

Effectiveness of Structured Teaching Programme on Knowledge Regarding Prevention of Nipah Virus Infection among Adults at Selected Setting, Chennai

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Abstract: A study to assess the effectiveness of Structured Teaching Programme on knowledge regarding NIPAH virus infection among adults in selected setting, Chennai. The objectives of the study were: a) to assess the knowledge regarding NIPAH virus infection among adults b) to assess the effectiveness of structured teaching programme on knowledge regarding NIPAH virus infection among adults c) to find out the association between the pretest knowledge regarding NIPAH virus infection among adults and selected demographic variables. A quantitative approach was used with one group pretest posttest research design. Non probability purposive sampling technique was used. Sample size was 30. The investigator assessed the knowledge of adolescents using structured questionnaire regarding NIPAH virus infection after taking informed consent from sample. After conducting the pretest, the researcher provided Structured Teaching Programme for a period of 30 minutes on the same day. After one week Posttest was conducted using the same research tool. The findings of the present study showed that Structured Teaching Programme was effective to increase the knowledge regarding NIPAH virus infection among adults.

Keywords: Effectiveness, Structured Teaching Programme, Knowledge, NIPAH virus infection, adults etc

1. Introduction

The Nipah virus (NiV) is a paramyxovirus that first appeared in Malaysia in 1998. Human NiV infection is most often characterized by fever, headache, dizziness, cough, and vomiting. The clinical presentations may vary from subclinical infections to acute pulmonary infection and encephalitis]. Fruit bats (*Pteropus* bat species) represent the natural host of the NiV, but pigs were the intermediate host in the NiV outbreak in Malaysia. From 2001–2014, a total of 33 outbreaks of NiV have been reported in both Bangladesh and India. Transmission of NiV may occur following direct contact with infected animals, consumption of fresh date palm sap contaminated by bats, or from other infected individuals].

Nipah virus disease (NVD) remains a re-emerging public health threat in India, with outbreaks in 2018 associated with high mortality, followed by an outbreak in June 2019 and an isolated case in September 2021. Newspaper and media reports indicate that NiV-related stigma in the community and among health care providers (HCP) was a major barrier to providing appropriate care and support and re-integrate survivors. Community concern is understandable considering that the case fatality rate in 2018 was 91%, with only two survivors. Currently, there is still no known cure for NVD apart from supportive care.

In order to counteract the ongoing public health burden of NVD, there is a need for ongoing surveillance outbreak response. The WHO research and development 2017 Blueprint included the NiV as a priority disease for rapid research and development; however, certain challenges unique to NiV make such education and awareness imperative. Keeping this view the investigator conducted a study to assess the effectiveness of structured teaching programme on knowledge regarding prevention of NIPAH virus among adults.

Statement of the problem

A study to assess the effectiveness of structured teaching programme on knowledge regarding prevention of NIPAH virus among adults at selected setting, Chennai.

2. Objectives

- To assess the pre test and post test knowledge regarding prevention of NIPAH virus among adults.
- To assess the effectiveness of structured teaching programme on knowledge regarding prevention of NIPAH virus infection among adults.
- To associate the post test knowledge regarding prevention of NIPAH virus with demographic variables among adults.

3. Methodology

The study was conducted in Palavakkam community area. Research design of this study is one group pre test and post test design. and non probability convenient sampling technique was used and sample consisted of 30 adults. The tool consisted of demographic variables, interview and structured questionnaire method. Data analysis and interpretation was done using inferential statistics. Informed consent was obtained from the study samples.

4. Result and Discussion

The study findings reveals that, the pre test mean value is 5.53 with S. D is 5.32 and post test value is 10.32 with S. D value is 12.21, it shows that there is a significance difference between pre test post test knowledge regarding Nipah virus among adults and there is a significant association between the level of post test knowledge regarding nipah virus with age group, gender, religion, Education, marital status, types of family, occupation, income & previous knowledge

regarding NIPAH virus at 0.05% level of significance. The study findings were supported by Poornima Mary Rodriguez., 2022 conducted a study on Effectiveness of level of knowledge on nipah virus infection among women and the study findings show that the calculated "t" value is 35.14 which is greater than the tabulated value 3.160 significant at $p < 0.05$ level respectively.

Nursing Implications:

- 1) Nurses in all settings should provide the basic health education programme on Nipah virus
- 2) It helps the health care professionals to gain awareness into the problems faced by adults and knowledge regarding disease
- 3) Nursing professionals may arrange regular awareness campaigns to spread the awareness regarding role of patient with Nipah virus
- 4) Nursing professionals give guidance and counselling on food hygiene to the students.
- 5) Nursing professionals may motivate the teachers to educate their students during school health programmes.

Nursing Education:

- 1) For nurse educator, there are abundant opportunities to educate the adults and general public regarding disease transmission and its prevention.
- 2) This study stresses the need for in - service education for the adults in order to provide education on hygiene.
- 3) The nurse educator should take initiation in conducting community based education programme on hygiene and prevention of diseases.

Nursing Administration:

- 1) The nursing administrator may take part in developing protocols, preparing posters and flash cards on hygienic practices in designing the health education programmes and strategies.
- 2) The nursing administrator may arrange awareness programme by nursing professionals who have obtained in - service education especially in the hygiene and infection control.
- 3) The nurse administrators should explore and encourage innovative ideas in the preparation of an appropriate teaching material.
- 4) The nurse administrator should organize sufficient manpower and material for disseminating information regarding hygiene during community visits.
- 5) The nurse administrator should take initiation in organizing and conducting classes for adults on Nipah virus.

Nursing Research

- 1) This study helps nurse researchers to conduct researches on other aspects of disease transmission.
- 2) Nurses should come forward to take up unsolved questions in the field of hygiene and prevention of Nipah virus to carry out studies and publish them for the benefit of public and nursing fraternity. The public and private agencies should also encourage research in this field through materials and funds.

5. Recommendations

On the basis of the findings of the study following recommendations have been made:

- A similar study may be replicated on a large sample to generalize the findings.
- An experimental study may be undertaken with a control group for effective comparison of the result.
- A study may be conducted by including additional demographic variables.
- A comparative study may be conducted between rural and urban settings or between rich and poor socioeconomic status people or between men and women.
- Manuals, information booklets and self - instruction module may be developed in areas of food hygiene and food safety.
- A study may be carried out to evaluate the efficiency of various teaching strategies like pamphlets, leaflets and computer - assisted instruction on Nipah virus.

Ethical considerations

- Ethical committee approval was obtained
- Informed consent was obtained from study participants in language known to them after explaining the purpose of the study.
- Confidentiality was maintained

Conflict of interest: The authors have no conflict of interest to declare

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6. Conclusion

The study result reveals that, there was significant improvement in knowledge level of adults after providing structured teaching programme, hence the researcher concluded that implementing Standard Precautions (STP) is crucial for preventing the transmission of the Nipah virus among adults. The evidence suggests that adherence to STP, including proper hand hygiene, personal protective equipment, and isolation protocols, significantly contributes to reducing the risk of Nipah virus infection. Ongoing education and strict compliance with these measures are essential for effectively safeguarding adults against the spread of this virus.

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