EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON SWINE INFLUENZA AND ITS MANAGEMENT AMONG NURSING STUDENTS, MANGALORE, KARNATAKA, INDIA

Mr. SANDEEP K R[1] Mrs. DIVYA SHETTIGAR [1]Mrs. SANDHYA RANI B S[2], Mrs. SUMA J[2]

[1]Asso.Profesor, Department of Community Health Nursing,

Ganga Sheel School of Nursing,Bareilly,U.P.

[1]Medical Officer, Mediassist,Bengaluru

[2]Asst.Professor, Department of Medical Surgical Nursing,

GangaSheel School of Nursing,Bareilly,U.P.

ABSTRACT

Introduction: Swine influenza (H1N1) is the pandemic which threatened the entire world in 2009, which provided a major challenge to health services around the world . Flu pandemics is a natural event that occur from time to time. Pandemic swine influenza (H1N1) is a new type of influenza that is characterized by its rapid spread among humans all over the world since its emergence in April 2009. Nursing students have an important role in the prevention of swine influenza (H1N1) as they are more involved in the direct patient care. It is vital that nursing students should possess the knowledge on swine influenza to safeguard themselves from the spread of swine influenza.and its prevention.

Method: In this study cross sectional descriptive survey was used. Nursing students were selected through stratified random sampling. The data was collected using a pretested structured questionnaire. The Planned-teaching programme was administered at the end of the pre-test. The post-test was carried out after 7 days, using the same tool as the pre-test.The data was analysed using SPSS version 16 and the results expressed as proportions

Results: A total of 60 nursing students were included in the study. Analysis revealed that 88.3% of nursing students had average knowledge, 8.3% had average knowledge and 3.3% had good knowledge in pretest. Whereas, post-test revealed that 91.7% had gained very good knowledge, 8.3% of them gained good knowledge. The total mean percentage of pre-test knowledge score was 32.86% (9.1 ± 2.34) and the mean post-test knowledge score was 88.3% (23 ± 1.71) showing an effectiveness of 55.5% (13.9± 2.76). Significance of difference between pre-test and post-test was statistically tested by using paired 't' test and it was found very highly significant ($t=39.07$, $p<0.05$). The pre test knowledge score shows an association with age ($\chi2=12.34$) , education of mother ($\chi2=7.99$) and source of information of swine influenza ($\chi2=22.02$) at 0.05 level of significance

Conclusion: Researcher felt that awareness programmes regarding swine influenza and its management should be emphasized to improve the knowledge of health professionals

Key words: Effectiveness; swine influenza; management; planned teaching programme;
Nursing students

1. INTRODUCTION

Today the world stands on the threshold of new era in which hundreds of millions of people are at risk from some of the most terrible diseases. During the past 20 years , at least 30 new diseases have emerged to threaten the health of many people.[1] Following three global pandemics in the last 100 years and the recent swine influenza (H1N1) outbreaks on national and international scales is of vital importance.[2]

The changing pattern of disease in both developed & developing countries, the emergence of new problems emphasize the need of forward looking approaches in health planning & management.[1] Swine influenza (H1N1) is the pandemic which threatened the entire world in 2009 , which provided a major challenge to health services around the world.[2]

Influenza, commonly referred to as the flu, is an infectious disease caused by Ribo Nucleic Acid viruses of the family Orthomyxoviridae (the influenza viruses), that affects birds and mammals. The most common symptoms of the disease are chills, fever, sorethroat,musclepains,severeheadache, coughing,weakness/fatigue and general discomfort. Sore throat, fever and coughs are the most frequent symptoms. In more serious cases, influenza causes pneumonia, which can be fatal, particularly for the young and the elderly.[3]

Pandemic swine influenza (H1N1) is a new type of influenza that is characterized by its rapid spread among humans all over the world since its emergence in April 2009. Swine Influenza (H1N1) was first identified in United States during the year April 2009. It was previously known as swine flu but now has been renamed after the causative virus – H1N1 strain. Swine influenza A (H1N1) virus spreads mainly from person to person through coughing or sneezing of people with influenza. It has usually a short incubation period from 1 to 7 days.[4]

H1N1 influenza leads to complications like bronchitis , asthma (sometimes with status asthmaticus) ,acute exacerbations of chronic bronchitis, sinusitis or otitis, myocarditis and pericarditis , cerebral encephalopathy, encephalitis , seizures , toxic shock syndrome and secondary bacterial pneumonia. [4]

It is vital that nursing students should possess the knowledge on swine influenza to safeguard themselves from the spread. So The investigator felt that planned Teaching Programme would increase the knowledge of nursing students on prevention and management of pandemic influenza A /H1N1.

Objectives of the study

- To assess the pre-test knowledge score on swine influenza & its management among nursing students through knowledge questionnaire.
- To find the effectiveness of planned teaching programme on swine influenza & its management
- Find the association between pre-test knowledge score on swine influenza and its management among nursing students with selected demographic variables

2. MATERIALS AND METHODS

This cross sectional study was undertaken in Zulekha Nursing College , Mangalore with the approval from the Principal and Institution Ethical committee. The study consisted of 60 nursing students of 18-21yrs. Adolescents were selected by stratified random sampling. The participants were briefed about the nature of the study, consent was taken and a pre-tested structured questionnaire was administered to them. Data that recorded include general data comprised of age, gender, place of residence, educational status of father, educational status of mother, family income per month, and source of information about swine influenza. Then the researcher had administered Planned-teaching programme for the students. Post-test was conducted to know the effectiveness of planned-teaching programme.

3. RESULTS

Main findings are discussed under the following headings :

SECTION I : DESCRIPTION OF SAMPLE CHARACTERISTICS

Distribution of nursing students according to the demographic characteristic

- Majority 37% nursing students were in the age group of 19 years and 35% of nursing students were in the age group of 20 years.
- Distribution according to their gender reveals that 68% of nursing students were female and 32 % were male.
- Based on place of residence 82% of nursing students were belong to urban area and 18% rural.
- Distribution according to their father's education reveals that 54% of them had secondary education, 23% had primary education, 13% were post graduates & 10% graduates.

- Distribution in relation to their Mother's education reveals that 63% had secondary education, 15% had primary education and 13% were post graduates & 9% graduates.
- Depending on family monthly income 48% of nursing students had family income of Rs. 5000-10,000/- month, and 15% had a income of less than Rs. 3000/- month
- Distribution of nursing students according to Source of information reveals that 60% had information from massmedia, 22% from health professionals, 8% neighbours/friends and 10% had no information

SECTION II : SIGNIFICANCE OF DIFFERENCE BETWEEN PRE-TEST AND POST-TEST KNOWLEDGE SCORE

Table 1 : Distribution of pretest knowledge level among nursing students

N=60

Level of knowledge	**Max score**	**Pretest**		**Posttest**	
		N	%	n	%
Poor knowledge	0-6	5	8.3	**0**	0
Average knowledge	7-13	53	88.33	0	0
Good knowledge	14-20	2	3.3	5	8.3
Very good	Above 21	0	0	55	91.7

SECTION III : EFFECTIVENESS OF PLANNED TEACHING PROGRAMME

Table 2 : Mean, SD, Mean% of the knowledge scores in pre-test and post-test**.**

N=60

RESPONDENTS KNOWLEDGE LEVEL						**'t' Value**
Pretest		**Post-test**		**Effectiveness**		
Mean ±SD	Mean%	Mean ±SD	Mean%	Mean ±SD	Mean%	
9.1±2.34	32.86%	23±1.71	88.3%	13.9± 2.76	55.5%	39.07 **S**

't'59 = 2.06 P <0.001 **S**-Significance

SECTION IV : ASSOCIATION BETWEEN POSTTEST KNOWLEDGE SCORE AND SELECTED DEMOGRAPHIC VARIABLE.

N=60

Sl no	**Variables**	**Degree of freedom**	**Chi Square value**	**Result**
1	Age	3	12.34	S*
2	Gender	1	2.16	NS
3	Place of residence	1	2.67	NS
4	Education of father	3	4.15	NS
5	Education of mother	3	7.99	S*
6	Family Monthly income	3	7.25	NS
7	Source of information	3	22.02	S*

NS Not significant, S* significant, χ^2_1=3.84, χ^2_2=5.99, χ^2_3=7.82; p< 0.05

The above table shows results that there is significant association between age , education of mother , source of information regarding swine influenza and post test knowledge score.

4. DISCUSSION

Influenza (Flu) pandemics are caused by new influenza viruses that have recently adapted to humans and resemble major natural disasters both in terms of recurrence and magnitude. The most recent one is the infection of human being by novel Influenza A H1N1 virus that causes pandemic of swine flu in the world. It is very essential to educate the health professionals like nursing students on some preventive measures of swine influenza.

From the data analysis and findings of the study, it is concluded that there was a significant difference between the pretest and posttest knowledge scores of nursing students on swine influenza and its management. The mean knowledge score of nursing students during pre-test was 32.86% where as it was increased up to 88.3% during the post-test as an effectiveness of structured teaching programme. The difference assessed was 55.5%. Therefore the knowledge of the nursing students can be further improved by providing on-going teaching and health education programmes.

A significant increase in the post-test score was observed in the nursing students on the overall knowledge of swine influenza and its management. The mean post-test knowledge score was higher than the mean pre-test knowledge scores (t=39.07, p<0.05).It revealed that PTP was very effective in improving the knowledge level of the nursing students regarding swine influenza and its management.

The findings this study is consistent with the study conducted to evaluate the effectiveness of planned teaching programme in basic life support in terms of knowledge and skill of staff nurses of a selected hospital , Punjab , India .The data collected from 30 staff nurses revealed that the post test score was significantly higher then the pre test scores and was found that PTP is effective in increasing the knowledge and skill.[5]

Our study denoted that demographic variables like age ,education of mother and source of health information about swine influenza (χ2=12.34, 7.99 , 22.02) were significant at 0.05 level of significance.

The study findings were concordance with a study conducted in Rajasthan , India regarding public knowledge, attitude and behavioural changes during the Influenza A (H1N1) outbreak . Of 791 respondents, 83.1% had heard about Influenza A (H1N1), but 16.9% felt that they did not have enough information about the pandemic. Knowledge differed significantly according to gender, age groups, and educational status .[6]

The findings of the study revealed that there was significant increase in the posttest knowledge score after the administration of health teaching. The over-all mean knowledge comparison reveals that pre-test mean score was 9.1 and mean post-test score was 23. The significant difference was calculated by using student independent‘t’ test with a value of 39.07.

5. CONCLUSION

The present study has found that nursing students did not had very good knowledge on swine influenza & its managament. A significant number of students were unaware of preventive measures. Various awareness programmes for nursing students regarding new infectious diseases should be arranged by administrators with up to date knowledge, so that they can implement in their day to day life.

The limitations of this study included the absence of a comparative group, the small sample size.

6. Recommendations:

On the basis of findings of the study the following recommendations were made.

- A similar study can be replicated on a larger sample with different demographic characters.
- A similar study can be conducted using other strategies like SIM, VAT and pamphlets.
- An experimental study could be undertaken with control group.

References

1. K.park, Textbook of preventive and social medicine. 20th ed, Jabalpur: M/s Banarsidas Bhanot publishers;2009
2. Role od nurses in prevention. (online). Available form :URL:www.asm.org.
3. Swine influenza. (online) Available form:URL:http://www.cdc.gov/h1n1flu/cdcresponse.htm.
4. Swine influenza. (online) Available http:// en.wikipidia.org/wiki/.
5. Ruth Rekha. Planned health teaching and cardiopulmonary resuscitation. Nursing journal of India. 2009 Dec;58(12):243-246
6. Shivlingesh Krishnappa Kamate, Anil Agrawal, Harshvardhan Chaudhary, Karanprakash Singh, Prashant Mishra, Kailash Asawa. Public knowledge, attitude and behavioural changes in an Indian population during the Influenza A (H1N1) outbreak. J Infect Dev Ctries. 2010 Aug;4(1):07-14.