A Study to Assess the Knowledge Regarding Swine Flu Among People Residing in Loni (Bk) Village, of Ahmednagar District

Mr. Swapnil Aher, Tutor, Dr. Vithalrao Vikhe Patil Foundation's Institute of Nursing Education, Ahmednagar - 414111

Corresponding Author : Mr. Swapnil Aher

Mail id : swapnilaher316@gmail.com

Mobile No.: 8888191391

Address : Dr. Vithalrao Vikhe Patil Foundation's Institute of Nursing Education, Ahmednagar-414111

Abstract :

Background : Swine flu influenza (H1N1) commonly known as Swine flu is a respiratory disease of pigs caused by type A influenza virus. Swine flu virus can be directly transmitted from pigs to humans and from humans to pigs. **(Fig. 1)** In India, till date 72,483 people have been tested for H1N1 in Government and a few private laboratories, among the tested 18.9% have found positive.[1] Given the seriousness of the situation and lack of any specific vaccine against Influenza A (H1N1), mitigation measures in the India have so far focused on identifying, treating, and isolating people who have the disease and educating the public about the steps that individuals can take to reduce the risk of transmission.[2] **Objective:** to Assess the knowledge regarding Swine Flu among people of rural area. **Methods :** Descriptive survey research design was used for assessing the knowledge of Swine flu among people residing in Lomeshwarnagar, Loni (Bk) village. The sample size was 100 rural people, who fulfilled the inclusion criteria. Non- Probability method, purposive sampling technique was used. **Results :** The 46% of the study population received the information from television and radio. The overall mean knowledge score was 13.19 ± 3.0. **Conclusion :** This study findings reveal that patients have average knowledge on Swine flu, so medical & paramedical professionals should focused more on Swine flu prevention and offer effective rehabilitative service for infected one.

Keyword : Swine flu, H1N1, InfluenzaA

Introduction : Swine flu : another pandemic knocking at the door? Swine flu is a highly contagious disease, that spreads quickly from person to person through air by infected mucus / saliva particles, generated in the act of coughing, sneezing or by touching contaminated objects. Direct contact occurs when people come in contact with the secretion of the sick person. Indirect contact occurs when people come in contact with contaminated surfaces and objects.[1]

The symptoms of H1N1 flu virus includes high-grade fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills, lethargy, lack of appetite, fatigue and some may have vomiting and diarrhea and in severe illness patient may succumb to death **(Fig.2)**

The 2009 flu pandemic was a global outbreak of a new strain of influenza A virus (H1N1), identified in April 2009 and commonly referred to as 'Swine flu'. According to World Health Organization (WHO) about 52,160 laboratory confirmed cases of Swine flu have been reported from 99 countries till June 25.[2]

Maharashtra has the highest number of death from Swine flu pandemic, has a death toll that has gone up to 220, the highest number of death is from Pune. According to health officials of Karnataka total number of positive cases are 793, and the death toll reached to 69, maximum numbers are from Bengaluru. The WHO has raised pandemic alert to the highest level, while developed countries are better prepared to mitigate the effect of the pandemic than developing countries.[3]

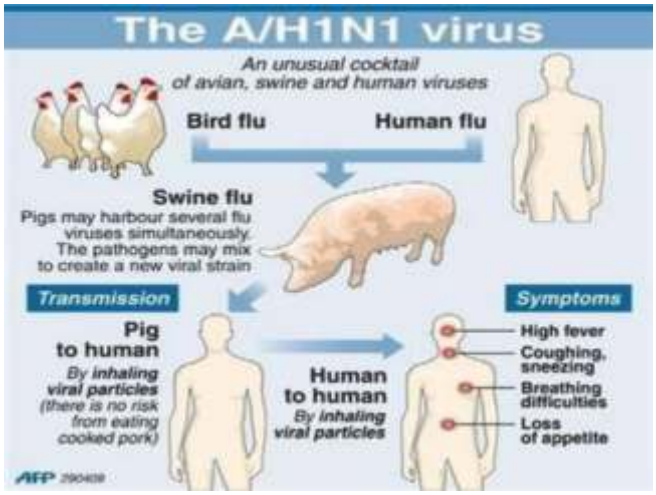

Fig.1 : Swine Flue Transmission

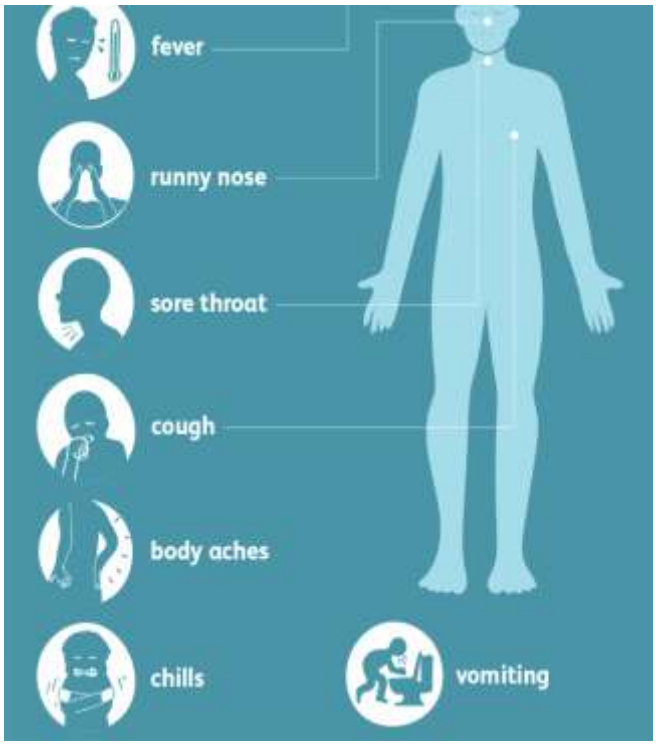

Fig. 2 : Symptoms of Swine Flu (H1N1 Flu)

Methods : Descriptive Survey research design. The population of the present study was 100 rural people of Lomeshwarnagar area, of Loni (Bk) village of Ahmednagar district. Non- Probability method, purposive sampling technique was used for the selection of participants. Study period was January 2015 to March 2015.Inclusion criteria: Rural people, Age group of 18 years and above, willing to participate in the study, available during period of data collection, and able to read and write Marathi. The structured questionnaire of dichotomous type was used to collect the data. The questionnaire has two sections such as : **Section A :** hadsocio-demographic data of study population. **Section B :** has dichotomous type 20 items, which includes the sub areas like Introduction to Swine flu (4 items), Etiopathogenesis (3 items), Diagnosis and treatment (5 items) and Preventive measures (8 items). The correct response carries the score of one and wrong response carries zero score. Thus the maximum obtainable score was twenty.The collected data was organized, tabulated and analyzed by using descriptive statistics i.e.Mean, Standard Deviation and Mean %.

Results : Section A : Demographic characteristics of the study population

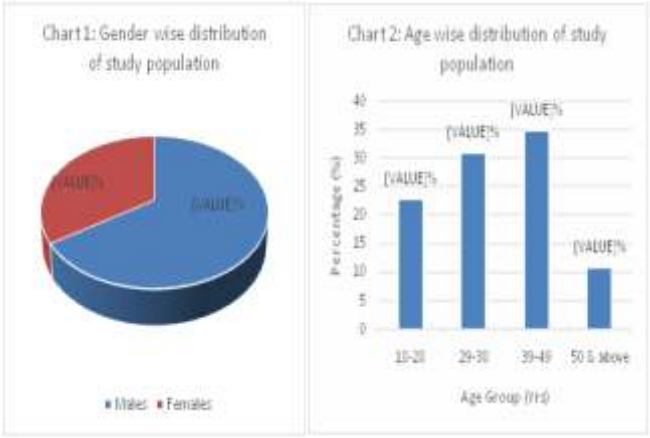

Table 1: Demographic data of study population

Sr.No.	Variables	Sub variables	Percentage (%)
1	Education	Uneducated	38%
		Primary/ Secondary level	30%
		Higher secondary level	21%
		Graduates	10%
		Post graduates	1%
2	Occupation	Farmer	29%
		Private Employee	28%
		Housework	26%
		Students	10%
		Government Employee	7%
3	Per capita family income	< 3000/-	21%
		Rs. 3000 – 5000/-	42%
		Rs. 5000 – 7000/-	22%
4	Source of information	Television & Radio	46%
		Newspaper	27%
		Health workers	18%

Section B: Assessment of knowledge of Swine flu of study population

Table 2: Mean, SD and Mean percentage of knowledge of Swine flu of study population

Sr.No.	Areas	Mean	SD	Mean %
1.	Introduction	2.42	1.13	56
2.	Etiopathogenesis	2.21	0.78	73.66
3.	Diagnosis & treatment	3.11	1.11	62.2
4.	Preventive measures	5.45	1.53	68.125
		13.19	**3.03**	**65.95**

Table 3: Study Questionnaire

Sr.No.	Questionnaire Heading	Questions	No.	Percentage
1.	Introductory knowledge of Swine flu	Swine flu is caused by H1N1 virus.	61	61%
		Swine flu does not affect the respiratory system	50	50%
		Swine flu is a communicable disease	74	74%
		Swine flu is not a curable disease.	57	57%
2.	Knowledge of netiopathogenesis of Swine flu	Incubation period of Swine flu is 1-7 days	79	79%
		Swine flu does not transmit through sneezing and coughing.	62	62%
		The common symptoms of swine flu are high-grade fever, chills, coughing and sore throat.	80	80%
3.	Knowledge on Diagnosis & treatment of Swine flu	Throat culture test is done for detecting Swine flu.	64	64%
		P. C.R. test is important for detecting Swine flu.	73	73%
		P.C.R. test is done in Mumbai and Pune	67	67%
		No immunization is available for Swine flu.	55	55%
		Getting vaccinated for H1N1 influenza does not protect one from the disease.	52	52%
4.	Knowledge on Preventive measures of Swine flu	Use of face mask provides protection from swine flu infection.	89	89%
		While sneezing and coughing covering the nose and mouth is not important.	59	59%
		The person infected with swine flu should be kept isolated.	76	76%
		Maintaining personal hygiene can prevent the transmission of swine flu infection.	75	75%
		Crowded places do not cause spread swine flu infection.	70	70%
		Washing hands frequently is not essential.	57	57%
		Don't shake hands with people who are infected with swine flu.	60	60%

Discussion : The 30% of study population had primary and secondary level education, 21% had higher secondary education, 10% of the study population were graduates, 1% had postgraduate qualification and 38% were uneducated. **(Table 1)**

The study findings shows 29% of the subjects were farmer, and the 7% were a Government employee. The per-capita family income of the study population ranging from Rs. 3000 to 7000/.**(Table 1)**

The 46% of the study population had received the information from Television and Radio, 27% through the newspaper, 18% through health workers and 9% had received information from their friends.(Table 1) These findings were consistent with study conducted by Savas E, Tanriverdi D, who also found that people were more aware through the Television and Radio.[4]

The overall mean knowledge score of rural peoples knowledge on Swine flu was13.19± 3.0.(Table 2) It interprets that the rural people had 'moderate knowledge' on Swine flu. The study survey shows that 73.66% subjects answered on 'etiopathogenesis' and 56% answered on introductory part of the Swine flu well. However, the samples had 'average knowledge' on the other areas. The study findings correlated with study conducted by Kamate SK et al, on public knowledge and attitude on H1N1.[5]

Question-wise analysis the 74% of the study subjects responded correctly to the question 'Swine flu is a communicable disease'. The 80% of the subjects responded correctly to the question 'The common symptoms of swine flu are high-grade fever, chills, coughing, and sore throat', and the 62% of the subjects responded correctly to the item 'Swine flu does not

transmit through sneezing and coughing'.**(Table 3)**

While assessing the preventive measures awareness amongst study subjects, the 89% of the samples responded correctly to the question 'Use of face mask provides protection from swine flu infection'.The samples from the study conducted by Balkhy HH et al,also responded correctly that Use of face mask provides protection from swine flu infection.[6]

Conclusion: From the findings of the present study patients though showed average knowledge of Swine flu in rural people, still need of more awareness regarding communicable diseases in the rural area is essential to prevent them and thereby reduce the rate of mortality associated with communicable diseases.

References:

1. Centers for Disease Control and Prevention. (2009a). Questions and answers about 2009 H1N1 Flu (H1N1 influenza).Retrieved from http://www.cdc.gov/H1N1flu/qa.htm
2. Knowledge and Awareness about H1N1 Flu in Urban Adult Population of Vadodara, India.
3. World Health Organization April (2009). Pandemic 2009. Retrieved from http://www.who.int/csr/en/index.html.
4. Savas E, Tanriverdi D Knowledge, attitudes and anxiety towards influenza A/H1N1 vaccination of healthcare workers in Turkey. Gaziantep University, Gaziantep, Turkey. BMC Infect Dis. 2010 Sep 23;10:281
5. Kamate SK, Agrawal A, Chaudhary H, Singh K, Asawa K. public knowledge, attitude and behavioral changes in an Indian population during the influenza A (H1N1) outbreak. J infect Dev ctries. [serial online] 2009 Nov. 30.
6. Balkhy HH, Abolfotouh MA, Al-Hathlool RH, Al-Jumah MA. Knowledge, attitudes and practices related to the Swine influenza pandemic among the Saudi public. BMC infect DIS (serial online) 2010 Feb.