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Knowledge Regarding H_1N_1 among Adults

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Abstract

Background: H_1N_1 is a major cause for concern among the common people of India and needless to say it has created fear across various strata of the society. The novel viral infection which is caused by influenza type A virus is an acute respiratory infection and is also known as swine flu.

Objective: The objectives of the study were to assess the knowledge regarding H_1N_1 among adults and to determine the association between level of knowledge regarding H_1N_1 among adults and socio-demographic variables.

Study design: Quantitative approach using descriptive design. Setting: Study was conducted at Ananthapuri Hospitals and Research Institute, Thiruvananthapuram. *Population*:Adults who are attending all out patient departments of Ananthapuri Hospitals and Research Institute, Thiruvananthapuram. One hundred and twenty adults attending outpatient departments were interviewed using structured interview schedule for assessing the knowledge regarding H_1N_1 among adults.

Results: One hundred and twenty adults attending outpatient departments were interviewed. The collected data were analysed by using appropriate descriptive and inferential statistics The result revealed that only 18.3% of participants had good knowledge, 70.0% of participants had average knowledge and 11.7% of participants had poor knowledge regarding H_1N_1 among adults. Significant association was observed between the knowledge regarding H_1N_1 among adults with age (P value 0.002) and no association was noted with other variable like sex, religion, occupation and medias of information. Since the geographical areas of Kerala is now becoming more prone to the occurrence of communicable diseases, it is mandatory that all persons especially adults should be equipped with necessary knowledge regarding H_1N_1. So that they can act promptly if they encountered with such diseases.

Conclusion: The study findings revealed that majority of adults had moderate knowledge regarding H_1N_1.

Keywords: H_1N_1; Knowledge; Adults.

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INTRODUCTION

The novel viral infection which is caused by influenza type A virus is an acute respiratory infection and is also known as swine flu. Coughing, sneezing or touching contaminated surfaces followed by touching nose or mouth are some mode of spread of H_1N_1[1]. The pandemic Influenza A (H_1N_1) virus differs in pathogenicity from Seasonal Influenza following its emergence during the year 2009 and this spread rapidly throughout the world leading to the declaration of an Influenza pandemic by World Health Organization 2009[2]. By June 2010, it had caused over 18,172 deaths in more than 214 Countries. The number of cases in various countries in last 5 years has well supported the reason for it being considered as a major emerging disease in the global Scenario[3]. H_1N_1 is a major cause for concern among the common people of India and needless to say it has created fear across various strata of the society. In April 2009, a new strain of Influenza virus A H_1N_1 commonly referred to as Swine flu, began to spread in several countries around the World. Evidence shows that this new strain could pass from human to human lead to quickly raise its pandemic alert level[4].

One of the reports by World Health Organization shows that 1,77,457 laboratories confirmed cases of H_1N_1 and 1462 deaths were reported on 6th August 2009. India has no exception and many deaths were reported in metropolitan cities such as Mumbai, Pune and Bangalore[5]. During 2013 India reported 5253 cases and 699 deaths with case fatality rate of 13.3%. In 2014, a total of 218 people died from H_1N_1 with 937 cases during the year[6]. H1N1 is turning out to be more dangerous than the present COVID-19 variant, with patient's developing pneumonia and other complications needs ICU support. Kerala is facing a surge now a days facing about 68 H_1N_1 of March 2023 which was more than of what was reported in January and February 2023[7].

A study conducted by Chinese Centre for disease control and prevention to assess the knowledge, attitude and practices of H_1N_1 among Chinese general population showed that 30% respondents were not clear about whether food spread H_1N_1 or virus spreads and 67.5% reported that the pandemic had no impact on their life[8]. A cross sectional study conducted among rural population in Puducherry revealed that 96% of them were aware about swine flu, its treatment, investigations and available vaccines and 17% of them were aware about avoiding crowded areas during H_1N_1 pandemic[9]. Another cross-sectional study conducted at Karnataka among dental professionals to assess knowledge and awareness regarding swine-Influenza A, shows that 67.3% of were aware about swine flu and among them, only 35.3% were aware about the preventive measures[10]. The result of a cross-sectional study conducted at Kollam,Kerala among rural population to assess the knowledge, attitude and practice regarding H_1N_1 shows that 71.40% had knowledge regarding signs and symptoms and 56.33% were aware about the modes of transmission[11]. In the light of the above context and by personal experience during interaction with public, the investigators felt that the knowledge regarding H_1N_1 and its prevention is very important to reduce the complications such as pneumonia, meningitis, influenza associated encephalitis and mortality as well. Therefore the present study was undertaken to assess the knowledge regarding H_1N_1 among adults.

METHODOLOGY

Research Design: Descriptive design *Setting*: The present Study was conducted at Ananthapuri Hospitals and Research Institute, Thiruvananthapuram *Population***:**Adults of Thiruvananthapuram corporation. *Sample***:** Adults who are attending outpatient departments of Ananthapuri Hospitals and Research Institute, Thiruvananthapuram and who meets the inclusion criteria. *Sample size***:** The study conducted among 120 adults**.** *Sampling Technique***:** Consecutive sampling. *Exclusion criteria:* Seriously ill and mentally ill patients were excluded. *Tool and technique***:** The structured interview schedule was used which includes questions on socio demographic variables and knowledge regarding H_1N_1. The content validity of the tool was done by experts in the field of Community Medicine and research methodologists. Pilot study was conducted among 12 participants and the tool was found to be feasible.

Data Collection process

The data was collected after getting permission from concerned authority of Ananthapuri Hospitals and Research Institute, Thiruvananthapuram and informed consent from the participants were obtained before conducting the study. Face to face interview was conducted using structured interview schedule which included socio demographic factors, knowledge about H_1N_1, signs and symptoms, treatment, and also sources of

information regarding H_1N_1. The purpose of the study was explained to the participants. The questions were asked sequentially from each subject and 10-15 minutes was taken for collecting data from each participant. The response was recorded systematically by the investigator

RESULTS

Data collected from 120 adults were analysed by appropriate descriptive and inferential statistics and results were shown in percentages and the knowledge level were graded as good (54-80) average (26-53) and poor (0-25). among 120 respondents, 31.7% of participants belonged to the age group above 50 years, majority of them (60.8%) were females, 71.7% of participants were Hindus, (40.0%) of participants were graduates and (32.5%) of participants were home makers. The Socio demographic variables of the respondents are shown in (*Table 1*) Regarding source of information on H_1N_1 (45.8%) were used television as a source of information followed by (31.7%) internet (*Table 2*) Regarding knowledge about H_1N_1, 70.0% of participants had average knowledge, 18.3% had good knowledge and 11.7% had poor knowledge regarding H_1N_1. (*Fig. 1*) It is also found that there was significant association between knowledge regarding H_1N_1 and age and no significant association with other variables. (*Table 3*)

Table 1: Socio-demographic characteristics of the study population

(N=120)

Variable	Percent (%)
Sex	
Female	39.20
Male	60.80
Age (Years)	
20-30	26.70
31-40	23.30
41-50	18.30
Above	31.7
Religion	
Hindu	71.70
Christian	22.50
Muslim	5.80
Education	
Primary	19.20
Secondary	12.50
Higher Secondary	25.80
Graduate	40.00
Post Graduates	2.50
Occupation	
Homemaker	32.50
Skilled Workers	21.70
Unskilled Workers	4.20
Govt Employees	10.80
Private Job	17.50
Students	13.30

Table 2: Source of information regarding H_1N_1

(N=120)

Source of information	Percent (%)
Tele vision	45.80
Newspaper	20.00
Radio	8.00
Health Magazine	1.70
Internet	31.70

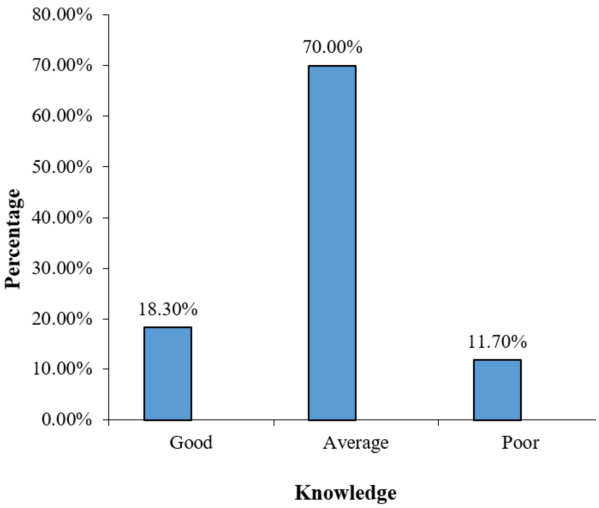

Fig. 1: Distribution of participants based on knowledge regarding H_1N_1

Table 3: Association between level of knowledge regarding H_1N_1 with age, gender and Occupation

Socio-demographic variables		Knowledge Level								x^2	Df	P value
		Poor		Average		Good		Total				
		No	%	No	%	No	%	No	%			
Age (in years)	20-30 yrs	1	0.8	26	21.7	5	4.2	32	26.7			
	31-40 yrs	4	3.3	14	11.7	10	8.3	28	23.3	20.948	6	*0.002
	41-50 yrs	2	1.7	13	10.8	7	5.8	22	18.3			
	Above 50	6	5.0	30	25.0	2	1.7	38	31.7			
Gender	Male	6	5	30	25	1	9.2	47	39.2	1.584	2	0.453
	Female	8	6.7	54	45	11	9.2	73	60.8			
Occupation												
	Homemaker	6	5	27	22.5	6 5		39	32.5			
	Skilled worker	4	3.3	20	16.7	2	1.7	26	21.7	10.272	10	0.417
	Unskilled worker	1	0.8	3	2.5	1	0.8	5	4.2			
	Govt employee	1	0.8	9	7.5	3	2.5	13	10.8			
	Private job	1	0.8	12	10	8	6.7	21	17.5			
	Student	1	0.8	13	10.8	2	1.7	16	13.3			

DISCUSSION

H_1N_1 is a pandemic and is widely spread across the India. Multiple numbers of similar studies have been conducted related to awareness about swine flu in various population groups. The primary objective of our study was to assess knowledge regarding H_1N_1 among adults. William Raj *et al.*[12] reported that majority (38%) of the respondents were in the age group between 39-48 years whereas in our study (31.7%) respondents were in the age group above 50 years and majority of the participants (60%) were females which is similar (60.8%) to the present study. It is also reported that majority (36%) of respondents used social medias as source of information whereas in the present study (45.8%) used television as an important source of information. Majority of the participants (52%) were had poor knowledge and 30% of them had moderate knowledge and 18% were had adequate knowledge regarding H_1N_1 where as in our study only (11.7%) had poor knowledge (70%) had moderate knowledge and (18.3%) had good knowledge which is contrary to the of the present study. Nisha kumari and Mina Panwar[13]reported that more than half (66%) of subjects had excellent knowledge, (31.3%) had good knowledge and 2.7% had average knowledge and revealed no association between socio demographic variables and knowledge level whereas in the present study only 18.3% had good knowledge and also found there was significant association between variables like age and knowledge regarding H_1N_1.

CONCLUSION

H_1N_1 is a subtype of influenza A virus, a communicable viral illness which causes upper and in some cases lower respiratory tract infection in its host. The common symptoms that are observed are mild respiratory illness with fever, cough, sore throat, dyspnoea, rhinorrhoea, myalgia, chills and fatigue. In some cases severe complications such as pneumonia and respiratory failure which can cause deaths. The study found that a majority of adults demonstrated average knowledge about H_1N_1, including its symptoms, transmission methods, and preventive measures. The effective information about H_1N_1, prevention, education about transmission, hygienic measures and vaccines by health care providers will help adults to become more aware about the transmission and prevention.

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