



## EFFECTIVENESS OF NURSE LED INTERVENTION ON KNOWLEDGE REGARDING PREVENTION FROM NIPAH VIRUS AMONG B.Sc. NURSING 4<sup>TH</sup> YEAR STUDENTS

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**ABSTRACT** Nipah virus is communicable disease that transmits via person-to-person direct contact and regularly reported in Bangladesh and India. This is most commonly seen in the family and caregivers of Nipah virus-infected patients. A quantitative pre-experimental experimental study was conducted to evaluate the effectiveness of Nurse Led Intervention on knowledge regarding prevention from nipah virus, 80 B.Sc. Nursing 4<sup>th</sup> year students were selected as sample by using non probability purposive sampling technique. Data was collected through structured knowledge questionnaire before and after administration of Nurse led Intervention in form of structured teaching programme. Results showed the mean pre interventional knowledge is 3.63 (SD±2.28) and post interventional knowledge 9.26 (SD ±3.83), hence the null hypothesis  $H_{01}$  is rejected, hence the research hypothesis  $H_{A1}$  is accepted that states the mean post-interventional knowledge is higher than the mean pre-interventional knowledge regarding prevention from nipah virus among B.Sc. Nursing 4<sup>th</sup> year students at selected nursing college, Indore and paired t test value 13.82 (df=79) reveals that nurse led intervention is highly effective to increase the knowledge in organized manner.

**KEYWORDS** : Nurse led intervention, prevention from nipah virus, B.Sc. Nursing 4<sup>th</sup> year students.

### INTRODUCTION

Nipah virus (NiV) is a member of the family Paramyxoviridae, genus Henipavirus. Nipah virus was initially isolated and identified in 1999 during an outbreak of encephalitis and respiratory illness among pig farmers and people with close contact with pigs in Malaysia and Singapore. Nipah virus transmits via person-to-person direct contact and regularly reported in Bangladesh and India. This is most commonly seen in the family and caregivers of Nipah virus-infected patients. Transmission also occurs from direct exposure to infected bats or consumption of raw date palm sap contaminated with infectious bat excretions.

### NEED FOR THE STUDY

An outbreak of encephalitis in Meherpur, Bangladesh, occurred in 2001 but was not 78 investigated until 2003 when another cluster of febrile illnesses with neurologic features and eight 79 reported deaths occurred in adjoining villages in Naogaon District, 150 km from the village in 80 Meherpur District. Similarities in the clinical manifestations observed among patients in Naogaon and 81 Meherpur raised the question of whether the outbreaks were caused by the same agent. 82 During January and February 2001, an outbreak of febrile illness associated with altered 83 sensorium was observed in Siliguri, West Bengal, India. Laboratory investigations at the time of the 84 outbreak did not identify any known infectious agent.

Nipah virus cases, including 17 deaths, were reported from Kerala State: 18 of the cases were laboratory-confirmed and the deceased index case was suspected to have Nipah virus but could not be tested. The outbreak was localized to two districts in Kerala State: Kozhikode and Malappuram. No new cases or deaths have been reported since 1 June 2018 and, as of 30 July, human-to-human transmission of Nipah virus has been contained in Kerala State.

As reported in the Disease Outbreak News published on 31 May 2018, three deaths due to Nipah virus infection were reported on 19 May from Kozhikode District, Kerala State. Three of the four reported deaths were confirmed positive for Nipah virus.

### RESEARCH STATEMENT

A Pre-experimental study to assess the effectiveness of Nurse Led Intervention on knowledge regarding prevention from nipah virus among B.Sc. Nursing 4<sup>th</sup> year students at selected nursing college, Indore.

### OBJECTIVES:

- To assess pre-interventional knowledge regarding prevention from nipah virus among B.Sc. Nursing 4<sup>th</sup> year students
- To assess the effectiveness of Nurse Led Intervention on knowledge regarding prevention from nipah virus among B.Sc. Nursing 4<sup>th</sup> year students

### HYPOTHESES

At the significance level of 0.05

$H_{0A}$ : There is no significance difference between the mean pre-interventional and the mean post-interventional knowledge regarding prevention from nipah virus among B.Sc. Nursing 4<sup>th</sup> year students at selected nursing college, Indore.

$H_{1A}$ : The mean post-interventional knowledge will be higher than the mean pre-interventional knowledge regarding prevention from nipah virus among B.Sc. Nursing 4<sup>th</sup> year students at selected nursing college, Indore.

### ASSUMPTIONS

- Nursing students are posted in hospital as well as in community, may help to raise awareness among people regarding prevention from nipah virus.
- Nursing students may have disorganized knowledge regarding prevention from nipah virus

### METHODOLOGY

A quantitative evaluative research approach was carried out to conduct pre-experimental one group pretest posttest design. 80 B.Sc. Nursing 4<sup>th</sup> year students were selected as sample by using non probability purposive sampling technique. Data was collected through structured knowledge questionnaire before and after administration of Nurse led Intervention in form of structured teaching programme and analyzed by descriptive and inferential statistics.

### FINDINGS

**Section-A:** Description of demographic characteristics of B.Sc. Nursing 4<sup>th</sup> year students

- Majority of B.Sc. Nursing 4<sup>th</sup> year students 50 (62.55%) belonged to 22-23 years of age group whereas 22 (27.5%) were in 20-21 years of age group, only 8 (10 %) belonged to 24 years and above age group.
- Most of the B.Sc. Nursing 4<sup>th</sup> year students 52 (65%) were female. And no one had previous knowledge regarding prevention from nipah virus.

**Section-B:** Pre-interventional knowledge regarding prevention from nipah virus among B.Sc. Nursing 4<sup>th</sup> year students

**Table 1.1: Frequency and percentage distribution of the pre-interventional knowledge of B.Sc. Nursing 4<sup>th</sup> year students**

Score	Grading	Pre-test		Mean	S.D.
		Frequency (f)	Percentage(%)		
0-7	Inadequate	76	95	3.53	
8-14	Moderately adequate	4	5		
15 & above	Adequate	0	0		

The above table shows majority of B.Sc. Nursing 4<sup>th</sup> year student 76 (95%) had inadequate knowledge between 0-7 knowledge score,

whereas 4 (5%) scored between 8-14 which was in the inadequate level of knowledge score; none of them had adequate level of knowledge ranging from 15 & above.

**Section-C:** Effectiveness of Nurse Led Intervention on knowledge regarding prevention from nipah virus among B.Sc. Nursing 4<sup>th</sup> year students

**Table 1.1: Comparison of pre-interventional knowledge & post-interventional knowledge of B.Sc. Nursing 4<sup>th</sup> year students**

Score	Grading	Pre – intervention		Post intervention	
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
0-7	Inadequate	76	95	21	26.25
8-14	Moderately adequate	4	5	46	57.5
15 & above	Adequate	0	0	13	16.25

**Table 1.3: Effectiveness of Nurse Led Intervention on knowledge regarding prevention from nipah virus among B.Sc. Nursing 4<sup>th</sup> year students**

Practice score	Pre-intervention	Post-intervention	Standard Error	Paired t-test
Mean	3.65	9.26	0.40	13.82
Standard deviation	2.28	3.83		

Above table 1.3 compares the mean pre interventional knowledge is 3.63 (SD±2.28) and post interventional knowledge 9.26 (SD ±3.83), hence the null hypothesis  $H_{01}$  is rejected, hence the research hypothesis  $H_{A1}$  is accepted that states the mean post-interventional knowledge is higher than the mean pre-interventional knowledge regarding prevention from nipah virus among B.Sc. Nursing 4<sup>th</sup> year students at selected nursing college, Indore and **paired t test value 13.82 (df=79)** reveals that nurse led intervention is highly effective to increase the knowledge in organized manner.

## CONCLUSION

The mean post-interventional knowledge is higher than the mean pre-interventional knowledge regarding prevention from nipah virus among B.Sc. Nursing 4<sup>th</sup> year students at selected nursing college, Indore

## REFERENCES

1. World Health Organization. Emergency preparedness and response. Nipah virus in India. 2018.
2. Chattu, Vijay K. Kumar, Raman. Kumary, Soosanna. Kajal, Fnu. David, Joseph K. 2018. Nipah virus epidemic in southern India and emphasizing "One Health" approach to ensure global health security. Journal of family medicine primary care. 7(2): 275–283
3. M.S., Parthana. 2018. Nipah virus in India: Past, Present and future. International Journal of Community Medicine and Public Health. 5 (9).
4. Lucey, Daniel R. Could have been much worse': India stops deadly Nipah outbreak. Infectious Disease News, September 2018.
5. National Centre for Disease Control. NIPAH Virus Guidelines. 2018.