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Original Research Article

The knowledge attitude practice regarding swine flu among parents/guardian accompanying children attending tertiary care center

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ABSTRACT

Background: The knowledge, attitude and behavior of the public during an infectious outbreak is important for individual protection as well as to control the spread of the disease in community. The knowledge, attitude and practices regarding Swine Flu and the correlation between Knowledge and Practices regarding Swine Flu among the parents/guardians accompanying the children attending the pediatric department of KGMCH, Nagercoil was investigated in this study.
Method: This cross sectional study was conducted among the parents/guardians accompanying the children attending the pediatric department of KGMCH after the epidemic situation. After obtaining written informed consent, participants were interviewed personally through predesigned and pre-tested questionnaire to elicit information regarding awareness of Swine Flu. All data were analysed using SPSS 25 software.
Results: Of the 200 people included in the study, 117 (58.5%) knew that it was a viral disease. Of all the participants, 97(48.5%) knew about the respiratory mode of transmission. Only 28% knew about the hand washing to prevent transmission. Around 93% participants told fever as major symptoms and 71% told cough as a major symptom.55% of the participants were scared regarding the deadly nature of the disease. Only 12.5% of the participants practiced hand washing as a preventive measure. Correlation between Knowledge and practice was weakly positive (Pearson correlation 0.252).
Conclusion: Knowledge regarding swine flu was average among the study population. TV, friends news channels and Health care workers were found to be the most common sources of information. Lack of awareness regarding key focus areas like hand washing as a preventive measure is of serious concern.

Keywords: Influenza a virus, Influenza epidemic, Knowledge attitude practice, Swine flu

INTRODUCTION

Swine flu is a respiratory disease caused by influenza viruses. Influenza viruses are large, single-stranded RNA viruses belonging to the family Orthomyxoviridae, which includes 3 genera (or types): A, B, and C. Influenza has generally been thought to be transmitted primarily via respiratory droplets, but transmission via contact with secretions and small-particle aerosols may also occur. The incubation period is short, ranging from 12-72 hr. Seasonal influenza incidence peaks during colder months in temperate climates and circulates throughout the year in the tropics. Transmission through a community is rapid, with the highest incidence of illness occurring within 2-3 week of introduction. Owing to the high transmissibility of influenza, other family members or close contacts of an infected person often experience a similar illness.[1]

The year 2018 marked 100 years since the devastating influenza pandemic of 1918-1919 which resulted in the death of an estimated 50 million people. Indore reported the first swine flu death of 2018 in India. Knowledge of causative agent, symptoms, mode of transmission and prevention of Influenza A is essential to know for individual protection as well as to control the spread of the disease in community. Role of parents/guardians are important to prevent swine flu infection among the children.

The objective of this study is to study the Knowledge, Attitude and Practices regarding Swine Flu among the parents/guardians accompanying the children attending the Pediatric Department of KGMCH, Nagercoil after epidemic situation and to the study the correlation between Knowledge and Practices regarding Swine Flu among the parents/guardians accompanying the children attending the Department of Pediatrics of Kanyakumari Government Medical College and Hospital (KGMCH), Nagercoil.

METHODS

This was a cross sectional study conducted in the Department of Pediatrics, KGMCH, Nagercoil among 200 Parents/Guardians accompanying the children attending the Department of Pediatrics of KGMCH, Nagercoil after swine flu epidemic. The study duration was from February 2019 to March 2019. Sampling was done by simple random sampling method.

Inclusion criteria included Parents/Guardians accompanying the children who were willing to participate study. Parents/Guardians accompanying the children were not willing to participate study were excluded from the study.

After obtaining written informed consent from the participants, data was collected in a predesigned proforma by personal interview. The study subjects were informed about the objectives and their confidentiality was maintained. For each question of knowledge, attitude and practices section, score 1 was given for correct response, score 0 was given for No response, score -1 was given for negative response.

All data were entered in the excel sheet and analysed using SPSS 25 software. Mean, SD, P values were calculated through student t test for raw data and chi-square test for consolidated data. Correlation and co-efficient was estimated by the Pearson's correlation. P value less than 0.05 was taken as significant.

RESULTS

Socio-demographic characteristics of study participants

Total 200 study participants comprising 91 (45.5%) male and 109 (54.5%) female were enrolled in our study. About two third (76.5%) of the participants were in the age group of 26 to 45 years. About 53.5% participants were from urban and 46.5% participants were from rural area. About 44% of the study participants have secondary education while about 6.5% study participants were illiterate. 106 (53%) participants were not working or students, only 4% participants were professional. (Table 1,2 ,3,4,5)

Table 1: Gender wise distribution.

Gender	No. of Participants(%)
Male	91(45.50%)
Female	109(54.5%)
Total	200

Table 2: Age wise distribution.

Age in years	No. of Participants (%)
< 25	24(12%)
26 - 45	153(76.5%)
> 45	23(11.5%)
Total	200
Mean	34.51
SD	8.73

Table 3: Living place wise distribution.

Living place	No. of Participants (%)
Urban	107(53.5%)
Rural	93(46.5%)
Total	200

Table 4: Education wise distribution.

Education	No. of Participants (%)
Illiterate	13(6.5%)
Primary	37(18.5%)
Secondary	88(44%)
Higher secondary	28(14%)
Graduate and above	34(17%)
Total	200

Knowledge regarding swine flu among study participants

Majority of study participants have heard about swine flu; major source of information regarding swine flu was Television 67(33.5%), friends 59(29.5%), Newspaper 26(13%), Health care worker 23(11.5%), 3.5% received information from Radio and Teachers. 5% of study participants have heard from more than one sources.

Table 6 shows 58.5% of participants knew that swine flu is a viral disease, 48.5% knew that correct mode of transmission, 59% knew that availability of Lab test, 39.5% knew about availability of vaccine, only 28%

participant knew regarding hand washing as a preventive measures.

Table 5: Occupation wise distribution.

Occupation	No. of Participants (%)
Not working/ Student	106(53%)
Labour	30(15%)
Skilled labour	37(18.5%)
Professional	8(4%)
Self employed	19(9.5%)
Total	200

Table 6: Knowledge regarding swine flu.

Knowledge	Yes(%)	No(%)	Don't know(%)
Swine Flu is a viral disease	117 (58.5)	11(5.5)	72(36)
Mode of transmission - Respiratory route	97(48.5)	42(21)	61(30.5)
Lab test available to detect disease	118(59)	24(12)	58(29)
Treatment available for disease	140(70)	20(10)	40(20)
Vaccine available for disease	79(39.5)	24(12)	97(48.5)
Do hand wash prevent swine flu	56(28)	42(21)	102(51)

Table 7: Knowledge regarding Symptoms.

Knowledge Symptoms of swine flu	No. of Participants (%)
Cough	142(71%)
Fever	186(93%)
Bodyache	133(66.5%)
Vomiting	97(48.5%)
Sorethroat	98(49%)
Breathlessness	83(41.5%)
Loss Of Appetite	59(29.5%)
Loose Stool	62(31%)

Fever was known as a common symptoms of swine flu by 93% of the participants and cough by 71%. Body ache (66.5%), sore throat (49%), Vomiting (48.5%), breathlessness (41.5%), loose stool (31%), loss of appetite (29.5%) were also known as symptoms of swine flu by the participants (Table 7).

Attitude regarding swine flu among study participants

On asking about reason for being scared, (55%) participants were scared as they considered it a deadly disease, 47% were scared because they thought that anyone could be affected, 5% were scared as they thought that no was treatment available for the disease and 2.5% were scared as they considered that no vaccines are available (Table 8).

Table 8: Reason for being scared.

Reason for being scared	No. of Participants
Anyone can be affected	94 (47%)
Deadly disease	110(55%)
No Treatment	10(5%)
No vaccine	5(2.5%)

Practices of participants towards swine flu

When asked about precautionary measures, only 9% used face mask/hand kerchief as a preventive measure.

Most of them used ayurvedic remedies and avoidance of public transport as a preventive measures. 24.5% kept their distance from infected person. Only 12.5% used hand washing as a preventive measures and 4.5% participants avoided overcrowding (Table 9).

Table 9: Practices to prevent Swine flu.

Possible practices to prevent swine flu transmission	No. of Participants (%)
Face mask/kerchief	18(9%)
Avoid overcrowding	9(4.5%)
Hand washing	25(12.5%)
Keep distance from infected person	49(24.5%)
Avoid public transport	84(42%)
Ayurvedic remidies	81(40.5%)

Table 10: Correlation between knowledge and Practices among age groups.

Age in years	Knowledge score		Practices score		correlation coefficient
	Mean	SD	Mean	SD	
<25	6.46	3.28	1.17	0.92	0.233
26-45	6.48	3.34	1.53	1.05	0.346
>45	6.74	3.87	1.74	1.09	0.294

Table 11: Correlation between Knowledge and Practice among Gender.

Rural / Urban	Knowledge score		Practices score		correlation coefficient
	Mean	SD	Mean	SD	
Rural	5..81	3.17	1.47	0.91	0.213
Urban	7.3	3.46	1.56	1.18	0.419

Correlation between knowledge and practices

Correlation was calculated between knowledge score and practice score. Overall Pearson co-efficient correlation

was 0.326. It indicates a positive but weak correlation between the knowledge and practice score.

Individual correlation between knowledge and practices according to age, gender and living places also has weak correlation (Table 10,11,12,13).

Table 12: Correlation between Knowledge and Practice among living places.

Knowledge score vs Practices		
Pearson correlation coefficient	0.326	Weak correlation

Table 13: Knowledge and Practice Correlation.

Knowledge score vs Practices	Score	Practices
Mean	6.51	1.51
SD	3.38	1.04
p value	< 0.001 significant	

DISCUSSION

In our study, 96% of the participants have heard about swine flu, which was comparable with study Vadodara (94%) and (97%) It may be due to awareness created regarding swine flu among public by the government, health care professionals and medica.[2,3] Female participants were more in our study comparable to studies done and while male participants were more in the study.[4-7] 93.5% literates, 6.5% illiterates are involved in our study. In 68.21% are literate and 31.79% are illiterate. Major source of information was collected from 76.5% between the age group of 26-45 years. But, in study 55% are in between the age group of 50-59%.[8,9]

In our study Television (33.5%) and friends (29.5%) were most common source of information followed by newspaper (13%) and Health care worker (11.5%). Only 3.5% received information from Radio and school. 5% of study participants have heard from more than one sources. It is comparable to a study done at Kerala and the study conducted at Melbourne.[9,10] The major source of information was mass media (television, newspaper and radio) as mentioned by 74% and 55% of the participants, respectively. In contrast to study major source of information were friends and relatives (37.3%) followed by mass media.[11]

Only 58.5% knows about the viral etiology of swine flu. The correct route of transmission of swine flu was mentioned by about 48.5% of the participants. This was higher in studies 60%, 56.33% in Kerala study, 77.2% in Barelly, 82% in Vadodara.[2,3,12]

In our study 59% know about the availability of Lab test. This knowledge is higher than the study, 70% knows about availability of treatment in health care. This knowledge was better than what was observed by the studies conducted at kerala (56.8%) and (41%).[11,12]

In our study knowledge about availability of vaccine was low (39.5%). This knowledge was higher in study done at kerala (55.86%), in (54.84%).[8,9]

In our study knowledge about hand washing was poor comparable to the study (70.5%). In our study, only 9% participants mentioned use of face mask as a way of prevention, which is very low compared to studies done by (56%) , (38.2%) and (14.3%). 42 % participants stated avoiding crowded public transport may be due to fear of swine flu.[13,14]

Hand washing as preventive measure was practiced by 12.5% which is very less compared to a study (70%), (87.8%) while it was low in (36.0%), (56.9%), and (30.0%) similar to the results in our study.[8,13,15-17] In contrast to our study, in a study conducted at Punjab 60.5 %10 of the participants believed that swine flu can be prevented by wearing face mask and 36.5% reported that swine flu can be prevented by hand washing and maintaining personal hygiene. 40.5% participants were using Ayurvedic remedies in our study which were in contrast to those reported Most participants used Nilavembu kasayam for fever.[18] This could be explained by the government encouraging the use Nilavembu during febrile illness and various social medias advocating it's use. 38.6% respondents felt that herbal medicines were least effective in a study.[19]

In our study, people had average knowledge of swine flu. But the knowledge was not being practiced preventing swine flu as evident by a positive but weak correlation between knowledge and practices in all age group, gender and Rural/urban area.

CONCLUSION

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 are linked together in a way so that any increase in knowledge, changes in attitudes and changes in the kinds of practices plays a major role in prevention of H1N1 influenza.

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