



“A STUDY TO ASSESS THE IMPACT OF VIDEO ASSISTED MODULE ON KNOWLEDGE REGARDING PREVENTION OF DENGUE FEVER AMONG ADULTS OF SELECTED URBAN SLUM AREA AT INDORE M.P.”

Author : Mr. Prabhanshu Vyas, Professor, Index Nursing College, Indore

Abstract: “Health has evolved over the century as a concept from individual concern to a worldwide social goal and encompasses the whole quality of life. Today health is recognized as a fundamental right of human being”. The mosquito borne diseases cause more deaths than any other communicable diseases in India. The distribution of the samples as per their pre- interventional knowledge score. It has been analyzed that among 500 adults, most of the samples, 342(68.4%) had average knowledge regarding prevention of dengue fever. Secondly, it has been depicted that 145(29%) had poor level and only 13(2.6%) had good level of knowledge regarding prevention of dengue fever. The distribution of the samples according to the post- interventional knowledge score regarding prevention of dengue fever among the adults. It has been critically analyzed that among the 500 samples, majority of the samples, 245(49.0%) were in good category of the knowledge. It was followed by 183 (36.6%) had been in the excellent category. Further on, 70(14%) were found in the average category and only two (0.4%) were in the poor category level. It shows comparison between pre interventional and post- interventional Knowledge score. Pre interventional Knowledge score is Poor (0-7) 29%. Average (08-15) 68.4% Good (16-23) 2.6%.excellent (24-30) 0% after video assisted module Poor (0-7) 0.4%. Average (08-15) 14% Good (16-23) 49%.excellent (24-30) 36.6%. This data shows after video assisted module improved knowledge regarding prevention of dengue among adults. Hence, the video assisted module has been a good strategy to improve the cognition among the prevention of dengue fever among the adults.

INTRODUCTION

Mosquitoes are important vectors in the transmission of viruses and parasites from animal to animal, animal to person, or person to person without affecting the insect's vectors with symptoms of diseases.² The terms —dengue is a Spanish attempt at the Swahilli phrase —Ki dengapepol meaning —cramp-like seizure caused by an evil spirit.³Promotion of environmental sanitation, immunization and treatment of cases are the key strategies for the prevention and control of communicable diseases that are used effectively.³In recent times mosquito borne diseases continue to pose challenges due to diversity of sources and the need for constant behavioral change in eradication of such sources with community participation. Demographic change rates and the risk of dengue has important implications for the planning and implementation of effective public health prevention and control measures of future vaccination campaigns. Dengue is a mosquito-transmitted virus and the leading cause of arthropod-borne viral disease in the world. It is also known as break-bone fever due to the severity of muscle spasms and joint pain, dandy fever, or seven-day fever because of the usual duration of symptoms. Although most cases are asymptomatic, severe illness and death may occur. Aedes mosquitoes transmit the virus and are common in tropical and subtropical parts of the world.⁴

NEED FOR STUDY

Morbidity and mortality rate of dengue is higher in all over India and other country thus researcher felt that to assess and educate the people about practices and preventive method of dengue fever. Dengue viruses rapidly spreads worldwide, and genotypes associated with increased virulence. What is known, as well as gaps in knowledge, is emphasized in light of future prospects for control and prevention of this pandemic disease. The incidence of dengue has been growing dramatically around the world in recent decades. Approximately 2.5 billion people or 40% of population live in dengue risk regions with 100 million new cases each year worldwide. It is vital to recognize at the earliest signs and symptoms, alteration in biochemical parameters and multisystem involvement pattern in dengue to reduce the mortality.²⁶

STATEMENT OF PROBLEM

A study to assess the impact of video assisted module on knowledge regarding prevention of dengue fever among adults of selected urban slum areas at Indore M.P.

OBJECTIVES

- 1.To assess the pre-interventional knowledge regarding prevention of dengue fever among adults.
- 2.To assess the post-interventional knowledge regarding prevention of dengue fever among adults.
- 3.To assess the impact of video assisted module on knowledge regarding prevention of dengue fever among adults.
- 4.To find out the correlation between post test knowledge score regarding prevention of dengue fever among adults.
- 5.To find out the association between pre-interventional knowledge score regarding prevention of dengue fever among adults with the selected demographic variables

HYPOTHESIS

H₁: There will be significant difference between pre-interventional and post-interventional knowledge score regarding prevention of dengue fever among adults at $p \leq 0.05$ level of significance.

H₂: There will be significant correlation between post-interventional knowledge score and practice scores regarding prevention of dengue fever among adults at $p \leq 0.05$ level of significance.

H₃: There will be significant association of pre-interventional knowledge score regarding prevention of dengue fever among adults with selected demographic variables at $p \leq 0.05$ level of significance.

ASSUMPTION

- The Adults will have some knowledge regarding prevention of Dengue Fever prior to the administration of Video assisted module
- Video assisted module (VAM) about Dengue Fever may help adults to update their knowledge about dengue fever, its causes, symptoms, effects and its prevention.

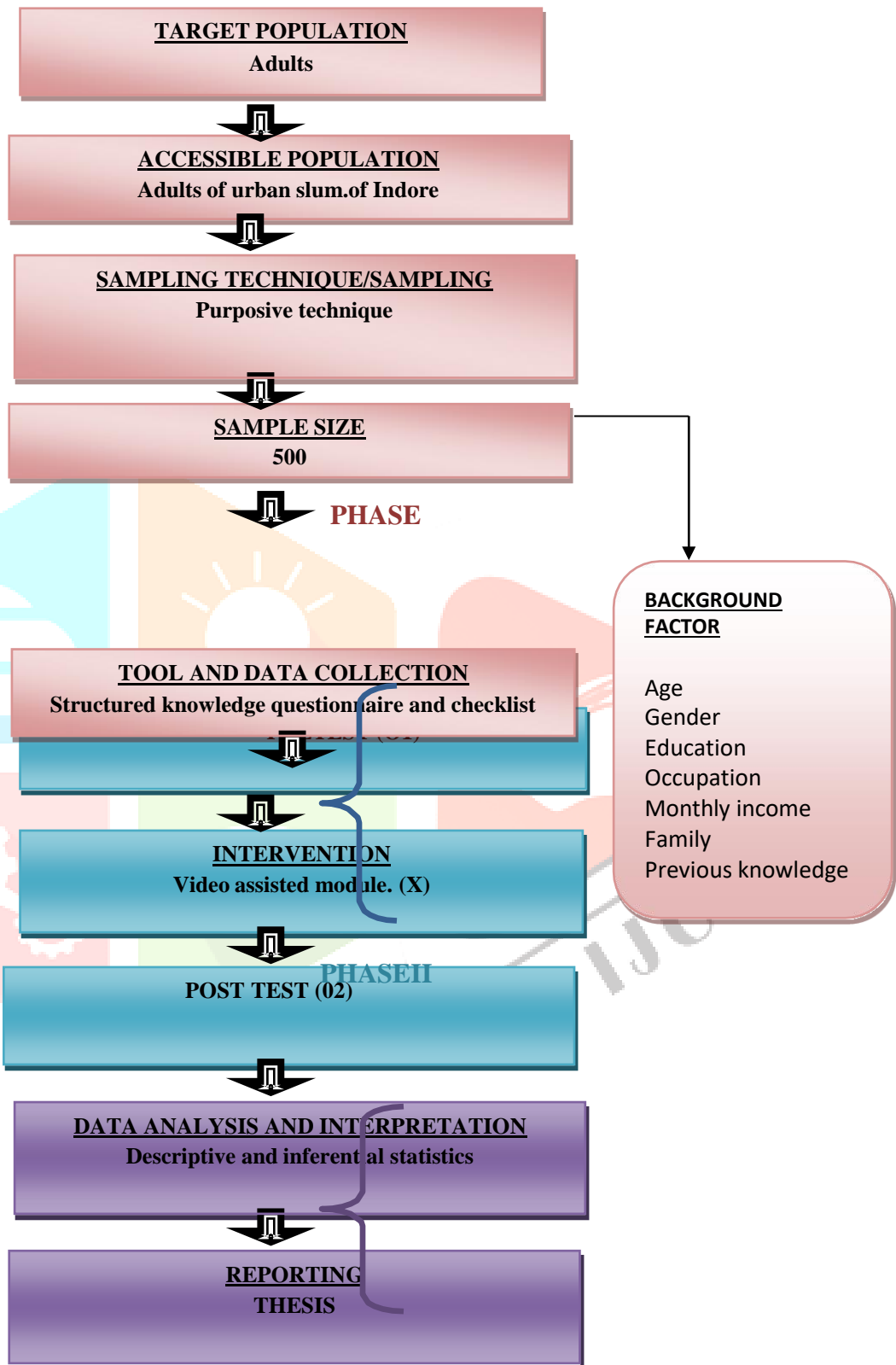
DELIMITATION

- The study will be delimited to urban slums.
- The data collection was limited to time period.

RESEARCH APPROACH

Research approach is a systematic, objective method of discovery with empirical evidence constant and varying only the phenomenon under the study, in this an Experimental research approach was used.

I



PHASE III

Figure No. 10: Schematic Representation of the Research Design

RESEARCH DESIGN

In this study a pre- experimental one group pre-test post-test design was used to observe the effectiveness of video assisted module among adults, regarding dengue fever. The pre - experimental design adopted for the present study was depicted in (figure 3.2)

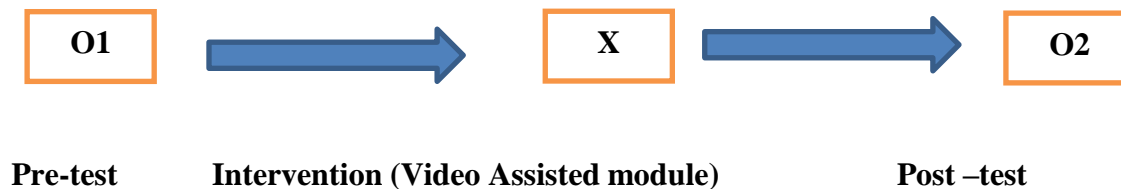


Figure 11: One Group Pretest, Posttest Design

THE SETTING

This study was conducted in Aathmil Panchayat Sidhibaroda urban slums of Indore.

SAMPLE

The samples are adults who are leaving in selected urban slum areas of Indore (M.P.).

SAMPLE SIZE

Sample size comprised of 500, adults of selected urban slum areas of Indore, those who fulfill the inclusion and exclusion criteria.

SAMPLING TECHNIQUE

Sampling refers to the process of selecting a portion of the population to represent the entire population. The investigator had utilized non-probability convenient sampling method to select the sample of the study.

SAMPLING CRITERIA Inclusion Criteria

- Adults residing in urban slum areas of Indore, M.P.
- Adults who are willing to participate in study
- Those who can read and write Hindi and English.

Exclusion Criteria

- Adult who are not willing to participate in the study.
- Adults who cannot read and write Hindi and English.

PILOT STUDY

The purpose of the pilot study was to find out the feasibility of the study, clarity of language in tool and finalize the plan for analysis.

The pilot study was conducted in Dudhiya Indore M.P. from **01-01-2021 to 20-01-2021**.

The written permission to conduct the study was obtained from the authority.

An informed consent was obtained from the respondents prior to the observations. The purpose of the study was explained to the subjects and confidentiality was assured to the entire subject. 50 adults were given the knowledge questionnaire to fill and they were observed for the practice of prevention of dengue fever.

The average time taken for filling the questionnaire was 10-15 minutes and followed by video assisted module regarding prevention of dengue fever.

The analysis of the pilot study revealed that objectives of the study could be fulfilled. Based on the information, the investigator proceeded with the actual data collection for the main study.

SECTION I: DISTRIBUTION OF ADULTS ACCORDING TO SOCIO DEMOGRAPHIC VARIABLES.

Table 4.1.1: Frequency and percentage distribution of adults according to sociodemographic variables

N= 500

Demographic variables	Frequency (N)	Percent (%)
Age		
21-25 years	110	22%
26-30 years	85	17%
31-35 years	145	29%
> 35 years	160	32%
Total	500	100%
Gender		
Male	475	95%

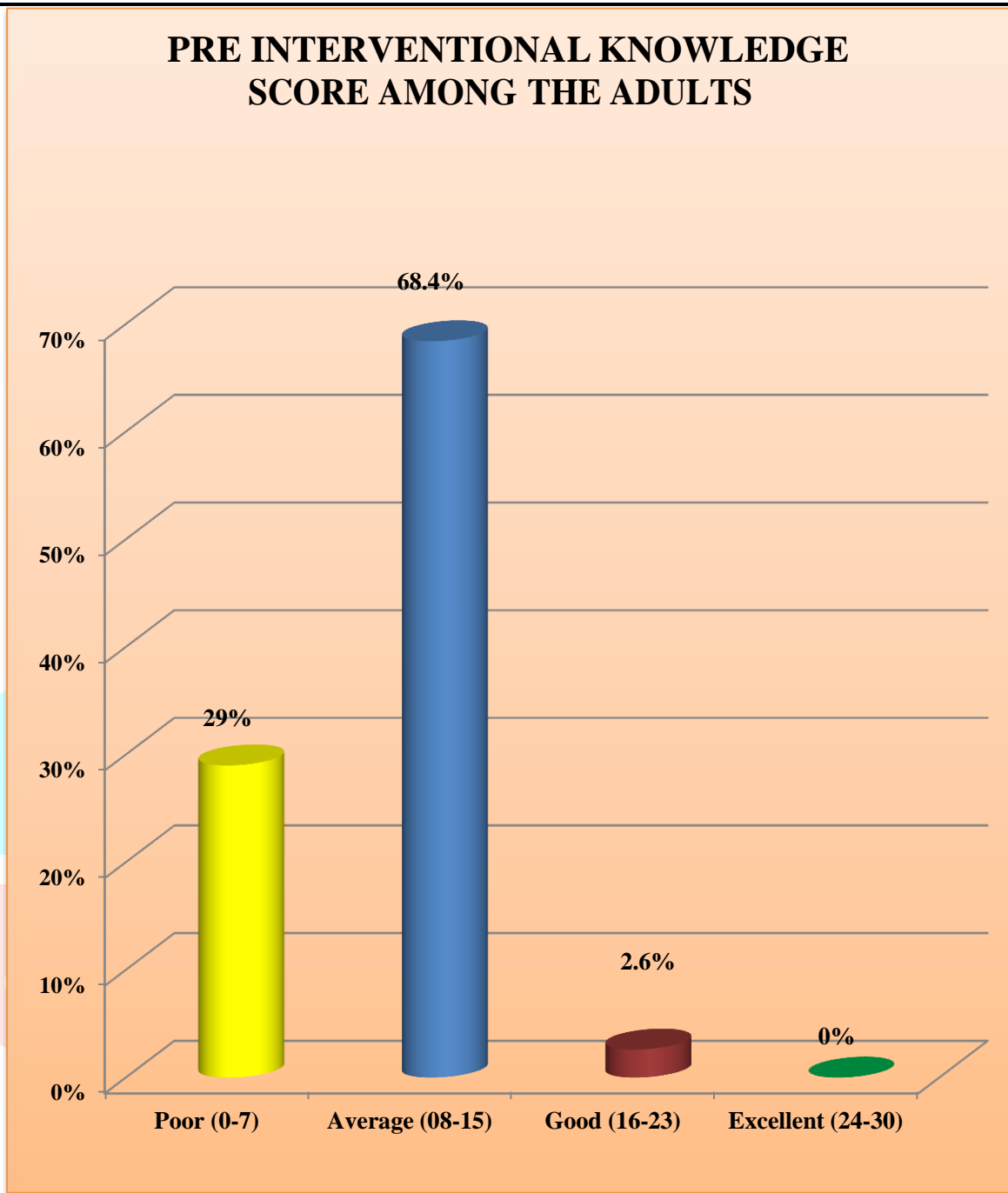
Female	25	5%
Total	500	100%
Educational Status		
Primary	120	24%
Secondary	200	40%
Graduate and post graduate	150	30%
Illiterate	30	06%
Total	500	100%
Occupation		
Private & government job	55	11%
Self employed	250	50%
Laborer	170	34%
Unemployed	25	5%
Total	500	100%
Monthly Income (in rupees)		
≤10000	5	1%
10000-15000	60	12%
15001-20000	65	13%
≥20001	370	74%
Total	500	100%
Type of family		
Joint Family	265	53%
Nuclear Family	220	44%
Extended Family	15	3%

Total	500	100%
Previous Sources of Knowledge		
Mass media and social media	258	51.6%
Health Professionals	21	4.2%
Family, friends & relatives	21	4.2%
Don't Know	200	40%
Total	500	100%

SECTION II: COMPARISON OF THE PRE- INTERVENTIONAL AND POST- INTERVENTIONAL KNOWLEDGE SCORE REGARDING PREVENTION OF DENGUE FEVER AMONG THE ADULTS.

Pre- interventional Knowledge Score Regarding Prevention of Dengue Fever among Adults.

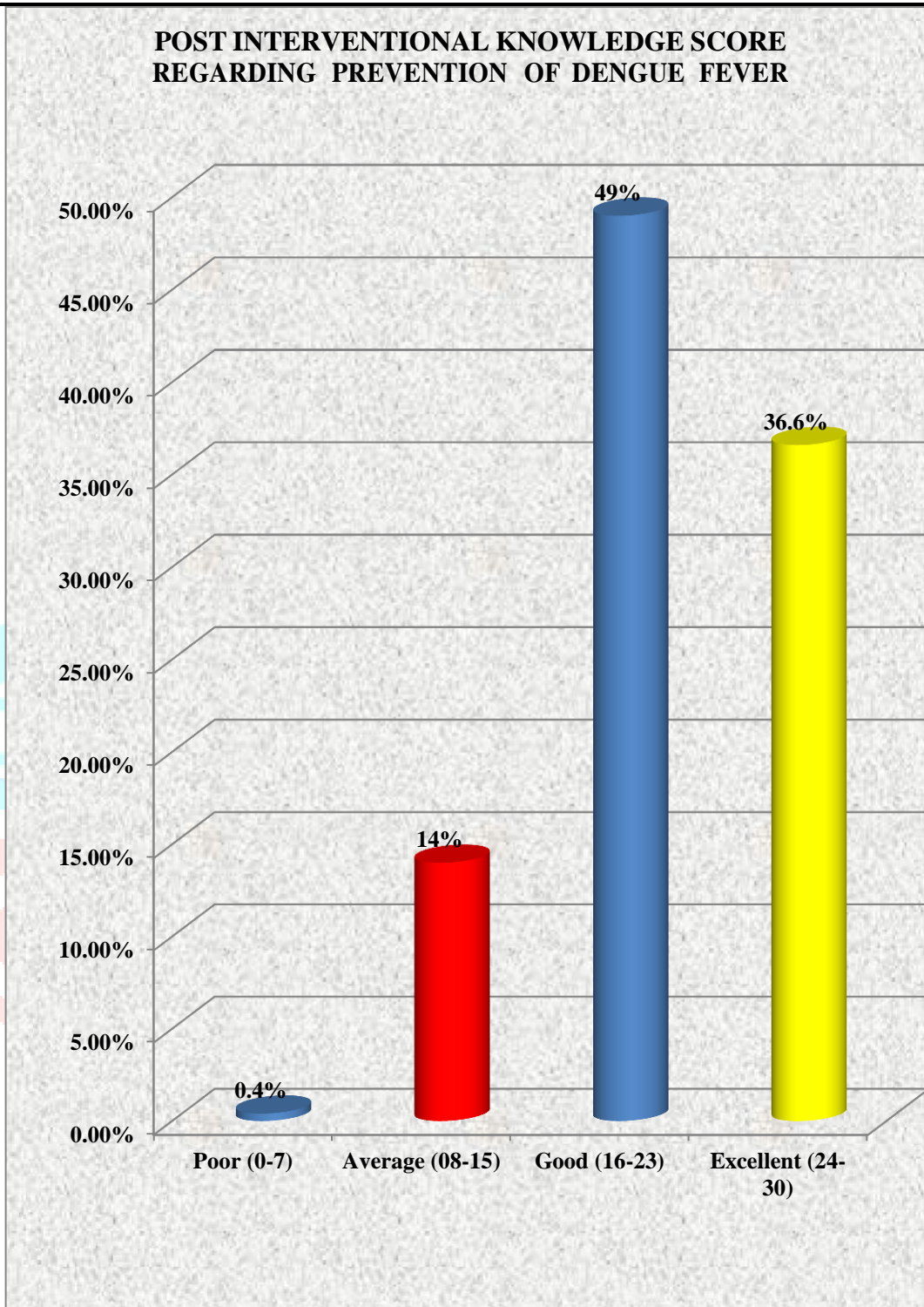
Level Of Knowledge	Pre- interventional Knowledge Score	
	Frequency	Percentage
Poor (0-7)	145	29%
Average (8-15)	342	68.4%
Good (16-23)	13	2.6%
Excellent (24-30)	0	0%
TOTAL	500	100%



Cone Diagram describing distribution of adults according to their pre-interventional knowledge score.

Post- interventional Knowledge Score Regarding Prevention of Dengue Fever Among Adults .

Level Of Knowledge	Post- interventional Knowledge Score	
	Frequency	Percentage
Poor (0-7)	2	0.4%
Average (8-15)	70	14%
Good (16-23)	245	49.0%
Excellent (24-30)	183	36.6%
TOTAL	500	100%

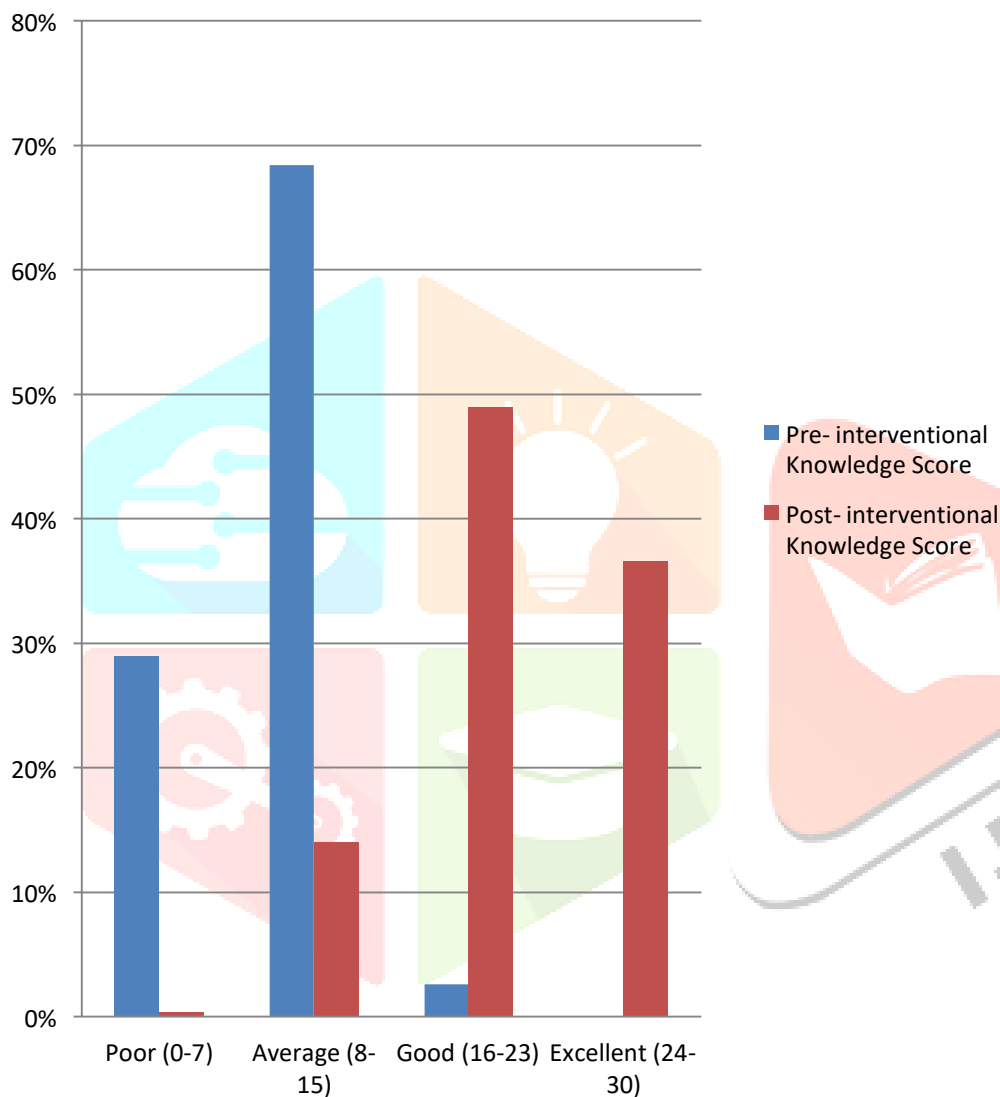


Cone Diagram describing distribution of adults according to their post-interventionalknowledge score.

Comparison between Pre- interventional And Post- interventional Knowledge Score Regarding Prevention of Dengue Fever Among the Adults.

Level Of Knowledge	Pre- interventional Knowledge Score		Post- interventional Knowledge Score	
	Frequency	Percentage	Frequency	Percentage
Poor (0-7)	145	29%	2	0.4%
Average (8-15)	342	68.4%	70	14%
Good (16-23)	13	02.6%	245	49%
Excellent (24-30)	0	0%	183	36.6%
TOTAL	500	100%	500	100%

COMPARISON OF PRE INTERVENTIONAL AND POST INTERVENTIONAL KNOWLEDGE SCORE

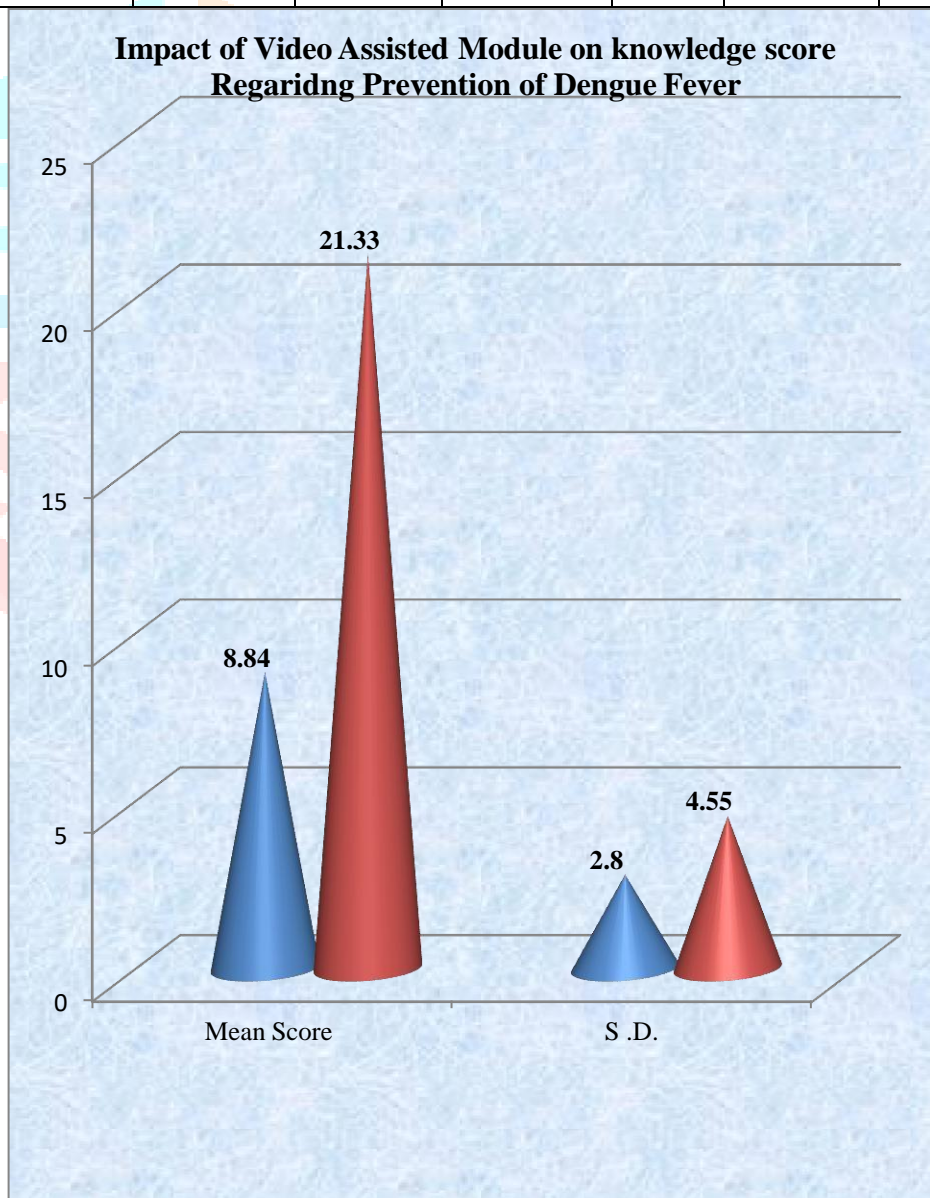


Bar Diagram describing distribution of adults according to their comparison between pre and post-interventional knowledge score.

EVALUATE THE IMPACT OF VIDEO ASSISTED MODULE ON KNOWLEDGE OF ADULTS REGARDING PREVENTION OF DENGUE FEVER.

Table no. 4.4.1 Impact of video assisted module on Knowledge Score and Practice Score.

Knowledge Score	Mean (\bar{X})	S.D. (s)	Mean Diff.	D. F.	t-value	Significance
KNOWLEDGE SCORE						
Pre-interventional	8.84	2.80	12.49	499	51.72 (t _{tab} =1.96)	Significant
Post-interventional	21.33	4.55				



Pyramidal Diagram describing effectiveness of video assisted module on knowledge score

CORRELATION BETWEEN POST INTERVENTIONAL KNOWLEDGE SCORES REGARDING PREVENTION OF DENGUE FEVER AMONG ADULT

Table no. 4.5.1 Correlation between post interventional knowledge scores.

S. No.	POST INTERVENTIONAL	MEAN	S.D	r
1.	Knowledge	21.33	4.55	+ 0.715
2.	Practice	6.42	2.42	

ASSOCIATION BETWEEN PRE-INTERVENTIONAL KNOWLEDGE SCORES WITH THEIR SELECTED DEMOGRAPHIC VARIABLE.

Particular	Pre-Interventional score						P	χ ² value
	Poor	Average	Good	Excellent	Total	Degree of Freedom		
Age								
21-25 years	31	73	6	0	110	6	0.2118	Significant
26-30 years	20	63	2	0	85			
31-35 years	41	103	1	0	145			
>35 years	53	103	4	0	160			
Total	145	342	13	0	500			

Gender								
Male	141	325	09	0	475	2	0.000053	19.708 Insignificant
Female	4	17	4	0	025			
Total	145	342	13	0	500			
Educational Status								
Primary	46	71	3	0	120	6	0.00001	38.45 significant
Secondary	28	168	4	0	200			
Graduate & post graduate	59	86	5	0	150			
Illiterate	12	17	1	0	30			
Total	145	342	13	0	500			
Occupation								
Private & government job	15	38	2	0	55	6	0.00001	273.194 significant
Self employed	64	179	7	0	250			
Laborer	48	119	3	0	170			
Unemployed	18	6	1	0	25			
Total	145	342	13	0	500			
Monthly Income								
≤10000	2	3	0	0	5	6	0.000452	24.342 Significant
10000-15000	25	33	2	0	60			

15001-20000	31	31	3	0	65			
≥20001	87	275	8	0	370			
Total	145	342	13	0	500			
Type of Family								
Joint Family	66	190	9	0	265	4	0.676 43	8.750 6 Insig nifica nt
Nuclear Family	72	145	3	0	220			
Extended Family	7	7	1	0	15			
Total	145	342	13	0	500			
Previous Knowledge								
Mass media & social media	78	175	5	0	258	6	0.379 1	6.407 Insig nificant
Health professionals	5	14	2	0	21			
Family, friends & relatives	8	13	0	0	21			
Don't Know	54	140	6	0	200			
Total	145	342	13	0	500			

SUMMARY

The analysis and interpretation of data collected to generate the possible solution of the research study. It mainly include the descriptive statistical analysis of demographic characteristics and the features of subjects, assessment of pre-test and post-test knowledge, effectiveness of video assisted module and associations of pre-test knowledge and practice with selected demographic variables were observed

BIBLIOGRAPHY

1. Baak-Baak CM, Cigarroa-Toledo N, Pech-May A, Cruz-Escalona GA, Cetina- Trejo RC, Tzuc-Dzul JC, Talavera-Aguilar LG, Flores-Ruiz S, Machain-Williams C, Torres-Chable OM, Blitvich BJ, Mendez-Galvan J, Garcia-Rejon JE. Entomological and virological surveillance for dengue virus in churches in Merida, Mexico. *Rev Inst Med Trop Sao Paulo*. 2019 Feb 14;61:e9. [PMC free article] [PubMed] [Reference list]
2. Sharma M, Glasner DR, Watkins H, Puerta-Guardo H, Kassa Y, Egan MA, Dean H, Harris E. Magnitude and Functionality of the NS1-Specific Antibody Response Elicited by a Live-Attenuated Tetravalent Dengue Vaccine Candidate. *J Infect Dis*. 2020 Mar 02;221(6):867-877. [PMC free article] [PubMed] [Reference list]
3. <https://www.indiatoday.in/information/story/how-to-identify-a-dengue-mosquito-1718502-2020-09-04>
4. <https://cdnsiencepub.com/doi/10.1139/cjm-2020-0572>
5. <https://www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue>
6. WHO (2009). *Dengue Guidelines for Diagnosis, Treatment, Prevention and Control* (PDF). Geneva: World Health Organization. ISBN 978-92-4-154787-1.
 1. Archived (PDF) from the original on 28 November 2009
7. <https://www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue>
8. <https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-021-06740-1>
9. <https://www.indiatoday.in/information/story/how-to-identify-a-dengue-mosquito-1718502-2020-09-04>
10. https://economictimes.indiatimes.com/news/india/india-reported-1-64-lakh-dengue-cases-during-2021-against-2-05-lakh-cases-in-2019-govt-to-rajya-abha/articleshow/88009894.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
11. <https://nvbdcp.gov.in/index4.php?lang=1&level=0&linkid=431&lid=3715>
12. Hari et al (2003), Knowledge Attitude Practices on dengue fever in kangardistrict.P-P: 12-13.