ORIGINAL ARTICLE
pISSN 0976 3325 | eISSN 2229 6816
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Knowledge, Attitude and Practice Regarding Swine Flu (H1N1) among People Accompanying Patients of a Tertiary Health Care Centre, Bhuj

Niraj Bharadva[1], Shreyash Mehta[1], Pravin Yerpude[2], Keerti Jogdand[2], Kartik Trivedi[3]

Financial Support: None declared
Conflict of Interest: None declared

How to cite this article:
Bharadva N, Mehta S, Yerpude P, Jogdand K, Trivedi K. Knowledge, Attitude and Practice Regarding Swine Flu (H1N1) among People Accompanying Patients of a Tertiary Health Care Centre, Bhuj. Natl J Community Med 2018; 9(1): 1-4

Author's Affiliation:
[1]Assistant Professor; [2]Associate Professor, Community Medicine, Gujarat Adani Institute of Medical Sciences, Bhuj; [3]Professor & Head, Community Medicine, Dr. M. K. Shah Medical College & Research Center, Ahmedabad

Correspondence
Dr. Shreyash R. Mehta
shreyash111@gmail.com

Date of Submission: 04-09-17
Date of Acceptance: 11-01-18
Date of Publication: 31-01-18

ABSTRACT

Background: Knowledge of causative agent, symptoms, mode of transmission and its prevention of Influenza A is necessary to know for individual protection as well as to control the spread of the disease in community.

Objective: To study the awareness, attitude and practices regarding H1N1 Influenza A among the people accompanying patients of GKGH, Bhuj.

Material and Methods: Cross-sectional study was conducted among people accompanying the patients of GKGH after the epidemic situation. Informed verbal consent was taken from all the participants and they were interviewed personally through predesigned and pre-tested questionnaire to elicit information regarding awareness of Influenza A (H1N1). Data such collected was analyzed using Microsoft Excel 2007

Results: Of the 227 people included in the study, 105 (46.26%) knew that it was a viral disease. Of all the participants, 123 (54.19%) knew about the mode of transmission. Around three fourth (74.01%) participants told cough & cold as a major symptoms and 71.81% told fever as a major symptom. Less commonly occurring symptoms such as vomiting (7.93%) and diarrhoea (2.64%) were known to few participants.

Conclusion: Knowledge regarding Influenza A (H1N1) needs to be enhanced among people through appropriate awareness programs to prevent spread of disease on large scale.

Key Words: Swine flu(H1N1), Knowledge, Attitude, Practice, Bhuj

INTRODUCTION

Influenza occurs in all countries and affects millions of people every year[1]. The Influenza A (H1N1) viral strain implicated in the 2009 flu pandemic in humans was earlier referred to as 'swine flu' because initial testing showed many of the genes in the virus were similar to influenza viruses normally occurring in North American swine[2,3]. Swine flu is a disease caused by virus that infects people, birds, pigs and other animals such as ferrets[4]. When an H1N1 virus affected person coughs and sneezes, the virus get sprayed out as tiny drops into the air. The other human gets contact with those tiny drops, when being close to the affected individual. By touching the surface used by affected person (e.g. door knobs) chances are indeed heavy to catch H1N1 infection immediately. Symptoms of swine flu are fever, cough, sore throat, body aches, headache, chills and fatigue. Indian swine flu outbreak of 2015 referred to the outbreak of the 2009 pandemic H1N1 virus in India. The states of Gujarat and Rajasthan were the worst affected. By 20th March 2015, according to the data released by the Health Ministry, 31,974 cases had been reported and 1,895 people had died

to the disease. Of these 6495 cases and 428 deaths occurred in Gujarat.[5] While Kutch district had reported 274 cases and 27 deaths.[6] These initiated series of media reports and articles on measures to prevent Swine flu in the newspapers. The best thing to prevent the spread of the swine flu is to have knowledge of it. As Kutch was one of the severely affected districts in 2015 epidemic, it requires some basic knowledge about swine flu in people of Kutch. Keeping all this thing in mind, the study was designed to assess the knowledge, awareness and practices regarding swine flu.

OBJECTIVE

The present study was undertaken among the people accompanying patients of GKGH, Bhuj, which catered to the people coming from these areas, with the objective of assessing their knowledge, attitude and practice regarding Influenza A (H1N1).

MATERIAL AND METHODS

The present descriptive cross-sectional study was conducted among people accompanying the patients visiting the GK General Hospital from May 2015 to July 2015 after the epidemic situation. Those who were ≥15 years of age were considered for the study. A total of 227 people who came at Hospital during the study period were enrolled in the study. Informed verbal consent was taken from all the participants complete anonymity was ensured. The participants were interviewed personally through pre-designed and pre-tested questionnaire to elicit information regarding awareness of Influenza A (H1N1). Data such collected was compiled and analyzed using Microsoft Excel 2007 and presented as percentages.

RESULTS

A total of 227 people were included in the study. Of these, nearly two third (61.24%) of participants were between the age group 35-45 years. Of these 122(53.74%) were males and 105 (46.26%) were females. (Table 1) Around 43% of the participants were from rural area of Kutch district.

Around 28% of the participants were illiterate, while 21% of the participants were studied up to graduate & above. Half of the participants (49.34%) were not working/ house wives/ students, while 19.82% % were labourers. While only 4.85% were doing professional work. (Table 1) Total 205 (90.31%) participants had heard about H1N1 influenza. So, further analysis was done on 205 participants. On asking about source of information, Television (60.5%) was main source of information, followed by newspaper (51.2%), peer group (44.9%), poster (26.3%), health care workers (9.8%) and radio (8.8%). (Table 2) Out of those who had heard about H1N1 influenza, 51.2% of the participants had the knowledge that Influenza A(H1N1) is viral disease and 60% participants knew that Influenza A (H1N1) is transmitted via the respiratory route, while 46.9% knew that Influenza A (H1N1) can be diagnosed by Lab test. More than half (59%) knew that treatment is available for disease and only 30.7% knew that vaccine is available for disease.(Table 3)

Table 1: Socio-demographic characteristics of Participants (n=227)

Socio-demographic characteristics	Cases (%)
Age group (years)	
15-25	8 (3.5)
25-35	48 (21.2)
35-45	139 (61.2)
45-55	26 (11.4)
>55	6 (2.7)
Gender	
Male	122 (53.7)
Female	105 (46.3)
Educational Status	
Illiterate	63 (27.7)
Primary	52 (22.9)
Secondary	43 (18.9)
Higher Secondary	21 (9.3)
Graduate & above	48 (21.2)
Occupation	
Not working/house wife/student	112 (49.3)
Labourer	45 (19.8)
Skilled worker	14 (6.2)
Service	36 (15.9)
Professional	11 (4.8)
Self employed	9 (4)

Table2. Source of information regarding H1N1*

Source of information	Cases (n=205) (%)
Television	124 (60.5)
News paper	105 (51.2)
Friends	92 (44.9)
Poster	54 (26.3)
Health care workers	20 (9.8)
Radio	18 (8.8)
School	1 (0.5)

* Multiple Responses

* 22 subjects had not heard about H1N1 influenza infection

Around 82% of the participants responded correctly for cough and/or sore throat and 79.5% for fever>38°C as a clinical feature of influenza. Body ache/headache and rhinorrhoea as symptom of H1N1 was replied by 66.3% and 60.5% participants.

Table 3: Knowledge of participants regarding Influenza A (H1N1) (n=205)

Knowledge regarding disease	Y	N	Don't know
Influenza A (H1N1) is viral disease	105(51.2)	25(12.2)	75(36.6)
Mode of transmission–Respiratory route	123(60)	22(10.7)	60(29.3)
Lab Test available to detect Disease	96(46.9)	14(6.8)	95(46.3)
Treatment available for disease	121(59)	21(10.3)	63(30.7)
Vaccine available for disease	63(30.7)	25(12.2)	117(57.1)

* 22 subjects had not heard about H1N1 influenza infection

Table 4: Knowledge of participants regarding symptoms and reason of scaring of Influenza A (H1N1)*(n=205)

Knowledge	Cases (%)
Symptoms	
Cough/Sore throat	168 (82)
Fever >38°C	163 (79.5)
Bodyache/Headache	136 (66.3)
Running nose	124 (60.5)
Breathlessness	85 (41.5)
Loss of appetite	73 (35.6)
Vomiting	18 (8.8)
Loose Diarrhoea	6 (2.9)
Reason of scaring	
Deadly disease	157 (76.6)
Anyone can be affected	57 (27.8)
No treatment available	10 (4.9)
No vaccine available	6 (2.9)

* Multiple Responses
* 22 subjects had not heard about H1N1 influenza infection

Table 5: Attitude and practices of participants regarding prevention of Influenza A (H1N1)* (n=205)

Attitude and practices	Cases (%)
Use of Face mask	198 (96.6)
Avoiding crowded place	150 (73.2)
Regular Hand washing	107 (52.2)
Keep distance from infected person	77 (37.6)
Avoidance of public transport	48 (23.4)
Ayurvedic remedies	18 (8.8)

* Multiple Responses
* 22 subjects had not heard about H1N1 influenza infection

Around 41% also replied breathlessness as a clinical feature of H1N1. Vomiting (8.8%) and Diarrhoea (2.9%) as a symptom of Influenza A (H1N1) was known to very few participants. (Table 4) On asking about the reason of scaring from H1N1, three – fourth (76.6%) participants scared due to deadly disease, 27.8% scared because any one can be affected, 4.9% scared because of no treatment available and 2.9% scared because of no vaccine available. (Table 4)

Around 97% had started using face mask, 73.2% started avoiding crowded place, 52.2% had started regular hand washing, 37.6% had started keeping distance from infected person, 23.4% started avoiding public transport and 8.8% had used ayurvedic remedies as a preventive measure to prevent H1N1. (Table 5)

DISCUSSION

This study investigated the levels of knowledge, attitudes and practices regarding swine flu (H1N1) and may help to provide scientific support to assist health sector authorities in developing strategies and health education campaigns to prevent transmission of H1N1 influenza and related pandemics.

Among the participants 90.31% (205) had previously heard of Swine flu which was higher than study done by K. Shilpa et al[7]and Singh S at al[8]may be due to awareness created regarding swine flu in public, while it was lower than study done by Chaudhary V et al[9]. This study had more male participants, which were similar to study by K. Shilpaet al[7]and Singh S et al[8]. While female participants were more in a study done by Latiffet al[10] and Lin et al[11]. Knowledge regarding the etiological agent of the disease in this study was higher than that of a study done by Bhola Nath et al[12] and Kamate SK et al[13] (40.4%) while it was lower than that of a study by Balkhy HH et al[14] (95.4%). Similarly knowledge regarding the mode of transmission was lower as compared to that of a study by Balkhy HH et al[14] (95.5%). These differences could be due to different level of educational status of the study population. Television and peer group were found to be important sources of information in this study which is similar to other studies[12,15].

Knowledge regarding the major symptoms of Influenza A (H1N1) is fairly good, but that of less frequent symptoms was very poor. The reason for this may be of the sample, 28% were illiterate and 21% only had studied up to graduate level and above Source of information was focusing more on main symptoms could be reason for this finding. This finding was similar to that of K. Shilpaet al[7], Singh S at al[8],Chaudhary V et al[9] and Bhola Nath et al[10]. Knowledge regarding vaccine as a measure of prevention was lower in this study as compared to that of Bhola Nath et al[10]. This may be because the vaccine as a measure of protection was less propagated by the health authorities. However, practice of regular hand washing was higher as compared to the study of Bhola Nath et al[10] but lower than study done by K. Shilpa et al[7],Kamate SK et al[13],Balkhy HH et al[14] and Farahat et al[16].This may be due to more impetus given on hand washing by the media. In this study, 73.2% of the participants avoided crowded places, which was higher than

study done by K. Shilpaet al[7] and Kamate SK et al[13]. This may be due to fear of swine flu.

The triad of knowledge, attitudes and practices in combination governs all aspects of life in human societies and all three pillars together make up the dynamic system of life itself. Therefore, they were linked all together in away so that any increase in knowledge, changes in attitudes toward prevention of influenza A H1N1 as well as changesin the kinds of practices that were followed regarding prevention of H1N1 influenza[16].

CONCLUSION

Overall Knowledge regarding swine flu was low among study participants. Most of the participants had fair knowledge about symptoms of swine flu. Health seeking behavior of participants was good as many of them used face mask. However practice regarding regular hand washing was poor. Strategy to create more awareness about swine flu pandemic through effective mass media is vital for limiting the pandemic. From this study it was found that, although people are aware of swine flu and risk associated with it but they lack in correct knowledge in spite of study has been conducted just after so much hype and this topic being in news and on the tongues of the people.

ACKNOWLEDGMENT

Sincere thanks to all participants for their participation in the study, as well as to Interns of GAIMS, Bhuj for their contribution in data collection.

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