

Original Research Article

**“Study on to assess the effectiveness of structured teaching programme on knowledge about the dengue fever among the adolescent children in Government Higher Secondary Excellence School of Sagar district in Madhya Pradesh”**

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**Abstract**

**Background:** Dengue fever is a mosquito-borne tropical disease caused by the dengue virus. Symptoms typically begin three to fourteen days after infection. Dengue is spread by several species of female mosquitoes of the Aedes type; principally an aegypti Treatment of acute dengue is supportive and includes giving fluid either by mouth or intravenously for mild or moderate disease. To assess knowledge level of adolescent children (14-18 years) regarding dengue fever, to assess knowledge level of adolescent children (14-18 years) regarding dengue fever, to assess the effectiveness of structured teaching programme regarding dengue fever among the adolescent children (14-18 years).

**Methods:** The population for the study includes the Adolescent Children (14-18 Years) in Government Higher Secondary School, Sagar, Madhya Pradesh. The sample used for the study was 60 (sixty) adolescent Children (18-20 Years). In this study adolescent Children were selected by simple random technique by lottery method.

**Results:** Paired ‘t’ test value is 10.6. It is hypothesized that there is significant ( $p < 0.001$ ) in effectiveness of structured teaching programme among adolescent children (14-18 years). There will be significant difference between pre-test and post-test level of knowledge regarding dengue fever among the adolescent children (15-17 years).

**Keywords:** Disease, Infection, Immune deficiency, Dengue virus, Symptoms, Intravenous.

**Introduction:**

Dengue fever is a mosquito-borne tropical disease caused by the dengue virus. Symptoms typically begin three to fourteen days after infection. This may include a high fever, headache, vomiting, muscle and joint pains, and a characteristic skin

rash. Dengue is spread by several species of female mosquitoes of the Aedes type, principally an aegypti. The virus has five types; infection with one type usually gives lifelong immunity to that type, but only short-term immunity to the others. Subsequent infection with a different type increases the risk of severe complications. A number of tests are available to confirm the diagnosis including detecting antibodies to the virus or its RNA <sup>[1,2]</sup>. H1 There will be significant difference between pre-test and post-test level of knowledge regarding dengue fever among the adolescent children (14-18 years) <sup>[3]</sup>.

### Objectives:

1. To assess knowledge level of adolescent children (14-18 years) regarding dengue fever mothers of under five children regarding asthma before structured teaching programme
2. To assess knowledge level of adolescent children (14-18 years) regarding dengue fever mothers of under five children regarding asthma after structured teaching programme
3. To assess the effectiveness of structured teaching programme regarding dengue fever among the adolescent children (14-18 years)

### Material and Methods:

The population for the study includes the Adolescent Children (14-18 Years) in Government Higher Secondary Excellence School, Krshnaganj ward, Sagar, Madhya Pradesh. The sample used for the study was 60 (sixty) adolescent Children (14-18 Years). In this study adolescent Children were selected by simple random technique by lottery method.

### Observation and results:

Table 1. The pre-test knowledge level of adolescent children (14-18 years) regarding dengue fever.

Pre-test knowledge	No	%
Inadequate (50 and below)	50	83.3
Moderately adequate (51-75%)	10	17
Adequate (76-100%)	NIL (0)	NIL (0)

Above table shows the pre-test knowledge level of adolescent children regarding dengue fever among the adolescent children (15-17 years). 50 (83.3%) had inadequate knowledge and majority of them 10 (17%) had moderately adequate knowledge, none of them had adequate knowledge <sup>[4]</sup>.

Table 2. The post-test knowledge level of adolescent children (14-18 years) regarding dengue fever.

Post-test knowledge	No	%
Inadequate (50 and below)	0	0
Moderately adequate (51-75%)	6	10
Adequate (76-100%)	54	90

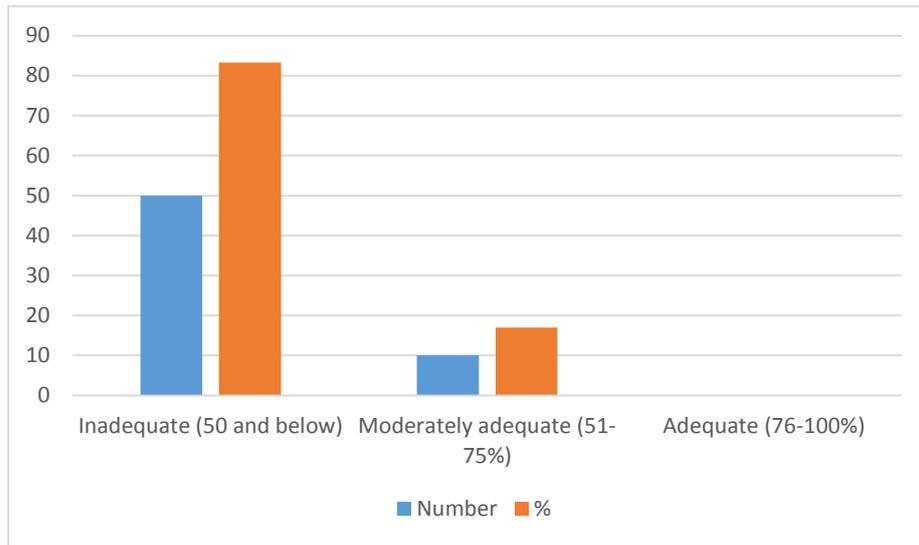
Above table shows the Post-test knowledge level of adolescent children (14-18 years) regarding dengue fever in (Figure 2). None of them had inadequate knowledge, 6 (10%) had moderately adequate knowledge, and majority of them 54 (90%) had adequate knowledge<sup>[5]</sup>.

Table 3. The effectiveness of structured teaching programme regarding management dengue among adolescent children (14-18 years).

S. No	Knowledge	Pre test						Post test					
		Inadequate		Moderately adequate		Adequate		Inadequate		Moderately adequate		Adequate	
		(50 and below)		(51-75%)		(76-100%)		(50 and below)		(51-75%)		(76-100%)	
		N	%	N	%	N	%	N	%	N	%	N	%
1	Over all knowledge on management and prevention of HIV infection among adolescent children (14-18 years)	50	83.3	10	17	0	0	0	0	6	10	54	90

A study to assess the effectiveness of structured teaching programme on knowledge regarding dengue fever among the adolescent children (14-18 years) in Government Higher Secondary Excellence School, Krshnaganj, Sagar, Madhya Pradesh.

Figure 1. Knowledge level of adolescent children.



Knowledge level of adolescent children.

Figure 2. The effectiveness teaching programme regarding adequate knowledge. Knowledge level of adolescent children.

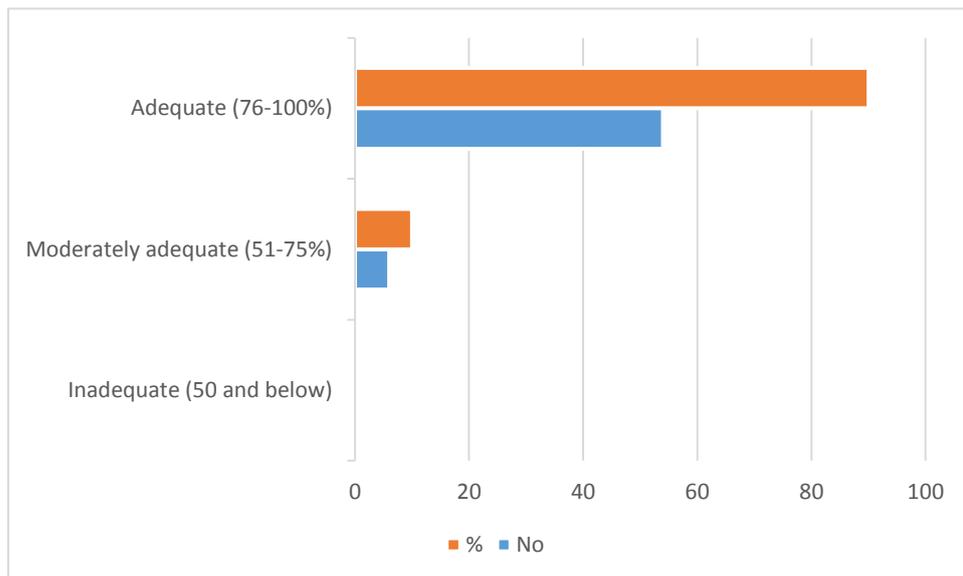


Table 4. The mean and standard deviation of pre and post test knowledge

Variables	Pre test knowledge		Post test knowledge		Effectiveness		(Paired) 't' value
	Mean	SD	Mean	SD	mean	SD	
Knowledge	14.6	3.5	19.5	3.2	5.9	4.0	10.6

**Conclusion:**

The study was conducted to assess the effectiveness of structured teaching programme regarding dengue fever among adolescent children (15-17 years) the discussion was based on the objectives, and hypothesis. With regard to pre-test and post-test level of adolescent children (14-18 years). The pre knowledge level of adolescent children regarding dengue fever among the adolescent children (14-18 years). 50 (83.3%) had inadequate knowledge and majority of them 10 (17%) had moderately adequate knowledge, none of them had adequate knowledge. In post-adolescent children (14-18 years) regarding dengue fever none of them had inadequate knowledge, 6 (10%) had moderately adequate knowledge, and majority of them 54 (90%) had adequate knowledge. The overall paired 't' test value is 10.6. It is hypothesized that there is significant ( $p < 0.001$ ) in effectiveness of structured teaching programme among adolescent children (15-17 years). There will be significant difference between pre-test and post-test level of knowledge regarding dengue fever among adolescent children (14-18 years).

**Conflict of interest:** None declared

**Funding:** Nil

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**Ethical consideration:** Ethical clearance was taken from Institutional ethical committee of Bundelkhand Medical College, Sagar, Madhya Pradesh.

**Author's Contribution:**

Anurag Jain: contributed regarding conception or design of the study, developing the consent form, Dileep Dandotiya: statistical analysis and interpretation, preparation of manuscript and revision of the manuscript, Ankit Solanki: concept and design of the study, aims & objectives, reviewed the literature, prepared first draft of manuscript, arranged all the references & this is his own dissertation work; Deepak Kumar Patel: concept, coordination, interpreted the results and manuscript preparation;

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