Swine flu pandemic- An awareness study in Bharatur city of Rajasthan.

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Swine flu caused by a strain of Influenza A virus H1N1 is an acute respiratory disease characterized by chills, fever, sore throat, muscle pains, severe headache, coughing, weakness, shortness of breath, and general discomfort.[1] An outbreak of H1N1 infection occured in Mexico in March 2009 which spread to all parts of the world in a very short period of time. WHO, in June 2009, raised its pandemic alert to Phase 6 which means that the disease had spread to more than two continents.[2] The Centre for Disease Control, USA estimated the death toll from swine flu at more than 284,000 cases worldwide. Severity of illness and fatality was more among healthy young adults.[3][4]

Direct transmission of a swine flu virus from pigs to humans is occasionally possible (zoonotic swine flu). All 50 cases of zoonotic swine flu known to have occurred since the first report in medical literature in 1958, have resulted in a total of six deaths.

Transmission of the disease is now human to human. Prevalence of the disease in India both in 2009 and 2010 shows that the disease peaked out in the months of August-September and November-December, 2009. The gender-wise distribution of cases has shown a male predominance [11].

Prompt action taken by the health authorities of Govt. Of India led to the containment of swine flu in the country. The infected persons were isolated, patients were categorized in A, B and C categories and treatment was given accordingly. Oseltamivir, commonly known as Tamiflu was the antiviral drug used. Laboratory testing by RTPCR method was undertaken for category C patients. Rest of the management was symptomatic. Mass awareness campaign regarding sign and symptoms and preventive measures was launched by the government.

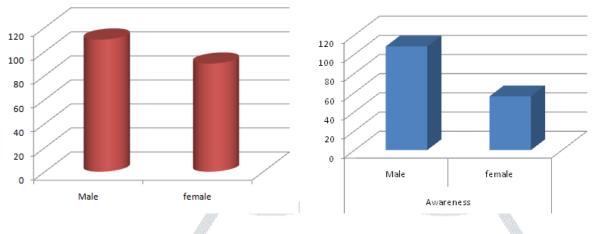
Material and Methods

A total of 200 persons from Bharatpur city of Rajasthan were surveyed to know about their awareness regarding swine flu. The study was conducted in November 2009. A questionnaire was prepared with simple questions and participants were interviewed personally. The questionnaire consisted age, sex, occupation, knowledge in awareness about the disease, clinical features and preventive measures.

A written consent was taken from all the participants who were interviewed. Complete anonymity was ensured to them, hence there were no refusals. The collected data was analysed and result concluded.

Results:

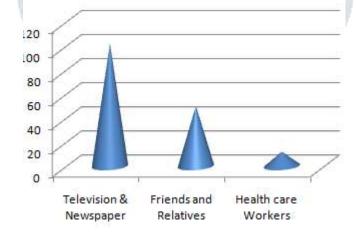
The study population consisted of 110 males and 90 females. Out of the 200 selected participants 82 percent i.e. 164 participants had previously heard about swine flu. Among the aware population 65.8% (108) were males and rest 56 were females.



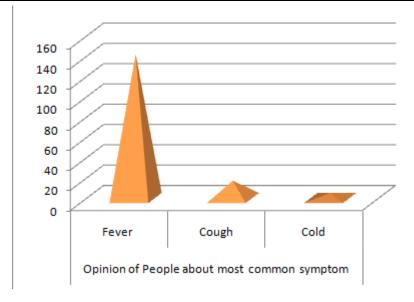
(Male-Female Participants)

Television, newspapers and pamphlets distributed by the administrative bodies were the main source of information to 62.2% (102) whereas 30.5% (50) participants came to know from their friends and relatives and only 7.3% (12) from health care workers.

Source of Information	No. Of Persons	Percentage
Television & Newspaper	102	62.2
Friends and Relatives	50	30.5
Health care Workers	12	7.3



The most common symptom of swine flu i.e. fever was known to 86.6% (142) persons while 10.3% (17) and 3.0% (5) of the participants knew about cough and cold as a symptom respectively.



4.3% (7) of the respondents were of the view that swine flu was spread by eating pork while 95.7% (157) of the respondents said that the disease was spread by inhalation of droplets and close contact with infected persons.

AA.

Reason of spread	Number of People	Percentage
Eating Pork	7	4.3
Contact with infected person	157	95.7

79.2% (103) people knew that the disease was curable and treatment was available for it while only 9.7% (16) of them had heard about the drug Tamiflu. 60.3% (99) of the participants were aware of free treatment and testing facilities by the government. Use of handkerchief and mask to prevent swine flu was known to 65.8% (108) participants.

Discussion:

The results of the present study depict a range of knowledge and attitudes concerning H1N1 influenza pandemic among a sample of urban population of Bharatpur city, Rajasthan.

In our study, 82% of the participants had previously heard about swine flu, which was greater in comparison to other studies made by Singh et.al. and Rathi et.al. [5][6] which may be due awareness and interest regarding health issues in our study population area. Present study constituted more of male participants, which were similar to a study done in Patiala [5] while female participants were more in a study done by Lin et.al. [10] of China. Media was the most common source of information in our study which was similar to other

studies done by Singh et.al., Farahat et.al. and Balkhy et.al. . [5],[7],[8] Health care providers as a source of information were very minimal as they were engaged in treatment and care of patients in hospitals. A regular training program needs to be designed and implemented peripheral health workers so as to make them competent and to update their knowledge regarding prevention from disease.

As found in other studies of Singh et.al. and Farahat et.al.[5][7], fever was the most common symptom known to most of the participants. In the present study 4.3% participants were of the opinion that eating pork causes swine flu. Similar finding was reported by K. Shilpa et.al.[4]. This is in contradiction to the study by Singh et.al. who reported it to be 40.6%. The study of Shilpa et.al[4]. reported 50.5% people knew about treatment of swine flu using drug Tamiflu which is in accordance with the present study. 65.8% participants considered hand washing as a preventive measure from swine flu in the present study. K.Shilpa et.al.[4] reported 92.4% following hand washing to prevent from the disease. This is concurred by findings of Balky et.al. and Kamate et.al[8][9].

Conclusion

This study conducted in Bharatpur city of Rajasthan showed that the knowledge regarding swine flu pandemic was moderate among voluntary participants. Fair number of them were aware about the mode of spread of disease, its treatment and preventive measures against the disease. Still trained health care workers should start door to door campaign to educate and motivate people to take proper precautions and visit nearby health care facility as and when the symptoms are seen.

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