

A Study on Awareness of Swine Flu among Rural Population of Pudhucherry- A Cross-Sectional Study

Dr.S.Rajini^{1*},Dr.K.Kannan²,Mrs.V.Tamilsevi ³,Gnanakannan ⁴, Ezhilarasi ⁵, Hareesh ⁶, Hemapriya ⁷

¹Professor and Head, Department of Community Medicine, Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry.

² Associate Professor, Department of Community Medicine, Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry.

³Statistician, Department of Community Medicine, Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry.

^{4,5,6,7} CRRI, Department of Community Medicine, Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry.

***Address for correspondence:**

Dr. S. Rajini, Professor & Head,

Department of Community Medicine,

Sri Lakshmi Narayana Institute of Medical sciences, Puducherry.

Mobile: 9865233325; Mail:rajsenspm@gmail.com

ABSTRACT:

Background:Influenza is an acute respiratory tract infection caused by influenza virus of which these are type A,B and C all known pandemics were caused by influenza A stains. The disease is characterised by sudden onset of chills, malarial fever muscular pain and cough [1]. A influenza A viral stains implicated in 2009 flu pandemic in human was earlier referred to as swine flu because initial testing showed many of genes in virus were similar to influenza viruses normally occurring in north American swine

Methods:

A cross sectional study was conducted among rural population of Puducherry using a pre-tested, pre-designed and standard questionnaire to collect data and it is analysed using suitable statistical methods.

Results:

In our present study among the 200 households, 96% of them were aware swine flu is a communicable disease and 78% of them said, the illness starts with fever and cough. Majority of the participants 89%, 94% and 75% of the individuals knows that there is treatment, investigation and vaccine available for the swine flu illness respectively. Almost 91% of them knew that the swine flu is preventable and knowledge regarding the methods of prevention is by mask (29%), personal hygiene (59%) and 17% by avoiding crowded areas respectively.

Conclusion:

Our study highlights that most of the participants are aware of the swineflu illness. The knowledge regarding the mode of spread, signs & symptoms and preventive strategies has to be imparted to the community through health education programmes.

Key words: swine flu, knowledge, awareness, rural population

Introduction:

The novel influenza A/H1N1, which is caused by influenza type A virus is an acute respiratory tract infection and is 1 known as swine flu in layman terms. Coughing, sneezing, or touching contaminated surfaces followed by touching the nose or the mouth are some of the modes of spread of H1N1¹.

The transmission of the virus is from person-to-person and is similar to the manner in which seasonal influenza spreads². The typical incubation period found for influenza is 1 to 4 days, with an average of 2 to 3 days. The symptoms of this form of virus includes sore throat, chills severe headache, coughing, weakness and general discomfort like those of influenza. However, some individuals with swine flu have shown serious respiratory illness, including pneumonia or respiratory failure leading to death.²

The pandemic influenza A ((H1N1) 2009 virus differs in its pathogenicity from seasonal influenza in two key aspects. First as the majority of human population has little or no pre-existing immunity to the virus, the impact of the infection has been in a wider age range, in particular among children and young adults, Secondly, the virus can infect the lower respiratory tract and can cause rapidly progressive pneumonia, especially in children and young to middle aged adults. Following its emergencies in March 2009, pandemic A (H1N1) 2009 virus spread rapidly throughout the world, leading to the declaration of an influenza pandemic by WHO on 2009.³

By June 2010, it had caused over 18,172 deaths in more than 214 countries, overseas territories or communities. The age of patients with confirmed infection ranged from 3 months to 81 years. The information analysed by CDC supports the conclusion that novel H1N1 flu has caused greater disease burden on people younger than 25 years

of age than older people. The number of cases in various countries in last five years has well supported the reason for it being considered as a major threat among emerging disease in the global scenario.⁴ During 2013, India reported 5,253 cases and 699 deaths, a case fatality rate of 13.3%.⁵ In 2014, a total of 218 people died from H1N1 flu, with 937 cases during the year.⁶ During the past six years, the world has been strengthening its preparedness while trying to understand the virus and its mode of spread.⁷ Confused comprehension and negative attitude towards emerging communicable disease may lead to unnecessary worry and chaos. Even increased panic may aggravate the epidemic of the disease.⁷ Monitoring of public perception in disease control epidemic enhances the compliance of community to the precautionary strategies. Monitoring and analysing the public response helps decision makers take appropriate measures to promote individual/ as well as community health. The community can keep itself informed and need to take steps to prevent the spread of the flu.⁸ The media and government also play a key role in educating people about the disease, its causes and remedies. Understanding KAP of community can help in designing adequate control, education and prevention programs and contribute towards successful control programs.⁹ During the review of literature, no study on KAP on swine flu was found from this part of country. It was in this context that the present study was conducted in a rural area of Jammu.

Material and Methods:

The community based cross sectional descriptive study was conducted in the field practice area of Department of Community Medicine, Sri Lakshmi Narayana Institute of Medical Sciences, Pudhucherry. The study participants were selected, using convenient sampling technique from the villages covered by the department of community medicine. A house to house survey was conducted by the interns and Health inspector posted in the department with a pre-designed and pre-tested questionnaire. The study was carried out among 200 participants, who were above the age group of 18 years identified during the time of the survey. Approval of Institutional Ethical committee was obtained before the starting of the study. The households who accepted to be a part of the study were included in the study and those who did not give consent were excluded from the study. The study was carried out over a period of two months (December 2018-January 2019). Informed oral consent was obtained from the participants included in the study.

A pre-designed and pre-tested questionnaire was given to the sample population. The questionnaire is based on the demographic data like age, sex, education, income and occupation, their knowledge and awareness on swine flu, type of treatment and its compliance. The data collected by the trained Interns were analysed using suitable statistical methods and presented as tables and figures.

Results:

The total study population enrolled in our study was 200. Among the study population majority were in the age group (29%) of 61 and above and 28% of them were in the age group of 18 to 30 years. Most of them were male (57%), who were present during the study.

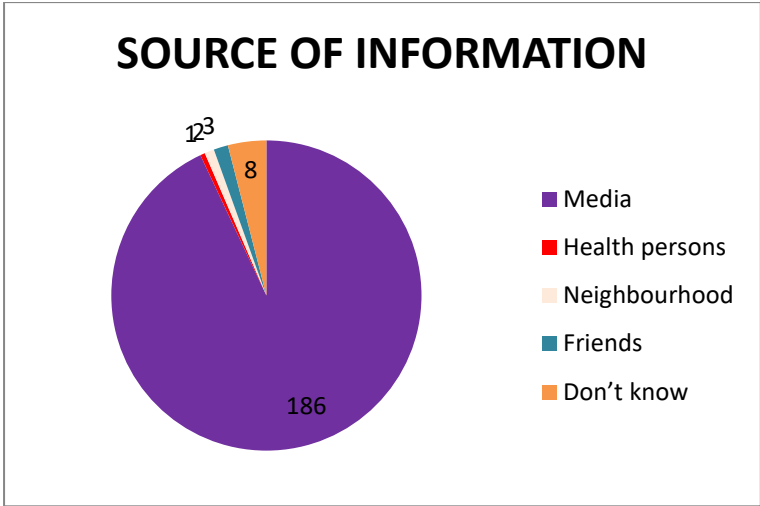
85% of the respondents were married and 51% of the individuals were farmers. It was also observed 63% of them are living in nuclear family and 50% belong to the middle social class according to Kuppusamy classification.

Table 1: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF STUDY POPULATION (N-200)

	Frequency	Percentage
AGE		
18 – 30	55	28
31 – 45	40	20
46 – 60	47	23
61 and above	48	29
GENDER		
Male	114	57
Female	86	43
MARITAL STATUS		
Unmarried	18	9
Married	170	85
Divorced & widowhood	12	11
OCCUPATION		
Farmer	101	51
Daily wager	19	20
Business	14	7
Govt. worker	4	2
Housewife	62	31
FAMILY TYPE		
Nuclear	125	63
Joint	75	37
CLASSES		
Upper	0	0
Upper middle	23	14
middle	101	50
Lower middle	8	4
lower	1	1

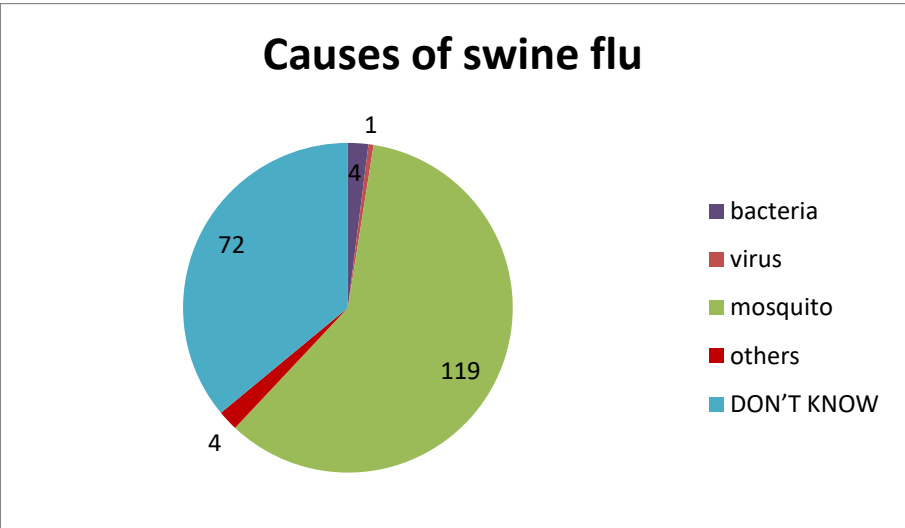
Most of the participants (93%) responded, that the source of information regarding swine flu was obtained from media and 60% of the individuals had a wrong information that swine flu was caused by mosquitos and only 5% of them are aware that the agent causing swine flu is H1N1 virus. Many as 36% of the participants do not know the cause for the illness.

Figure 1: Source of Information on Swine Flu for the Study Participants (N-200)

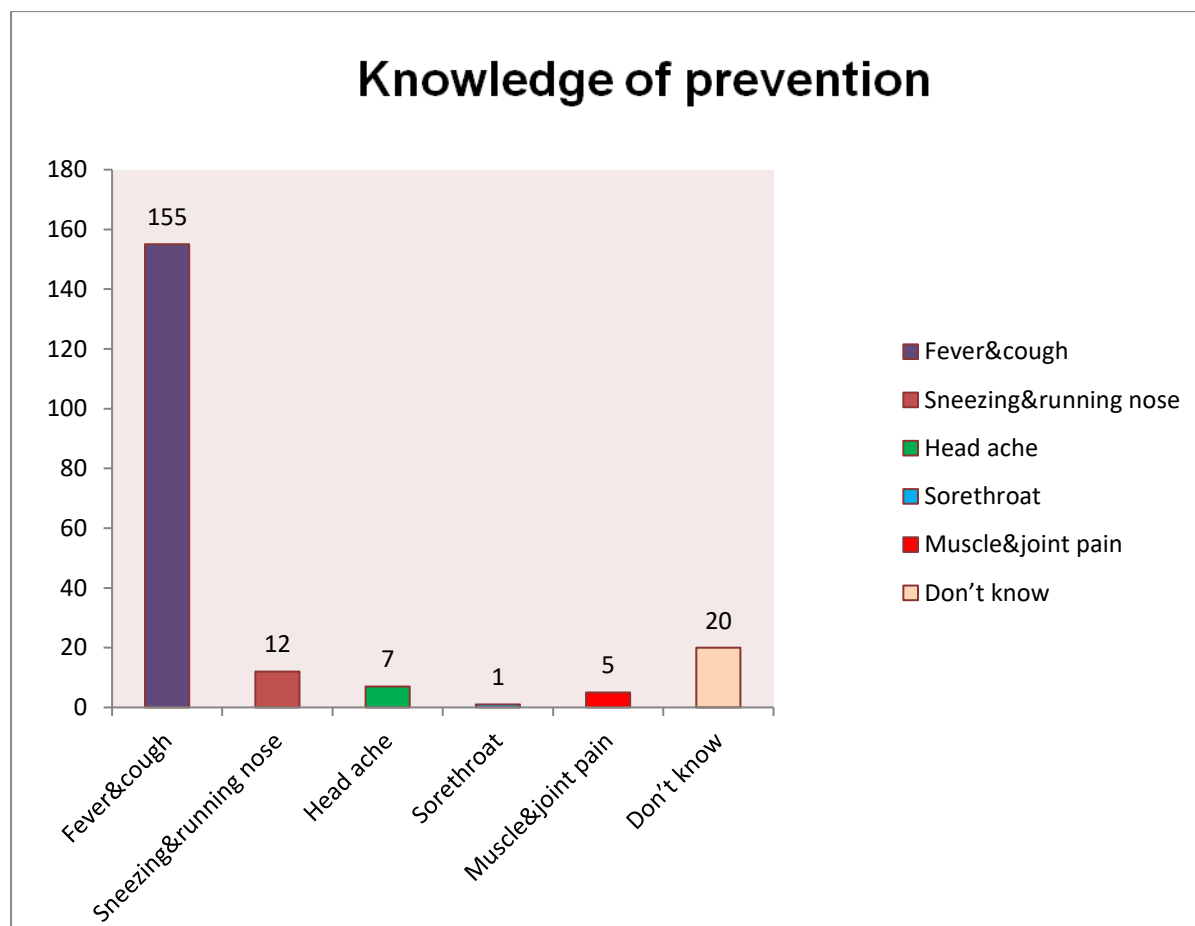


In our study 96% of them were aware swine flu is a communicable disease and 78% of them said, the illness starts with fever and cough. Majority of the participants 89%, 94% and 75% of the individuals knows that there is treatment, investigation and vaccine available for the swine flu illness respectively. Almost 91% of them knew that the swine flu is preventable and knowledge regarding the methods of prevention is by mask(29%), personal hygiene (59%) and 17% by avoiding crowded areas respectively.

Figure 2: Awareness on the cause of swine flu



The data was collected regarding separation of the patients during the illness. 95% of them had knowledge, that patients should be isolated after the infection and 84% of them believed that swine flu can be treated. Only 2% of the surveyed population had swine flu cases in their homes and 16% of them are scared that they should not get swine flu anytime.

Figure 3: Distribution of Study subjects based on their Knowledge of Prevention**Table 2: Distribution of study subjects based on awareness regarding treatment, investigation & vaccine on swine flu (n-200)**

		Frequency	Percentage
Treatment available	Yes	177	89
	No	9	5
	Don't Know	14	7
Investigation available	Yes	187	94
	No	6	3
	Don't Know	7	4
Vaccine available	Yes	49	75
	No	1	5
	Don't Know	150	75

Discussions:

Influenza A virus causes recent threats and outbreak at local and global scale, which causes severe damage to human health and economic burden to the government. In our present study 60% of them responded, swine flu caused by mosquitos and 25% said it is caused by eating pork. In a study done by Prabhuswami et al,¹⁰ found that knowledge regarding swine flu was average. Harshal kawanpure et al,¹¹ in their study it was noted 4.69% thought that swine flu spread by eating contaminated pork, 8.44% through mosquito bites and flies.

This study shows 96% of them are aware, that swine flu is a communicable disease and 60% of them obtained knowledge from media. In a study done by Dayanand et al,¹² in Nepal and Rathi et al,¹³ found that, 58% and 96% people were aware about the communicability, respectively. Our study shows 78% of the participants were having knowledge regarding the signs and symptoms of swine flu. Similarly Shilpa et al,¹⁴ and Kumari et al,¹⁵ also has observed very good knowledge regarding the signs and symptoms in their study done at Karnataka and Jammu & Kashmir respectively. In the present study 89%, 94% and 75% of the individuals knows that there is treatment, investigation and vaccine available for the swine flu illness respectively. In other various studies done by Dayanand et al, Bharadva et al,¹⁶ and Naik et al,¹⁷ revealed 60.6%, 46.9% and 53% of the individuals are having knowledge on investigation and treatment for swine flu illness respectively.

Conclusions:

Overall awareness regarding swine flu is high among the rural population of Pondicherry. One of the important aspects to be highlighted is the causative agent and the mode of spread to the community. Most of the people are aware of the illness and its treatment facilities available. Community health education programme has to be done and to be addressed on the agent, signs and symptoms and its preventive measures.

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Conflict of interest: Nil

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