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## Original Research Article

## Impact of video assisted module on knowledge and practice regarding prevention of dengue fever among adult

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## ABSTRACT

**Introduction:** Dengue fever is an acute infectious life threatening mosquito born disease, transmitted through Aedes aegypti mosquito. Characterized by episodes of 'saddle back' fever, muscle and joint pain accompanied by an initial erythematous and terminal rash of varying morphology. It is also called as 'Break bone fever, occurs more frequently during rainy seasons i.e. in the month of June to September.

**Materials and Methods :** Methodology of research indicates the general pattern of organizing the procedure for gathering valid and reliable data for problems under investigation.

**Research Design:** One group pretest posttest experimental design (pre-experimental research design).  
Research Approach: Evaluative research approach,

**Setting:** Study will be conducted at Khudel urban slum area of Indore.

**Population:** The population under the study includes residents of selected urban slum at Indore.

**Result:** to assess the pre-intervention knowledge & Practice regarding Prevention of dengue fever among adult between 25-45 year is improved after VAT.

**Conclusion:** Based on literature review and community field experience the investigator found that people have inadequate knowledge and majority were unaware of practice on preventive measures of dengue fever,

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## 1. Introduction

This disease is mainly affect to the children below 15 years of age The incidence rate among local residents was highest in the 15-24 year age group with a male to female ratio of 1.6:1. Most infections in children are subclinical whereas infections in adults are more likely to be symptomatic Over the past 10 to 15 years next to diarrheal disease and acute respiratory disease dengue fever has become a leading cause of hospitalization and deaths among children in South East Asia region.<sup>1</sup> The estimated number of annual dengue fever cases is between 20 to 30 million and Dengue hemorrhagic cases are about 2, 00,000.

The main factors for breeding of the mosquito are due to unhygienic practices and poor environmental sanitation. Mosquito mainly breeds in open drainages, stagnant water around houses and uncleaned water reservoirs.<sup>2</sup>

In India, the first epidemic of clinical dengue-like illness was recorded in Madras (now Chennai) in 1780 and the first virologically proved epidemic of dengue fever (DF) occurred in Calcutta (now Kolkata) and Eastern Coast of India in 1963-1964

By using mosquito net, repellent, cream and covering whole body parts can prevent from mosquito bite. By cleaning or removing breeding places like utensils, periodical cleaning or drying of water containers etc. can prevent breeding of mosquitoes.<sup>3</sup>

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## 2. Need For Study

The term “dengue” is a Spanish attempt at the Swahili phrase “Ki dengapepo” meaning “cramp like seizure caused by an evil spirit”. Dengue is a mosquito born infectious disease that has become a major public health concern found in most tropical and subtropical areas of the world. Dengue fever is now believed to be a most common vector born disease in the world.<sup>4</sup> The number of dengue cases reported to WHO increased over 8 fold over the last two decades, from 505,430 cases in 2000, to over 2.4 million in 2010, and 5.2 million in 2019. Reported deaths between the year 2000 and 2015 increased from 960 to 4032.

Now it has become one of the endemic diseases in more than 112 countries.

In the absence of specific treatment and vaccine for dengue fever, only a vector control is an important measure to control of dengue infection.<sup>5</sup> And also there is a need to develop a vaccination on comparison with other communicable disease, which has become challenge for researchers, and there is a need to educate the community in regard of prevention and control with view to reduce the burden on society and Health Care Delivery System (HCDS).

A study conducted in the city of West Bengal on community perception of dengue in slum area of metropolitan city reveals that; around 161 participants were interviewed through structured knowledge questionnaires. Only 68.9% had knowledge as fever is a main symptom of dengue fever. Majorities (83.3%) of respondents were unaware of mode of transmission of disease and 69.9% were unaware about prevention of dengue fever. The levels of awareness are significantly high among literates. Study also reveals that compare with high socio-economic people, low socio-economic people have less knowledge on dengue fever and it's prevention. Nearly 60.9% were unaware regarding breeding places of mosquitos.<sup>6</sup> So overall study reveals that there should be provision of specific intervention like information, communication and education to be provided for urban slum community on prevention of dengue fever and dengue hemorrhagic fever.

In India around 20 million cases get infected annually. According to 2019 census incidence of dengue fever cases are as follows, in, Rajasthan-13706 with 17 deaths, Gujarat-18219 with 19 death, Chatisgarh-722, Mahatashtra-14907 with 29 deaths, and Andrapradesh-377 cases, Madhya Pradesh-4189 with 2 deaths.<sup>7</sup>

The research study was conducted among the residents after dengue epidemic with a view to assess knowledge attitude and practice related to dengue in rural area of East Delhi. Total of 687 subjects were interviewed through structured questionnaires (334 rural and 353 urban). Nearly 82.3% participants were unaware of dengue in that 92% urban and 83% rural were explained fever as a common symptom, 89% urban and 71% rural people expressed

headache and bleeding are symptoms of dengue and mosquito is a main factor for spreading of disease. Some of respondents (i.e. 2/3<sup>rd</sup> of urban and 2/5<sup>th</sup> of rural) expressed that they had used some methods for control of mosquitoes. Overall it reveals that compare with rural people, urban people had better knowledge on dengue fever and it's prevention.

A prevalence of 6.14% acute dengue virus infection was observed among children with febrile illness with a significant difference ( $p=0.0488$ ) between males (4.7%) and females (7.7%). In addition, children who reportedly were unprotected from vectors, showed a comparatively higher prevalence of the disease seropositivity than those practicing protective measures

So it insisted the investigator to assess the knowledge and practice of prevention of dengue fever among selected urban slum residents of Indore.

## 3. Objective

1. To assess the pre-intervention knowledge regarding Prevention of dengue fever among adult between 25-45year.
2. To assess the pre-intervention practice regarding Prevention of dengue fever among adult between 25-45year.

### 3.1. Hypothesis

H<sub>1</sub>: There will be significant difference between pretest and posttest knowledge score regarding prevention of dengue fever among adults of selected slums at 0.05 level of significance.

## 4. Materials and Methods

Methodology of research indicates the general pattern of organizing the procedure for gathering valid and reliable data for problems under investigation.

### 4.1. Research design

One group pretest posttest experimental design (pre-experimental research design).

### 4.2. Research approach

Evaluative research approach.

### 4.3. Setting

Study will be conducted at Khudel urban slum area of Indore.

### 4.4. Population

The population under the study includes residents of selected urban slum at Indore.

#### 4.5. Variables

1. Independent variable: Audio assisted module.
2. Dependent variable: Knowledge and practice on prevention of Dengue fever.
3. Demographic variable: Age, gender, educational status, type of family and economic status etc.

#### 5. Method of Data Collection

##### 5.1. Sampling procedure

Sample for study will be collected by convenient sampling method.

##### 5.2. Sample size

Sample size will be 500, urban slum area at Indore.

##### 5.3. Inclusion criteria

1. Residence of urban slum in Indore
2. Urban slum people who are willing to participate in study
3. Adult who are 25-45 years of age

##### 5.4. Exclusion criteria

1. Residence who are not there in the area at the time of study
2. Residents below 25years of age and above 45 year of age
3. Residents who are deaf and dumb

##### 5.5. Instruments to be used

1. Structured knowledge questionnaire
2. Structured practice check list
3. Video assisted module used for giving teaching programme

##### 5.6. Data collection method

1. Permission will be obtained from concern authority.
2. Purpose of the study will be explained to the subjects
3. Informed consent will be obtained from subjects
4. Data will be collected by check list, interview method

#### 6. Summary

Even though dengue fever has become one of the growing global health problem, where there is no proper preventive and control measure have been taken effectively. Data will be analyzed by using descriptive (mean, median, frequency, percentage and standard deviation) and inferential statistics (paired t- test, chi-square test) on the basis of objective and hypothesis.

#### 7. Source of Funding

None.

#### 8. Conflict of Interest

None.

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