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Perception and Misconception Regarding Swine Flu (H1N1) in Uttarakhand Population: A Random Study

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Abstract **Original Research Article**

Background: This study aims to know the perception and misconception regarding Swine flu (H1N1). Among population of Uttarakhand from different regions and to study whether the common people who knew about Swine flu has the correct knowledge about it or not, or what are the various perception and Misconception about Swine flu. ***Materials and Methods:*** A cross sectional study was conducted at different places in Uttarakhand; Haridwar, Roorkee, Selaqui, Vikasnagar, clement town, sahastradhara, IT park and paltan bazar. The study was performed during the epidemic of H1N1 in the month of February and March, 2019. Total 219 people were randomly selected. Data collection was done by using predesigned, pretested, bilingual language (English and Hindi) semi structured questionnaire. People who were present and had given consent to participate in the study been included and those who are not willing to participate are excluded from study. ***Results:*** (150)68.4% people heard about the Swine flu. (61) 27.8% people correctly answered symptoms of Swine flu. Television/Social media (153) (>69.8%) was major source of information in public. (174)79.4% people take precautions if they are suffering from cold & cough. (156) 71.2% people have negative behavioural change regarding Swine flu outbreak. (63) 28.7% people have positive behavioural changes regarding Swine flu outbreak and wants to look for a solution. ***Discussion and Conclusion:*** Although most of are aware of swine flu but correct knowledge about Swine flu is lacking in public. Knowledge regarding key points such as frequent hand washing, avoiding crowding places, vaccine and treatment availability, which is much important during epidemics and pandemics as precautionary measures, was lacking in public and also some people are not willing to listen about Swine flu.

Keywords: Awareness, H1N1 influenza, Swine flu, Death rate, Contagious.

INTRODUCTION

Swine flu is a respiratory disease of pigs caused by influenza virus and pig act as reservoir of the virus. Pandemic influenza is a leading public health problem, which is known historically to claim millions of lives [1]. It is estimated that 50- 100 million people were killed by the 1918 flu pandemic (commonly referred to as the Spanish Flu) [2]. People like farmers and pork processors are at higher risk of getting swine flu from pigs because of their close propinquity with pigs. The causal agent of the swine influenza is influenza A having five subtypes, namely, H1N1, H1N2, H2N3, H3N1, and H3N2 [3]. Of these subtypes, the H1N1 influenza, a strain was isolated in the infested humans and the remaining four subtypes are found exclusively in pigs. On 11 June 2009, the World Health Organization (WHO) upstretched its pandemic alert to the highest level, phase 6, meaning that, the A/H1N1 flu had spread in more than two continents [4]. The most topical one was the infection of human being by novel influenza A H1N1 virus that triggered pandemic of swine flu (SF) in the world [5]. The first case of current pandemic of SF was reported in Mexico on 18th March 2009, which had spread rapidly throughout the world within short period [6] and the first confirmed case of SF in India was on 16th May 2009, who was the traveller from USA at Hyderabad airport since then cases were on rise tremendously. Community awareness in general and young generation, in particular, is of vital importance in

battling H1N1 and awareness about the disease, its diagnosis and treatment among public will help in monitoring the spread of the disease [7]. Therefore, to have clear understanding of factors contributing to development of H1N1 is necessary [8]. Thus, this study was commenced to evaluate the extent of awareness among adolescents living in different areas, toward H1N1 and to create future awareness of such type of infectious diseases by providing them health education[9]. By simple hygiene and sanitation procedures for cough and respiratory problems, one can effectively avert swine flu transmission [10]. Precise knowledge and information regarding swine flu help in taking effective steps to avert the spread of the flu [11]. The purpose of this study was to know whether the public had sufficient knowledge about swine flu (H1N1) and to assess their knowledge about possible defensive measures that can be taken by the people including vaccination against swine flu. Study was directed among people of Uttarakhand and can help in spreading the message of preclusion in the community.

MATERIALS AND METHODS

Study Design

A cross sectional study was conducted at different places in Uttarakhand which includes; Haridwar, Roorkee, Selaqui, Vikasnagar, and local places of Dehradun; clement town, sahastradhara, IT park, paltan bazar.

Study Period

Study was performed during the epidemic of H1N1 in the month of February and March, 2019.

Sampling Volume and Techniques

Purposively people from different zone of in and around Dehradun were chosen for the study. On an average 27 cases from a particular place were considered for proposed study. A total of 219 people was subjected for the questionnaire by random sampling method.

Data Collection

Data collection was done by using predesigned, pretested, bilingual language (English and Hindi) and semi structured questionnaire. The questionnaire contains the information regarding socio-demographic profile, knowledge about the disease (nature, modes of transmission, source of information, perceptions, clinical features, preventive measures) and questions on health seeking behaviour. The study was started after obtaining the verbal and informed consent from required authorities, whereas verbal and informed consent taken from each and every person before conducting the study.

Inclusion Criteria

People from Uttarakhand who gave their consent to participate in the study were included.

Exclusion Criteria

Those who were absent and do not participate were excluded from the study.

RESULTS

In present study (150)68.4% people heard about the Swine flu (H1N1). (61)27.8% people correctly answered symptoms of swine flu. (153) >69.8% people heard about swine flu from television and other social media sources. (174)79.4% people use to take precautions if the (common symptoms like, cold, cough, fever, running nose etc exist). During this study (156)71.2% people have negative behavioural change regarding swine flu outbreak as they refused to even talk or did not participate in the proposed study. Also (63)28.7% people have positive behavioural changes regarding swine flu outbreak and wants to look for a solution these people showed interest to attend awareness camps, and wants to know more about swine flu (H1N1) (Table-1 & Figure-1). Out of the 173 of male participants 69 have positive and 104 have negative behaviour regarding the Swine flu outbreak in Uttarakhand and also out of 46 female participants 16 have positive while 30 have negative behavioural change (Table-2 & Figure-2). The results also showed that respondents in the age groups between 18 to 24 years, 25 to 34 years and 35 to 54 years differed significantly in knowledge from respondents in the 55 to 64 years and > 65 years age groups (Table-3 & Figure-3).

Table-1: Knowledge and perceptions regarding swine flu among people of Uttarakhand

Sr. No	Questions asked from the commuters	Proportion of Respondents (Positive)	Proportion of Respondents (Negative)
1	Ever heard of swine flu?	(150) 68.4%	(69) 31.6%
2	Source of Information? Television (TV), Social media (SM), Newspapers (NP), People)	TV (22)34%, SM (5)7%, NP (7)10%, People (11) 17%	Not answered (21)32%
3	Which is the causative agent for swine flu?	(61) 27.8%	(158)72.2%
4	If having cold what are the precautions?	(174)79.4%	(45)20.6%
5	Behavioural changes in relation to the inf-A (Swine flu) outbreak	(63)28.7%	(156)71.2%

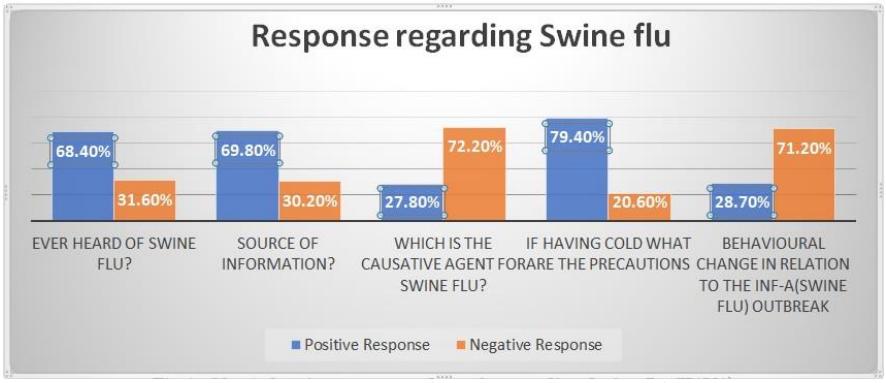

Fig-1: Chart showing response of people regarding Swine flu (H1N1)

Table-2: Behavioural change regarding swine flu among people of Uttarakhand Sex-wise

Gender	Number (%) of Participants	Number (%) having Positive behaviour	Number (%) having Negative behaviour
Male	173 (78.9%)	69 (39.8%)	104 (60.1%)
Female	46 (21.0%)	16 (44.7%)	30(65.2%)

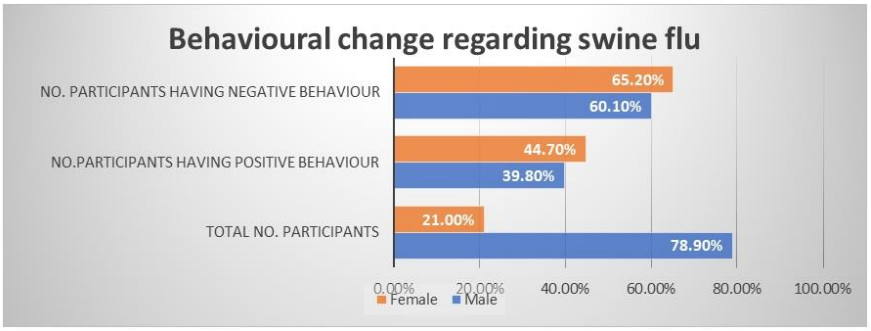

Fig-2: Chart showing Sex wise comparison of behavioural change in people regarding Swine flu (H1N1)

Table-3: Knowledge regarding Swine flu among people in Uttarakhand Age-Wise

Sr. No.	Age/Group (in Years)	Number (%) of participants	Heard about Swine flu	Never heard about swine Flu
1	18-24	47(21.4%)	38(80.8%)	9(19.1%)
2	25-34	65(29.6%)	44(67.6%)	21(32.3%)
3	35-54	71(32.4%)	47(66.1%)	24(33.8%)
4	55-64	19(8.6%)	12(63.1%)	7(36.8%)
5	Above 64	17(7.7%)	9(52.9%)	8(47.0%)

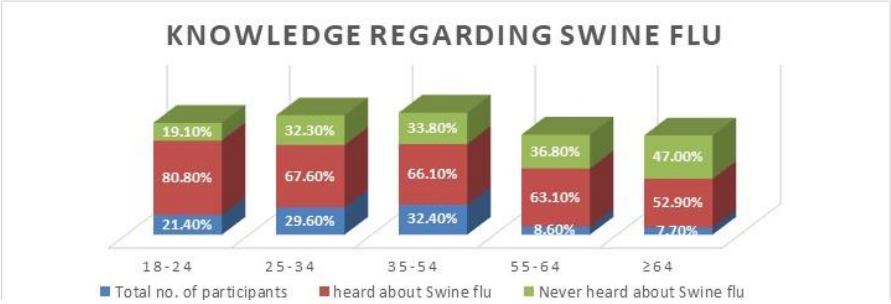

Fig-3: Chart showing Age wise distribution of people on the basis of knowledge regarding Swine flu (H1N1)

Fig-4: Survey at different places in Dehradun

DISCUSSION

In our study (150)68.4 % of the study subjects had heard of swine flu, the reason for this may be due to lack of awareness and ignorance regarding health issues in our study population. Current study had more of male participants instead female. It was found that males had significantly higher knowledge compared to females. This difference could be due to the fact that males usually had more interaction and socialization than females. This holds particularly well for a country such as India where traditional norms and customs discriminate against females. Similar effects were observed in a study conducted by Syed Farid-ul-Hasnain *et al.*, in 2009 where age, employment and education had significant influence on knowledge [12]. People who were employed had more access to information through interaction with other people at workplaces than those unemployed. Similar findings were seen in a study conducted by Salehi Leili *et al.,* in 2008 [13]. Considering the influence of education on knowledge, it was found that knowledge increased significantly from illiteracy to high school level, but no significant difference in knowledge was found between graduates and postgraduates, which shows that high school education was the edge. (153)>69.8% people heard about swine flu from television and other social media sources, according to our study (174)79.4% people use to take precautions if the (common symptoms like, cold, cough, fever, running nose etc exist). Considering attitude, many people believed that the Influenza A (H1N1) situation was overstated by health authorities and the media. However, a majority (156)71.2% people have negative behavioural change regarding swine flu outbreak as they refused to even talk or did not participate in the proposed study with (63)28.7% people have positive behavioural changes regarding swine flu outbreak and wants to look for a solution. In our study regarding the treatment or prevention from Swine flu people have different opinions, some said that herbal remedies some say face masks are necessary while consult a doctor has the highest number of respondents during the survey [14].

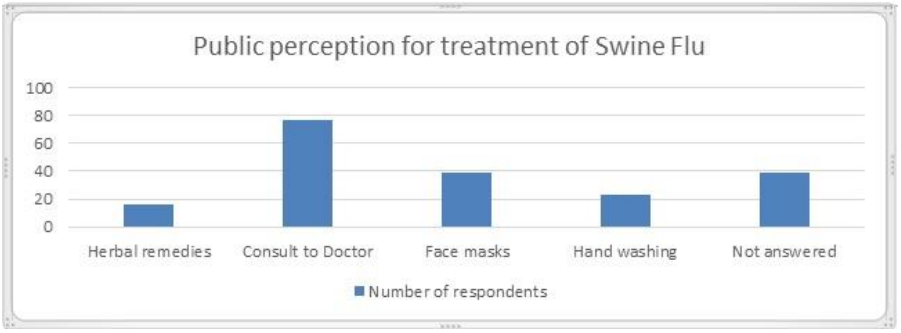

Fig-5: Chart showing the perception in people regarding the treatment of Swine Flu by different methods

Strength of this study was an attempt to create awareness about H1N1 among adolescents of different areas population, and to prepare them in future to battle with such type of infectious diseases, so that no terror is created at individual, family, community level and even at the basic level of health care. Our study had many restrictions. First, it was conducted in a single state. Further research into differing reactions to the outbreak among other ethnic groups is required. Second, our study sample has the potential to be biased towards community

members who are particularly anxious about Influenza A (H1N1). Our survey measured a specific population's views at a specific point in time; their beliefs and attitudes reflect the information available at the time and therefore are not stable. It is unknown whether responses given to the hypothetical situations posed in the survey would accurately reflect the respondents' real-world responses.

CONCLUSION

Although most of are aware of swine flu but correct knowledge about swine flu is lacking in public. Knowledge regarding key points such as frequent hand washing, avoiding crowding places, vaccine and treatment availability, which is much important during epidemics and pandemics as precautionary measures, was lacking in public and also some people are not willing to listen about swine flu.

Conflict of Interest: None

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