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Medicine

Effectiveness of structured teaching session on knowledge regarding swine flu among nursing students in Tirunelveli district of Tamilnadu

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ABSTRACT

Background: Swine flu an acute respiratory disease caused by Influenza A (H1N1) virus continues to be a serious threat in India. The knowledge of health care providers plays a vital role in controlling and preventing disease outbreaks.

Objective: The present study is designed to assess the existing knowledge and to assess the effectiveness of a structured teaching session in improving the knowledge regarding various aspects of swine flu among 190 nursing students in a selected medical college in Tirunelveli district of Tamilnadu during 2017.

Results: Regarding various aspects of swine flu studied, before teaching session, 77.3%, 85.3%, 65%, 19% and 22.1% were aware of mode of transmission, common symptoms, high risk groups, about the drug recommended for prophylaxis and treatment of swine flu. After the structured teaching session, 94.7%, 92.1%, 93.7%, 95.7% and 99.5% of students had improved knowledge on the above mentioned aspects.

KEYWORDS : Swine flu, nursing students, teaching session, effectiveness

Introduction:

Swine flu an acute respiratory disease is caused by a re-assorted virus named InfluenzaA (H1N1). The 2009 flu was a global outbreak caused by new strain of Influenza A virus (H1N1), identified first in Mexico which then had a rapid spread to neighbouring countries followed by WHO declared the outbreak as a pandemic[1]. In India during the period of 2009, 27,236 cases and 981 deaths were reported due to swine flu, in 2012, 5044 cases and 405 deaths were reported[2]and still it continues to be a serious threat to the country. Knowledge and actions of healthcare providers play a key role during the period of disease outbreaks. Proper sensitization of health care providers regarding the control and preventive measures of the disease is vital to control and prevent further outbreaks. In India, various studies have assessed the knowledge of school going children, medical and nursing students regarding swine flu[3-6] and few studies among them have evaluated the effectiveness of structured teaching sessions in improving the knowledge regarding swine flu[4-6]. There is paucity of evidence regarding the knowledge of swine flu among health care providers in this geographic region. So this study focused on assessing the current knowledge and effectiveness of a structured teaching session in improving the knowledge regarding swine flu among nursing students.

Objective: To assess the existing knowledge and to evaluate the effectiveness of a structured teaching programme on swine flu among nursing students in a selected medical college in Tirunelveli district of Tamilnadu during March 2017.

Materials and methods: This cross-sectional study was planned and conducted during March 2017 among 190 nursing students in a selected medical college in Tirunelveli district of Tamilnadu. The objective of the study was explained to all 190 nursing students of all the three years. Confidentiality was assured and written consent was obtained. All the 190 nursing students consented for the study and the questionnaire to assess the exiting knowledge was administered before the start of the structured teaching programme. A pre-designed, piloted questionnaire was used to collect data. The questionnaire was designed to assess the knowledge of nursing students regardingthe following aspects of swine flu, causative agent, mode of transmission, common symptoms, high risk groups and other preventive measures.

Questionnaire was self administered. Questionnaire were collected back after 15 minutes and a structured teaching session was conducted, which focused on causative agent, mode of transmission, symptoms, high risk groups, preventive measures and recommended medicines for prophylaxis and treatment of swine flu. Immediately after the teaching session, questionnaire containing the same set of questions used for pre-test were administered to all the participants. The collected data were entered in Microsoft excel sheet 2015 and analysed using IBM SPSS software version 21. Descriptive analysis was done and results were entered in percentages.

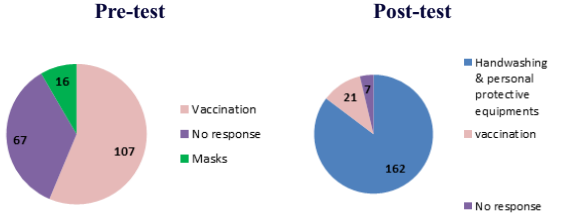
Results:

Among the 190 nursing students participated in the study, 125 belong to 18-20 years age group, followed by 65 belong to 21-23 years. Pre-test results revealed that 189 out of 190 students were aware of the term H1N1 and post-test it improved to 100%. Responses of the participants regarding the various aspects of swine flu in pre-test and post-test were as follows,

Table1.Responses of participants on various aspects of swine flu (n=190)

Aspects of swine flu Studied	Correct responses in Pre-test		Correct responses in Post-test	
	Number	Percentage	Number	Percentage
Causative agent	181	95.3%	190	100%
Mode of transmission	147	77.3%	180	94.7%
Common symptoms	162	85.3%	175	92.1%
High risk groups	123	65%	178	93.7%
Prophylactic drug for swine flu	36	19%	182	95.7%
Drug used for treatment of swine flu	42	22.1%	189	99.5%

Figure.1.Responses regarding preventive measures for swine flu among nursing students(n=190)



Before the awareness session, out of 190 students, 107 believed that vaccination as the only way to protect us from swine flu, but after the session, 162 students accepted hand washingand use of personal protective equipments as the one of the main preventive measure. Pre-test results revealed that 63 believed that vaccination provides lifelong protection against Influenza A – H1N1, but after the session, 189 were aware that vaccination gives only temporary protection.

Discussion:

This cross-sectional study was carried out in 190 nursing students in the age group of 18-20 years.The pre-test results of the study showed 99.5% of students were aware of the term H1N1and 95.3% were aware of the causative agent of swine flu as Influenza A H1N1 virus. Similar to this, study done by Nandhkumaret al[3] revealed 95.55% awareness regarding the term H1N1 and study by Vasavada et al [4] showed that majority of participants were aware of the causative agent.

In our study the insight regarding the mode of transmission as airborne, through close contact and through fomites[7] was 77.3% in pre-test and it

improved to 94.7% after the awareness session. Before the session 85.3% students believed the common symptoms of swine flu as fever, cough, sore throat. Similar to this, study by Vasavada et al[4] showed cough (81%), cold (93%) and fever (77%) were believed as the commonest symptoms of swine flu among the participants. In our study, awareness regarding the common symptoms improved to 92.1% after the session. During pre-test, out of 190, 123 (65%) were aware of two or more of the high risk groups as young children with pre disposing risk factors, pregnant mothers, old age, health workers, people with co-morbid conditions (heart disease, lung disease, liver disease, kidney disease, diabetes, blood disorders); people on long term steroid treatment and immuno-compromised[7]. After the session 178 (93.7%) were aware of all the high risk groups. Before the session, only 36 (19%) were aware of the prophylactic drug for swine flu as Oseltamivir which improved to 95.7% after the teaching session. Regarding the drug recommended for treatment of swine flu, 42 (22.1%) knew it was Oseltamivir[7] and after the session, 189 (99.5%) knew it.

In our study, pre-test results showedthat out of 190 students, 107 believed that vaccination as the only preventive method to protect from swine flu, but after the session, 162 students accepted hand washing and use of personal protective equipments as the one of the main preventive measure. Similar to this study by Vasavada et al[4], showed only 45% knew hand washing as a preventive measure.

Even though the present study failed to prove a statistical significance in the improvement in results observed between pre-test and post-test, increase in awareness and knowledge of nursing students on various aspects of swine flu was observed subjectively. Study by Pratibha Mane and Jyoti Sangwan[5] to assess the effectiveness of structured teaching session regarding swine flu among nursing staffs showed that at pre-test 18%,50% and 32% of participants had average, good andvery good overall knowledge and after the teaching session, it improved to nil, 20% and 80% ofaverage, good and very good overall knowledge. Another study by Sheetal Udaykar and Makarand Udaykar[6] proved the effectiveness of structured teaching sessions in improving the knowledge among students.

Conclusion:

Structured teaching programmes are essential to increase the awareness and to improve the knowledge of students and health care providers in various disease aspects. Integrated teaching and proper planning of these sessions can keep the students and health care providers updated in the needed aspects.

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