



## Effectiveness of Structured Teaching Programmed on Knowledge Regarding Chikangunya among BSC Nursing Students at Nootan College of Nursing, Visnagar

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### ABSTRACT

“Small bite, Big, Threat”- by who 2014

Chikangunya is a viral disease that could take over chronic symptoms. It has no specific treatment or vaccine to date to evaluate the effectiveness of structured teaching programme of knowledge reading Chikangunya among BSC nursing students at Nootan College of nursing, visnagar. The analysis of data was done by statistics the study identified that 40% had poor level of knowledge, 33.33% had average level of knowledge and 26.67% had adequate knowledge in the Post – Test. The study result presents that Pre- Test Mean value is 13.67 and SD is 6.55. Post- Test Mean value is 16.96 and SD 5.78. The Mean difference is 3.290. The calculated ‘T’ value is 2.069. Which is higher than the table value 1.69. The study conducted that level of knowledge regarding Chikangunya among BSC nursing students found to be increased after structured teaching programme and Post – Test among BSC Nursing student at Nootan college of nursing , Visnagar.

**KEYWORDS:** Chikangunya, Effectiveness, Knowledge, Structured Teaching Programmed.

### BACKGROUND OF STUDY

Chikungunya viral disease (CHIKV) is an arthropod – borne Arbovirus of the Alphavirus genus in the family Togaviridae. The acute phase of the disease could last up to weeks with fever >38.5°C, headache, back pain, itching and polyarthralgia. The most important clinical symptoms are fever and bilateral, painful mainly small peripheral joint of ankles, wrists and phalanges as well as large joints of the knees and the elbows beside inability to walk occasionally. In the absence of defined antiviral drugs and vaccine, treatment focuses on reducing the symptoms [1]. CHIKV infection in outbreaks had shown significant morbidity with severe disable and low mortality. Even though, the mortality of CHIKV infection could not be familiar if the crude mortality rates in epidemic are high giving up to poor inferential casual relationship[2]. The chronic phase of the disease may last till years with a 30-40% recurrence of polyarthralgia caused by an immune-mediated reaction in the joints. Atypical forms of Chikungunya disease are rare. Although, it might cause neonatal encephalitis by vertical transmission of the virus[3], uveitis, retinitis and other neurological and cardiovascular symptoms [3]. The disease is transmitted specifically by the vector- mosquito (Aedes Aegypti & Aedes Albopictus)[4]. It was first found in the 1950s at Tanzania. Since then, it re-emerged and widely spread to various geographical areas in Asia, Europe and the USA, the central and southern region of Africa[5]. The most current diagnosed outbreak of chikungunya disease occurred in May 2020, Visnagar in Gujarat state at northern part of county in India in the diagnosis & differentiations of the disease are extremely hard; it needs specific serology, polymerase chain reaction (PCR), ELISA and viral isolation. The reason is that it shares similar clinical symptoms of dengue and Zika viruses such as skin rash, fever and polyarthralgia and sometimes it co-exists as co-infection, both having high positive IgM [6]. However, and expensive to be followed in developing countries including India. The overspreading of the Aedes mosquitoes, lack of sanitation and public awareness in developing countries sensitize the emergence of outbreaks of arthropod – borne viral infection in the existence of overburden health system with other communicable diseases[7].



Various arbovirus infection normally exist in sub-saharanAfrica, where the chikungunya virus was the major infectious agent in the northern part of india. The CHIKV disease take place in sporadic as well as flared as epidemics. The knowledge about chikungunya disease in community people as well as among university health care students in some developing countries was discovered to be inadequate and insufficient [8,9]

**METHODOLOGY**

The Investigation Was Conducted At Nootan College Of Nursing Visnagar. The Study’s Research Design Is Pre-Test, Post-Test Pre-Experimental Design. The College And Sample Was Selected Using A Non-Probability Sampling Technique For This Trial 30.Bsc Students In Which 21 Girls And 9 Boys Were Chosen. And They Were Given 30 Multiple Choice Questionnaires To Assess The Knowledge Of Bsc Nursing Students Regarding Chikangunya. Pre-Test Were Done On The First Day Of Week To Assess Knowledge And Post-Test Were Done On Third Day Using Similar Multiple Choice Questionnaires. The Data Was Evaluated With Interstitial Statistics Like Mean, S.D, And The Chi-Square Test.

**RESULT**

**Table-1:** Sample sample frequency and percentage distribution based on demographic characteristics.

SR No.	Variable	Category	Frequency	Percentage
1	Age	18 year	02	0.66%
		19 year	05	16.17%
		20 year	06	20%
		21 year	17	56.67%
2	Sex	Male	09	30%
		Female	21	70%
3	Source	Newspaper	04	13.33%
		Internet	15	50%
		Television	07	23.33%
		Others	04	13.33%
4	Education	1 <sup>st</sup> year	02	6.66%
		2 <sup>nd</sup> year	04	13.33%
		3 <sup>rd</sup> year	06	20%
		4 <sup>th</sup> year	18	60%
5	Residence	Urban	16	53.33%
		Rural	14	46.67%

**Table-2:** Frequency and percentage distribution of pre-test and post-test level of knowledge among B.sc nursing students.

Level of Knowledge	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Poor (Score 1-10)	12	40%	04	13.33%
Average (Score 11-20)	10	33.33%	16	53.33%
Adequate (Score 21-30)	08	26.67%	10	33.33%

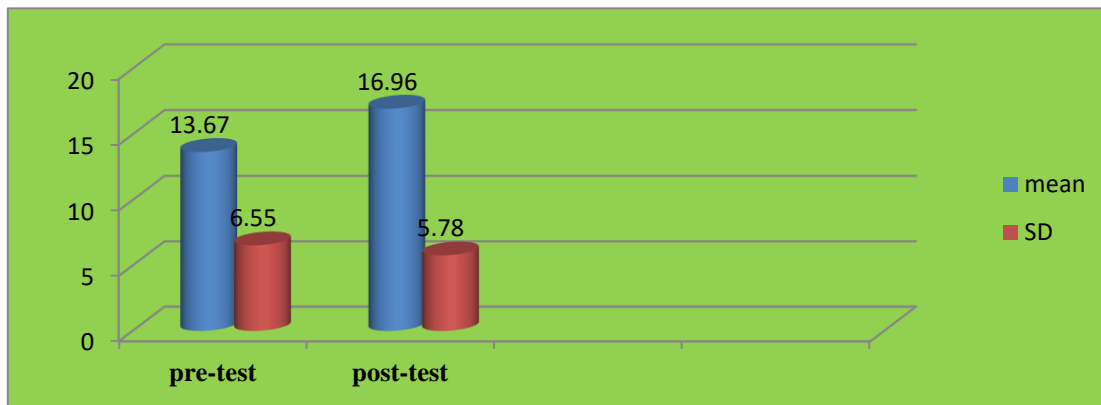
Table-2 presents that the frequency and percentage distribution of pre-test and post-test score of group depicts that in the pre-test 12 (40%) of students had poor knowledge, 10 (33.33%) of students had average knowledge and 08 (26.67%) of students had adequate knowledge. While, in post-test students who had poor knowledge 04 (13.33%), average knowledge 16 (53.33%) and adequate knowledge 10 (33.33%).



**Table-3.** Mean, SD, mean Difference and ‘t’ value of pre-test and post-test level of knowledge regarding Chikangunya among B.sc Nursing students.

Parameter	Mean	SD	MD	‘t’ value	‘t’table value	Level of Significant
Pre-test	13.67	6.55	3.290	2.069	1.69	0.043
Post-test	16.96	5.78				

Table-3 depicts that pre-test scores on the level of knowledge among B.scNursing student. In Pre-test mean score is 13.67 (SD 6.55) and post-test mean score is 16.96 (SD 5.78). The ‘t’ value was 2.069. When compared to the table value. (1.69 ) it was high. This depicts that there is a significant (at P<0.05 level) difference between pre-test and post-test scores on the level of awareness regarding Chikangunya among B.sc Nursing Students.



**Table-4:** The relationship between post-test level of comprehension regarding chikangunya and selected demographic characteristics among B.sc nursing students.

Sr. No.	Variable	Category	Frequency	Level of knowledge			DF	Table Value	Chi square	Significant >0.05 level
				Poor	Average	Adequate				
1	Age	18 year	02	01	00	01	6	12.542	19.84	0.002 S
		19 year	05	02	03	00				
		20 year	06	01	00	05				
		21 year	17	00	13	04				
2	Sex	Male	09	02	05	02	2	5.991	1.25	0.54 NS
		Female	21	02	11	08				
3	Source	Newspaper	04	01	03	00	6	12.542	11.79	0.06 NS
		Internet	15	00	09	06				
		Television	07	01	02	04				
		Others	04	02	02	00				
4	Education	1 <sup>st</sup> year	02	01	01	00	6	12.542	21.25	0.001 S
		2 <sup>nd</sup> year	04	01	00	03				
		3 <sup>rd</sup> year	06	02	00	04				
		4 <sup>th</sup> year	18	00	15	03				
5	Residence	Urban	16	01	07	08	2	5.991	4.74	0.09 NS
		Rural	14	03	09	02				



## DISCUSSION

The result of this study have been discussed with reference to the objective. The pre-test knowledge score was comparatively lower than the post test knowledge score which had augmented crucially after administer of structured teaching programme in bsc nursing students at Nootan college of nursing regarding chikangunya. The teaching of infectious disease in the classroom only, it is less effective. The detachment of medical and paramedical students by field work which could impact on knowledge of health care students. Handing over the knowledge and skills of central of infectious disease to medical students would be augmented if it is executed at field level under the supervision of health care professionals[10].

## CONCLUSION

**Bsc nursing** students at Nootan college of nursing heard about CHIKV disease but were having average knowledge about the general information of the disease. but after structured teaching programme their knowledge were multiplied from poor to adequate. finally, it concluded that knowledge regarding chikangunya among bsc nursing students was increased in post- test as compared to pre-test.

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