature review related to knowledge and practice of Dengue fever.

Figures and Tables

Section I

Description of samples (school students) based on their personal characteristics

Table 1: Description of samples (school students) based on their personal characteristics in terms of frequency and percentage

N=100

Demographic
variable

Freq	%
Age	
13 years	21
14 years	29
15 years	25
16 years	25
Gender	
Female	50
Male	50
Education	
7th	25
8th	25
9th	25
10th	25
Occupation	
Student	100
Religion	
Buddhist	13
Hindu	81
Muslim	6
Address	

Aurangabad		100		100%
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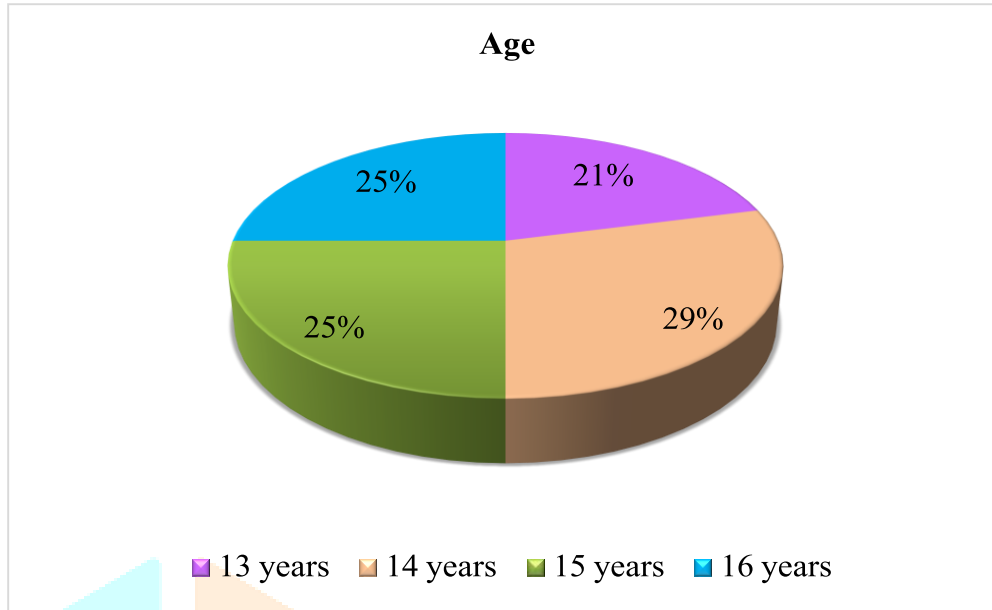


Fig 1.1 Distribution of students according to their age Distribution of students according to their age shows that 21% of the schoolstudents had age 13 years, 29% of them had age 14 years, 25% of them hadage 15 years and 25% of them had age 16 years.

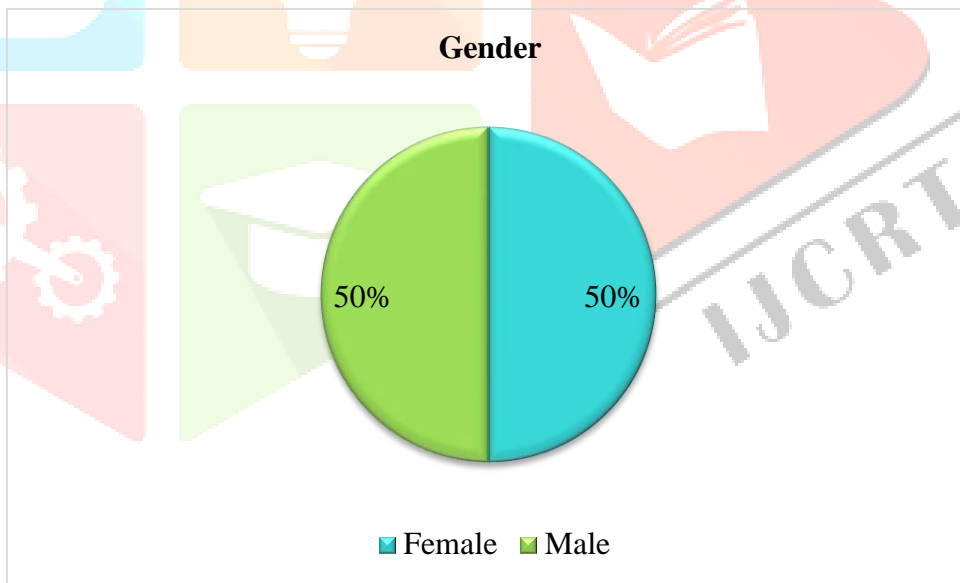


Fig 1.2 Distribution of students according to their gender Distribution of students according to their gender shows that 50% of themwere females and 50% of them were males.

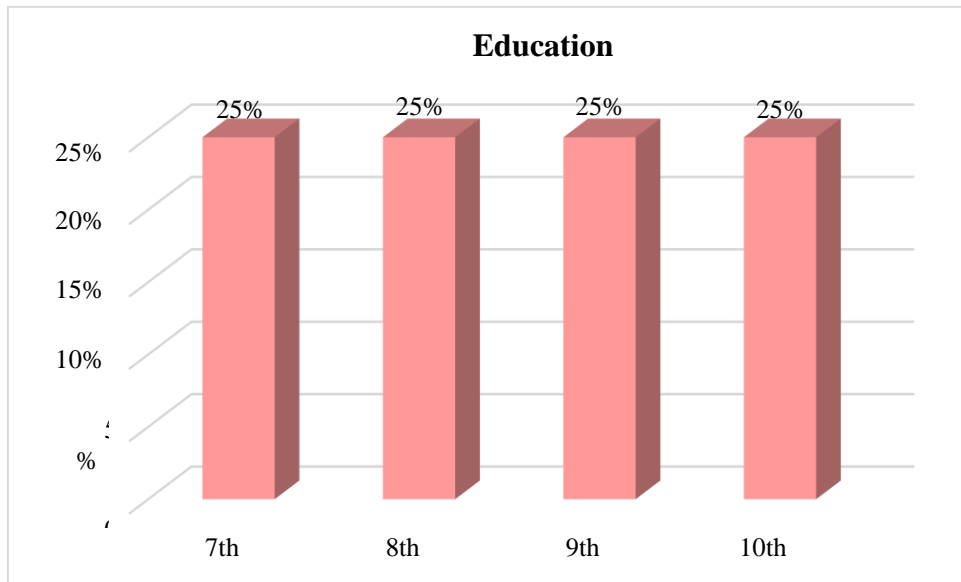


Fig 1.3 Distribution of students according to their Education Distribution of students according to their Education shows that 25% of them were in 7th standard, 25% of them were in 8th standard, 25% of them were in 9th standard and 25% of them were in 10th standard

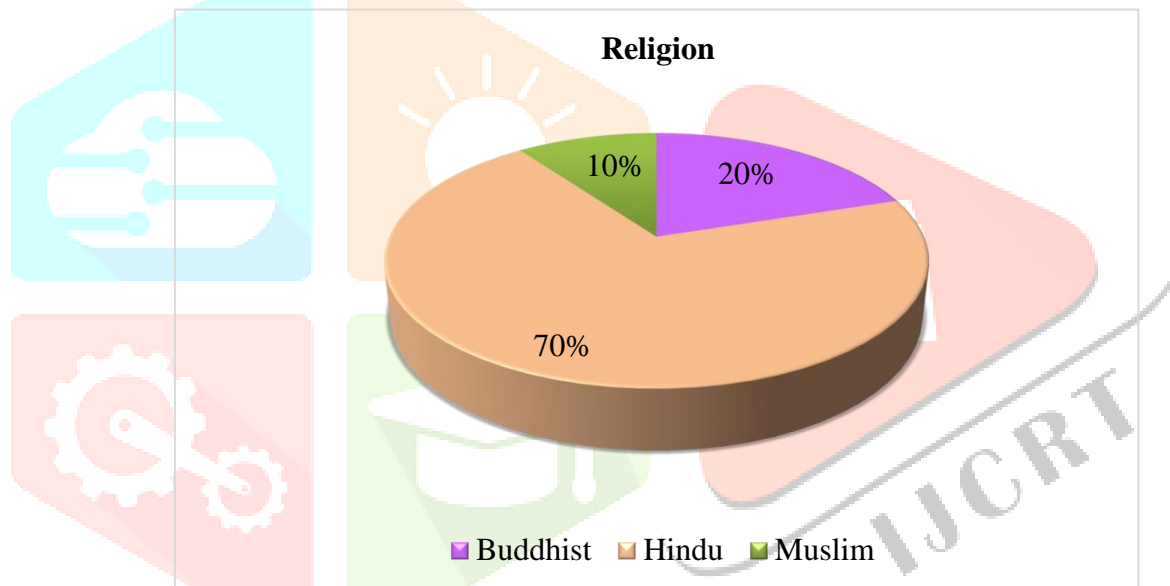


Fig 1.4 Distribution according to their religion Distribution according to their religion shows that 13% of them were Buddhist, 81% of them were Hindu and 6% of them were Muslim.

Section II

Analysis of data related to knowledge regarding dengue fever among the students of schools Table 2: Knowledge regarding dengue fever among the students of schools

N=100

Knowledge	Pretest	
	Freq	%
Poor (Score 0-4)	37	37%
Average (score 5-9)	63	63%
Good (score 10-14)	0	0%

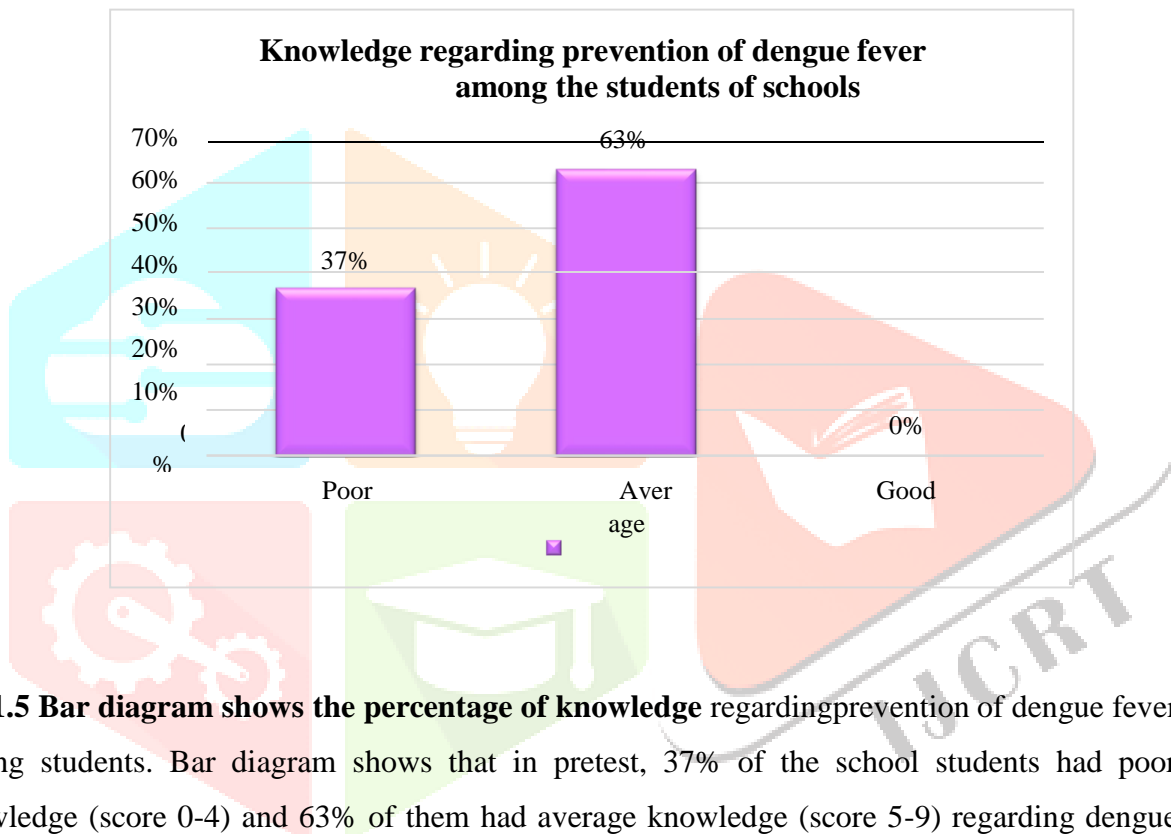


Fig 1.5 Bar diagram shows the percentage of knowledge regarding prevention of dengue fever among students. Bar diagram shows that in pretest, 37% of the school students had poor knowledge (score 0-4) and 63% of them had average knowledge (score 5-9) regarding dengue fever.

Section III

Analysis of data related to knowledge regarding prevention of dengue fever among the students of schools

Table 3: Pretest and posttest knowledge regarding prevention of dengue fever among the students of schools

N=100

Knowledge	Pretest		Posttest	
	Freq	%	Freq	%
Poor (Score 0-4)	37	37%	0	0%
Average (score 5-9)	63	63%	46	46%
Good (score 10-14)	0	0%	54	54%

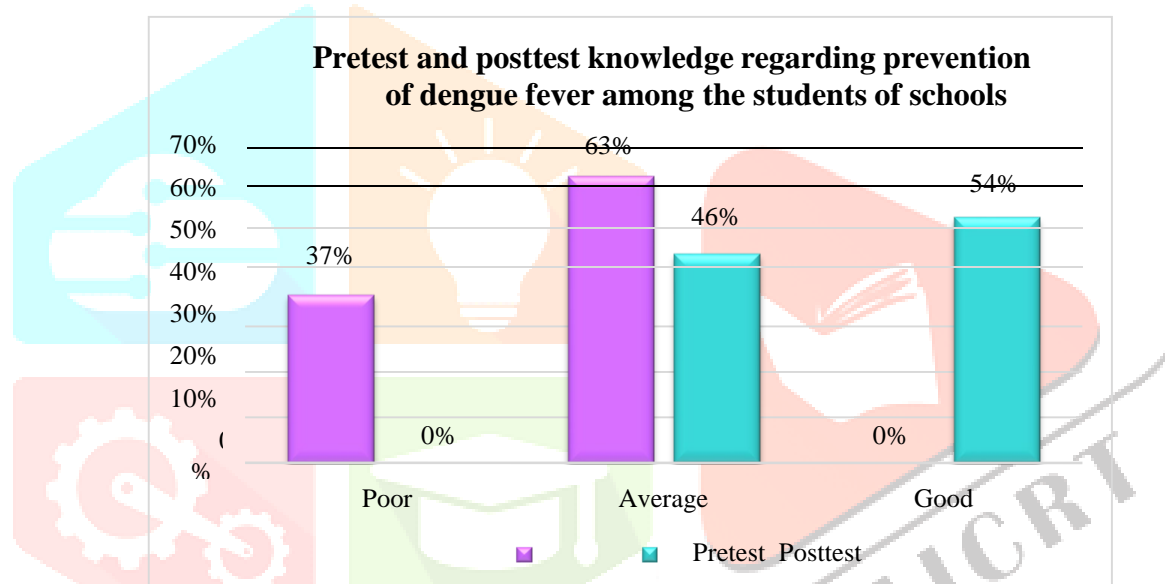


Fig 1.6 Bar diagram shows pre-test and post-test knowledge regarding prevention of dengue fever among the students of school

Bar diagram shows that in pretest, 37% of the school students had poor knowledge (score 0-4) and 63% of them had average knowledge (score 5-9) regarding prevention of dengue fever. In posttest, 46% of them had average knowledge (score 5-9) and 54% of them had good knowledge (score 10-14) regarding prevention of dengue fever. This indicates that there is remarkable improvement in knowledge among school students regarding prevention of dengue fever.

Table 4: Paired t-test for the effectiveness of planned teaching on the knowledge regarding dengue fever

N=100

	Mean	SD	T	df	p-value
Pretest	5.2	1.6	23.0	99	0.000
Posttest	9.9	1.4			

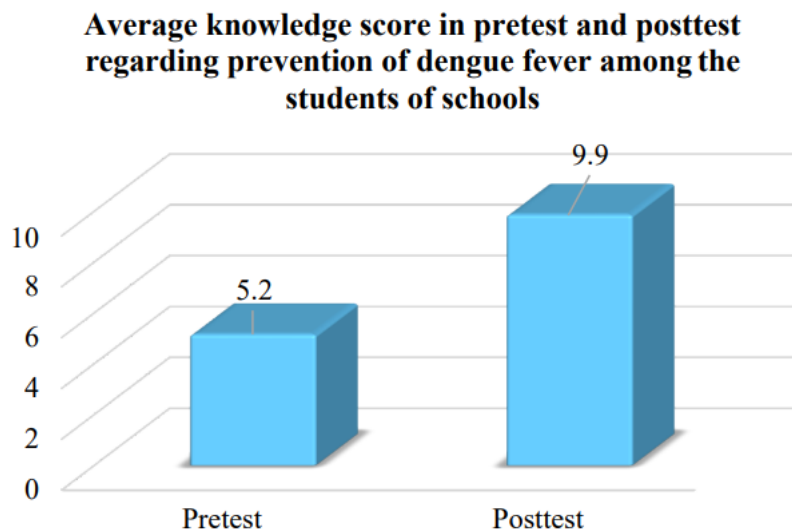


Fig 1.7 Bar diagram shows percentage of average knowledge score pre-test & post-test regarding prevention of dengue fever

Researcher applied paired t-test for the effectiveness of planned teaching on the knowledge regarding dengue fever. Average knowledge score in pretest was 5.2 which increased to 9.9 in posttest. T-value for this test was 23 with 99 degrees of freedom. Corresponding p-value was small (less than 0.05), then null hypothesis is rejected. It is evident that the planning teaching is significantly effective in improving the knowledge among school students regarding dengue fever

Section IV

Analysis of data related to association between the knowledge regarding prevention of dengue fever and socio-demographic variables

Table 5: Chi-square test for association between the knowledge regarding prevention of dengue fever and socio-demographic variables

N=100

Demographic variable		Knowledge		Chi-square	df	p-value
		Average	Poor			
Age	13 years	13	8	0.53	3	0.913
	14 years	17	12			
	15 years	16	9			
	16 years	17	8			
Gender	Female	37	13	4.29	1	0.038
	Male	26	24			
Education	7th	17	8	0.47	3	0.925
	8th	15	10			
	9th	15	10			

	10th	16	9			
Religion	Buddhist	8	5	0.50	2	0.780
	Hindu	52	29			
	Muslim	3	3			

Since p-value corresponding to gender was small (less than 0.05), the demographic variable gender was found to have significant association with the knowledge among school students regarding prevention of dengue fever.

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REFERENCES

1. AbuBakar, Liping, etal, "Health Beliefs and practice related to Dengue fever: A focus group study" July, 2013
2. A.H. Suryagantha "community medicine with recent advances", I Edition (2009), Jaypee Brothers Medical publishers (p) Ltd, Pp-412-415.
3. Ayyup M, Khazindar A M Lubbad E H etal, Characterizes of Dengue fever in a large public hospital, Journal of Ayyup medical college, Abbotabad,2006, Apr, june18(2);9-13.
4. Ahmed Itrat, Abdullah khan, Sunniya Javaid, etal "Knowledge, awareness and Practices regarding Dengue fever population of Dengue hit cosmopolitan, PLOS one july 09,2008, DOI:10.1371/Journal.
5. Amar, Taksande, Department of pediatrics, "Knowledge, attitude and practice of Dengue fever in rural area of central India", JNME, sawangi (m), wardha, m.s. India, January19,2013.
6. B.K.Mahajan, " Methods in biostatistics", Jaypee Brothers Medical publishers (p) Ltd, VII Edition(2010),Pp-28-32.
7. D. Elakkuvana baskaraj "Nursing research and biostatistics", Emmess medical publishers, II Edition (2012), Pp-475-490.
8. Dr.Suresh K. Sharma "Nursing research and biostatistics" Elsevierpublication, Reprinted (2012), Pp-61-68,358-360.
9. Dr. Mrs. Kasthuri sundef rao, "An introduction community health nursing" Ecumenical Book Services, II Edition (2012), Pp: 490-491."
10. Donalisio M R. AivesM J Visockas A, "A survey of knowledge and attitudes in a population about Dengue transmission –region of Campinas sao Paulo" Brazil-1998/Rev soc bras med top 2001 Mar- apr;34(2):97-201.

