

Lack of Knowledge, Awareness among Gujarati Medical Undergraduates for Swine Flu Epidemic: A Boon to the Disease

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Abstract: Introduction: Human swine flu is a highly contagious respiratory disease caused by a new strain of influenza virus. knowledge of the precautionary behavior necessary, signs and symptoms, and treatment of this imminent threat. Objective: To study the knowledge, attitude and practice of medical undergraduates students regarding the swine flu epidemic. Method: The present study was a cross-sectional one and was conducted in the month of March-2017 among medical undergraduates. Results: A total of 332 undergraduate medical students participated in this study. 79% were confident that they knew about the H1N1 influenza and about 54% of the students recognized it as a major threat to their health. Media sources like the internet and newspapers were the major sources of information regarding swine flu for about 57% of students. Only 27% of students sought information from senior colleges or professors at the hospital. The symptoms of swine flu as enumerated by the students in descending order were—cough (67%). Around 57% of students know that a H1N1 vaccine is available but only 48% knew the effective drugs used for treatment, out of which only 16 % were aware of the mode of action and side effects produced by the drug. 40% of the medical undergraduates knew about the most prevalent strain of the disease. About 60% of students knew to wear a mask for protection. Around 55.2% know that a simple surgical mask is ineffective and even fewer- 30.2%, knew the amount of time a single mask would be able to protect against the infection Only 16% knew that throat swab needs to be taken for swine flu diagnosis and only 30% of the future prescribers knew the guidelines for management of swine flu according to different categories. Conclusion: With epidemics arising every few years, it is necessary to take steps to ensure that the undergraduates have a through and adequate knowledge. [Bhavi T NJIRM 2017; 8(5):37-40]

Key Words: swine flu, Gujarati Medium, Knowledge

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Introduction: Human swine flu is a highly contagious respiratory disease caused by a new strain of influenza virus. The virus becomes contagious from approximately one day before symptoms develop to about five to seven days after symptoms develop. However some patients may be contagious for a longer time. The disease itself lasts about three to seven days with more serious infections lasting for nine to ten days.¹

Human-to-human transmission of H1N1 flu occurs in the same way as seasonal flu occurs in people, which is mainly through coughing or sneezing of people infected with the influenza virus. People can become infected by inhaling the virus or touching surfaces which contain the virus and then touching their mouth or nose.²

The transmission can be halted by some precautions taken by people. The CDC recommends that people wash hands frequently with soap and water, cover your mouth and nose with a tissue when coughing or sneezing, and avoid touching your eyes, nose and mouth.³ Specific measures include vaccination,

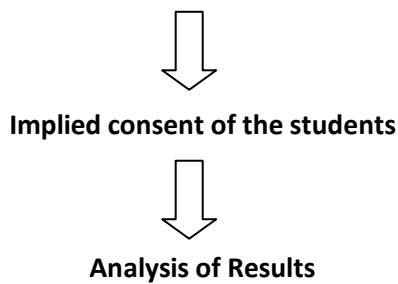
Oseltamivir (Tamiflu) prophylaxis, and the use of the N 95 respirator.

Symptoms of human swine flu include fever, cough, sore throat, body ache, headache, vomiting and diarrhea. In the past, the CDC received reports of approximately one human infected with the swine flu every one to two years, but over the last few years, these cases have been detected more frequently.⁴ Since December 2014, an outbreak of swine flu in India has killed more than 1,500 people.⁵ Although numerous studies have been reported on awareness of swine flu in the general community, no such study has been done on the undergraduate medical students. This becomes more important since undergraduate students have chances to be exposed to the virus during their routine clinical postings, especially in a developing country like India where transmission rates are high and the students often come without eating breakfast- rendering them susceptible to various infections. Hence they should have through knowledge of the precautionary behavior necessary, signs and symptoms, and treatment of this imminent threat.

Objective: To study the knowledge, attitude and practice of medical under graduates students regarding the swine flu epidemic.

Method: The present study was a cross-sectional one and was conducted in the month of March-2015 among medical undergraduates. A maximum of fifty percent of medical undergraduates of the college was covered because of feasibility and logistics. Since the study population comprised of medical students, answers related to questions on management of the disease and the drugs used were also asked.

Preparation of validated questionnaire pertaining to swine flu



Results:A total of 332 undergraduate medical students participated in this study. 79% were confident that they knew about the H1N1 influenza and about 54% of the students recognized it as a major threat to their health. Media sources like the internet and newspapers were the major sources of information regarding swine flu for about 57% of students. Only 27% of students sought information from senior colleges or professors at the hospital .The symptoms of swine flu as enumerated by the students in descending order were–cough (67%), fever (57%), headache (20.9%), body ache (20.2%), vomiting (13.4%), and diarrhea (15%). About 40% of students reported that swine flu can be transferred via inhalation and person to person contact.As far as questions pertaining to drug therapy, 40% of the students answered incorrectly and believed that antibiotics were used to combat the disease. Around 57% of students know that a H1N1 vaccine is available but only 48% knew the effective drugs used for treatment, out of which only 16 % were aware of the mode of action and side effects produced by the drug. 40% of the medical undergraduates knew about the most prevalent strain of the disease. About 60% of students knew to wear a mask for protection. Around 55.2% know that a simple surgical mask is ineffective and even fewer- 30.2%,knew the amount of time a

single mask would be able to protect against the infection Only 16% knew that throat swab needs to be taken for swine flu diagnosis and only 30% of the future prescribers knew the guidelines for management of swine flu according to different categories.(Refer to figure 1 to 4)

Figure1: Percentage of students’ perception for swine flu as major threat

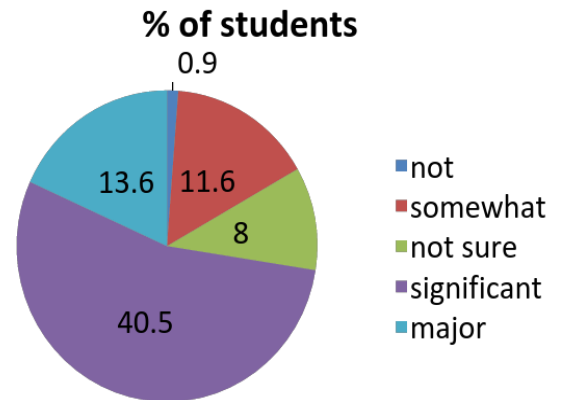


Figure 2: Knowledge of swine flu Extent of Knowledge regarding Swine Flu (%)

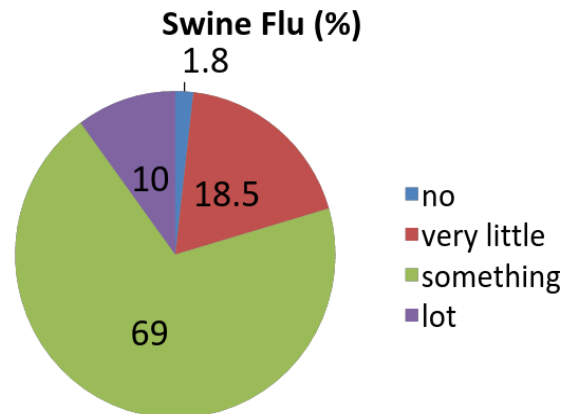


Figure 3: Semesterwise distribution of students Semesterwise Distribution of Students (%)

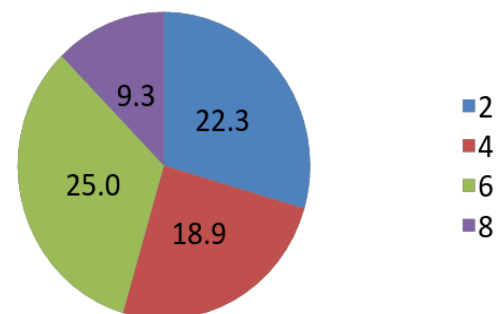
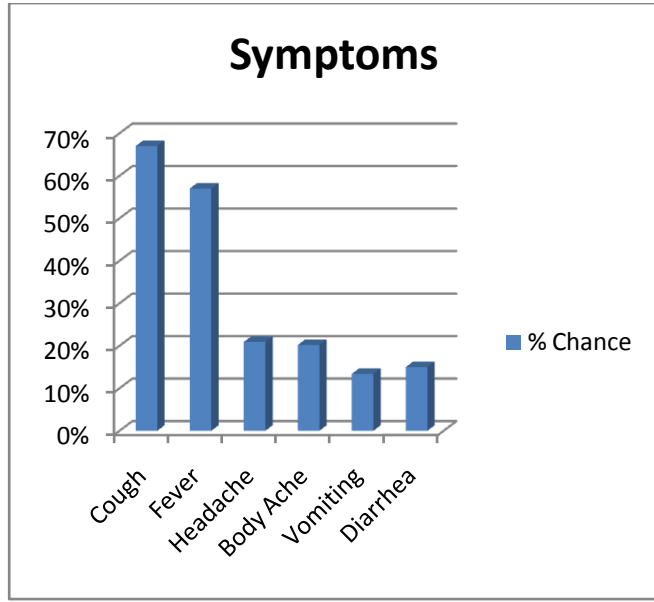


Figure 4: Reporting of symptoms by the medical students for swine flu

Discussion: A total of 332 undergraduate medical students participated in this study. Other study from shreen et.al 2014.⁶

In our study, 79% were confident that they knew about the H1N1 influenza and about 54% of the students recognized it as a major threat to their health. In another study done by shreen et.al 2014 reported 98.3% have heard about swine flu, in kerala study 85.20%, 88% in Punjab, 94% in Vadodara & 97% in Barielly.⁷⁻¹⁰

Media sources like the internet and newspapers were the major sources of information regarding swine flu for about 57% of students same will be reported by the study of shreen et.al 2014, study from Punjab, kerala reported almost similar finding.⁶⁻⁸

Only 27% of students sought information from senior colleges or professors at the hospital.

The symptoms of swine flu as enumerated by the students in descending order were—cough (67%), fever (57%), headache (20.9%), body ache (20.2%), vomiting (13.4%), and diarrhea (15%). Same finding was reported 60% by shreen et.al 2014.⁶ About 40% of students reported that swine flu can be transferred via inhalation and person to person contact. This suggested very low knowledge in our setup. As far as questions pertaining to drug therapy, 40% of the

students answered incorrectly and believed that antibiotics were used to combat the disease. Around 57% of students know that a H1N1 vaccine is available but only 48% knew the effective drugs used for treatment, out of which only 16% were aware of the mode of action and side effects produced by the drug. This finding was also equivalent to other previous studies. 40% of the medical undergraduates knew about the most prevalent strain of the disease.

About 60% of students knew to wear a mask for protection. This finding was low as compared to shreen et.al 2014.⁶ Around 55.2% know that a simple surgical mask is ineffective and even fewer—30.2%, knew the amount of time a single mask would be able to protect against the infection. This finding was similar to shreen et.al 2014, but was lower as compared to keralan study.⁶ Only 16% knew that throat swab needs to be taken for swine flu diagnosis and only 30% of the future prescribers knew the guidelines for management of swine flu according to different categories. This finding was low as compared to other studies.⁶⁻¹⁰

Conclusion: With epidemics arising every few years, it is necessary to take steps to ensure that the undergraduates have a thorough and adequate knowledge. The following is a proposal to achieve this goal.¹¹⁻¹⁷

1. Hold seminars in medical college by experts in the field. These lectures would be conducted for student in all semesters.
2. Small group discussions to address questions and misconceptions on a student to student basis
3. Engage students in bed side teaching.
4. The fourth and most important change should come from above— from the Medical Council of India. A government mandate to hold seminars during epidemics ensures, by law, that our future doctors have knowledge about a disease that is wreaking havoc through our country.

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