Original article

A cross sectional study of awareness regrading influenza among the urban population of Surendranagar

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ABSTRACT
INTRODUCTION: Influenza is well known to cause frequent epidemics. Awareness about it will be the best measure of to avoid "flu" as well as to reduce the complications and resultant morbidities.

AIMS AND OBJECTIVES: 1. To find out level of awareness amongst urban population of Surendanagar and 2. To explicate the awareness with the socio-demographic characteristics of the population.

MATERIALS AND METHODS: 5% of the ward population in randomly selected ward were subjected to house to house survey. Data was collected using presdesigned, pretested proforma.

RESULTS: Majority of males had education upto primary followed by secondary while 34% of females were illiterate. Majority of males were labourers while females were house wives. Majority of the families belonged to Social class IV. Only 58% had heard of influenza, 75% of them, males. Nearly 44% of those who were aware did not know about preventive measures.

RECOMMENDATIONS: Large scale I.E.C activities using popular media, group discussions, demonstrations etc to create awareness and spread knowledge of preventive measures should be taken up.

KEY WORDS: Influenza, awareness, urban population. Surendranagar

INTRODUCTION

Influenza, more popularly known as the seasonal flu, is caused by influenza viruses. It spreads between people and is known to cause mild to severe illnesses. In extreme cases can cause death. Children (<2 yrs of age), elderly and those suffering from chronic illnesses are at a higher risk of complications. The disease is well known to cause epidemics every year. This study was thus aimed at finding out the awareness of influenza among the urban population of Surendranagar.

AIMS AND OBJECTIVES:
1. To find out the awareness regarding influenza among urban population of Surendranagar
2. To explicate the awareness with the socio demographic characteristics of the population

MATERIAL AND METHODS:

All the wards in urban Surendranagar were enumerated and by simple random sampling, one ward was selected. It was decided to study 5% of the total ward population for the study (which came to 742).

A cross sectional house to house survey was carried out to include all the members of the house hold more than 10 years of age present at the time of the visit.

Data was collected using a pre designed and pre tested questionnaire and was analyzed using SPSS.

ANALYSIS AND INTERPRETATION

TABLE 1: DISTRIBUTION OF THE SUBJECTS ACCORDING TO THEIR AAGE (N=742)

| Age group	Males		Females		Total	
	No.	%	No.	%	No.	%
<20	58	21.32	61	12.97	119	25.31
20-40	92	33.82	215	45.74	307	41.37
40-60	76	27.94	118	25.10	194	26.14
>60	46	16.91	76	16.17	122	16.44
Total	272	36.65	470	63.34	742	100

Out of the 742 subjects, 272 were males and 470 females with mean age of 37.31 ± 17.58. The median age was found to be 33. Majority of the subjects were young adults (41.37%) and the percentage of the geriatric population in the study group was found to be 16.44.

FIGURE I: SHOWING DISTRIBUTION OF THE MALE AND FEMALE SUBJECTS ACCORDING TO THEIR EDUCATION
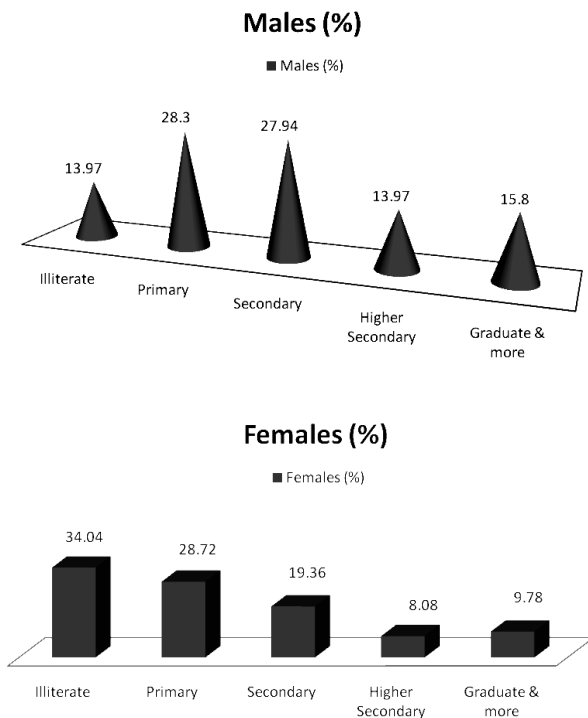
Males (%)

Females (%)

It can be seen from the above diagram that majority of the males were educated upto primary (28.3%) and secondary (27.94%). Females on the other hand in majority were illiterate (34.04%) followed by education upto primary (28.72%) and then upto secondary (19.36%).

FIGURE 2: SHOWING THE DISTRIBUTION OF THE SUBJECTS ACCORDING TO THEIR OCCUPATION (N=742)

Distribution according to occupation
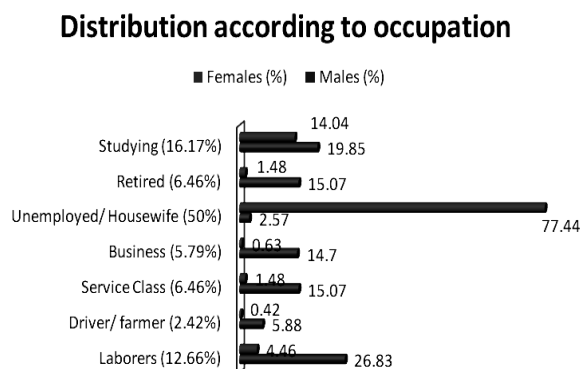
Majority of the male subjects were labourers (26.83%) and females were housewives (77.44%). About 16.17% of the subjects were studying in Schools/ Colleges.

TABLE II: DISTRIBUTION OF THE FAMILIESACCORDING THE MODIFIED PRASAD`S CLASSIFICATION OF 2009, (N= 261, CPI=RS. 741)

Social class	Range (in Rs.)	No. of families	Percentage
1	>3653	17	6.51
2	1826-3652	56	21.45
3	1096-1825	65	24.90
4	548-1095	99	37.93
5	<547	24	9.19

It can be seen that majority of the families were from social class 4 (37.93%) followed by class 3 (24.9%) and class 2 (21.45%)

TABLE III: SHOWING THE PERCENTAGE OF SUBJECTS WHO WERE AWARE OF INFLUENZA (FLU) (N=742).

Sex	Aware of Influenza (flu)				Total	
	YES		NO			
	No.	%	No.	%	No.	%
Male	205	75.36	67	24.63	272	36.65
Female	225	47.87	245	52.12	470	63.35
Total	430	57.95	312	42.04	742	100

Out of the total subjects, only 58% of the subjects had heard of influenza (flu), majority of whom were males (75%). The difference between two proportions of both the sexes regarding the awareness was found statistically highly significant using Z test (P<0.0001).

TABLE IV: SHOWING THE AWARENESS OF THE SUBJECTS REGARDING THE NEWER INFLUENZAS (SWINE, AVIAN FLU, SARS)

Sex	Aware of Newer Influenzas				Total	
	Yes		No			
	No.	%	No.	%	No.	%
Male	190	48.71	82	23.29	272	36.65
Female	200	51.28	270	76.70	470	63.35
Total	390	52.56	352	47.43	742	100

When asked about the awareness of the newer influenzas like H1N1 (Swine) Influenza, Avian Influenza and SARS, it was noted that those who had heard of them had a very minor majority (53%) as compared to those who had not and the difference was statistically not significant (X^2=0.165-DF=1 P = 0.6847).

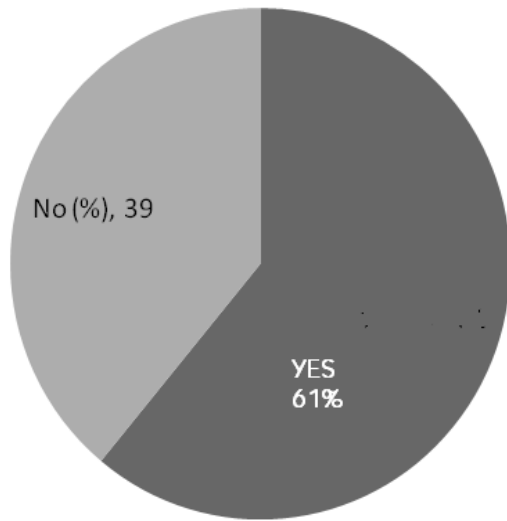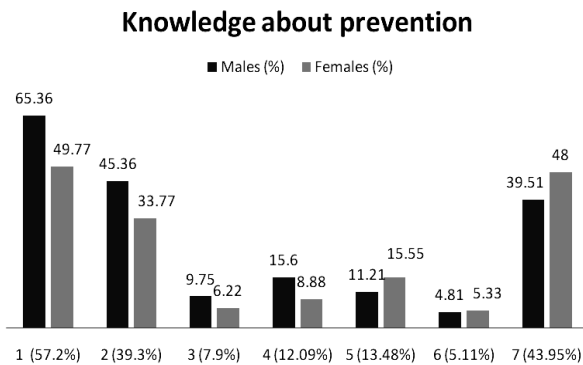FIGURE III: DEPICTING AWARENESS ABOUT THE MODES OF TRANSMISSION (N=430)

FIGURE IV: SHOWING THE KNOWLEDGE OF THE SUBJECTS REGARDING THE VARIOUS MODES OF PREVENTION (N=430)

As shown in the figure, maintaining a respiratory etiquette, covering nose & mouth during other`s cough and sneeze was known to 57.2% (1). Wearing mask while visit to places of overcrowding and public gathering was known to 39.3% (2). Isolation of suspected and known patients during epidemics was known only to 7.9% (3) Improving hygiene and regular hand washing 12.09% (4), avoidance of visit to places with overcrowding 13.48% (5). Other modes of prevention according to their knowledge like Vaccination, Chemoprophylaxis, Staying home at the 1st sign of influenza etc was 5.11%. Nearly 43.95% had no idea regarding the prevention of the disease.

It was rather disappointing to know that nearly 44% of the subjects among those who had heard of Influenza (flu or flu like illnesses) had no knowledge regarding the prevention of the disease

though nearly 61% had an idea about the common modes of transmission.

TABLE V: ASSOCIATION OF THE AWARENESS WITH THE SOCIAL CLASS OF THE SUBJECTS (N=742).

S E Classification	Heard of Influenza (flu)		Total
	Yes	No	
Class 1	39	09	48
Class 2	108	51	159
Class 3	80	105	185
Class 4	65	216	281
Class 5	10	59	69
Total	430	312	742

It is very clear from the above table that as we proceed from lower social class to higher, the awareness regarding Influenza got bettered (X^2=137.595, Df=4, P<0.0001).

DISCUSSION AND CONCLUSION:

In the present study 53% had heard of swine flu. Similar study conducted by Kamate et al showed 83% who had heard of swine flu which is much higher than present study of 53%. This difference could be due to difference in the socio demographic characteristics of the two populations.

A study conducted by Caddedu C et al showed similar findings with low level of awareness among the health care workers . Puri S et al showed nearly 96% of the study subjects having knowledge about the transmission which is again higher than the present study.

It can be concluded from the study that the awareness among the general population showed several lacunae. Looking to the seriousness of complications related to the disease large scale IEC activities regarding all the aspects of the disease should be initiated.

RECOMMENDATIONS:
1. Large scale IEC activities for the general population regarding all aspects of the disease transmission and prevention.
2. Use of posters, banners, TV and newspapers for dissemination of the information regarding dos and donts of the disease
3. Group discussion and personal demonstrations by Health workers during the epidemics and pandemics.

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The human body contains blood, phlegm, yellow bile and black bile. These are the things that make up its constitution and cause its pain and health. Health is primarily that state in which these constituent substances are in the correct proportion to each other, both in strength and quantity, and are well mixed.
Hippocrates (1978), Hippocratic writings. Edited with an introduction by G.E.R. Lloyd. Harmondsworth (Penguin), 262

The most important characteristic of an organism is that capacity for internal self-renewal known as health.
There are two organisms whose processes of self-renewal have been subjected to human interference and control. One of these is man himself (medicine and public health). The other is land (agriculture and coservation).
The effort to control the health of land has not been very successful.
Leopold, Aldo (1970), A Sand County Almanac. New York (Ballantine Books), here: 272