



KNOWLEDGE, ATTITUDE AND PRACTICES OF COVID-19 AMONG HABITANTS OF SURAJKUND AREA MEERUT

Medical Science

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ABSTRACT

Covid-19 pandemic has been a serious cause of death worldwide. It is caused by a SARS-CoV-2 belonging to a family known as corona virus. The aim of this study was to assess the community knowledge, attitude and practice strategy implementation on SARS-CoV-2 disease 2019. A cross-sectional survey was done from 10 February to 22 March 2022 in Surajkund Area Meerut, Uttar Pradesh. Interviewer-administered questionnaire was used to collect data from 100 respondents. The majority of the respondents (82%, n = 82/100), (66%, n = 66/100), (59%, n = 59/100) knew fever, shortness of breath and dry coughing are the clinical symptoms of the disease, respectively. Vast majority of the surveyed participants of this study (87%, n = 87/100) frequently wash their hands with soap and water. COVID-19 has a great impact on the economy, politics and social interactions in the study area. Our findings suggest that the community should practice the WHO recommendations to minimize the spread of the virus.

KEYWORDS

Pandemic, Corona Virus, Cross-sectional Survey, Economy.

INTRODUCTION

The world has been facing a serious pandemic caused by a novel coronavirus that was first isolated on 21st December 2019, as a cluster of acute respiratory illness in Wuhan, China, from where it spread drastically to over 195 Countries. It was declared as a global pandemic by WHO on 11th March 2020⁽¹⁾.

Coronavirus disease 2019 (COVID-19), which is caused by SARS-CoV-2, is reported by the WHO to be triggered by the inhalation of contaminated droplets with viral particles or by touching the nose, mouth and eyes after a person's hands come in contact with contaminated surfaces^(2,3). In addition, transmission via aerosols and through feco-oral routes are also suspected. Among the most described symptoms of COVID-19 are fever, cough, sore throat, shortness of breath, pneumonia, fatigue, malaise and gastrointestinal symptoms. At the same time, infection by the SARS CoV-2 can be asymptomatic⁽⁴⁾.

On 30 January 2020, a laboratory confirmed case of 2019-nCoV was reported in Kerala⁽⁵⁾. The Prime Minister's Office and the Ministry of Health, Family and Welfare (MoHFW) are closely monitoring 2019-nCoV situation and intensifying preparedness and response efforts. Surveillance is being strengthened and enhanced at points of entry, in health facilities and in the community including contact tracing and follow up around the confirmed case. Public health preparedness including surveillance, diagnostics, hospital preparedness, infection prevention and control, logistics and risk communication is being constantly reviewed by the national and state health authorities

Development and adaption of Information Education and Communication (IEC) materials in local languages is being done by the concerned States. WHO India is working closely with MoHFW, NCDC, ICMR and NDMA at the national level and supporting through task force/control rooms at the state and district level in Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Telangana, and Puducherry. WHO field offices continue to participate in meetings on current response, vaccination; chaired by Chief Ministers, Health Ministers, Chief and/or Health Secretaries, MDs – NHM, etc. Technical support and guidance were shared regarding Omicron variant.

WHO Country office and the field offices continue to provide technical support for COVID-19 containment activities in Uttar Pradesh; including supportive supervision to monitor contact tracing; identify containment zones and sharing regular feedback. House to house survey for ILI/SARI in Uttar Pradesh was provided.

METHODS AND MATERIALS

Study Design:

A cross-sectional study was done from 10 February to 22 March 2022.

Study Population:

Habitants who were aged 18 years and above in Surajkund Area of Meerut UP.

Ethical Approval:

The ethical committee of our institution approved the study protocol to collect the data from the respondents. The respondent's right to refuse or withdraw from participating was fully maintained and the information provided by each respondent was kept strictly confidential.

After acquiring verbal consent from the respondents, the required data was collected from the study participants.

Sample Size Determination:

To determine the sample size a single population proportion formula, $n = Z^2 p (1-p)/d^2$ was used. We used 50% of prevalence to get a representative sample size by considering 95% confidence interval and marginal error (d) of 10%.

- $n = Z^2 p (1-p)/d^2$ thus
- $n = (1.96)^2 (0.5) (1-0.5)/(0.10)^2 = 96$
- n = Number of sample size
- Z = 95% confidence interval equals 1.96
- P = 50%

Therefore, the minimum calculated sample size is 96. Now to round off we will take 100 as final sample size.

Sampling Technique And Procedure:

A random sampling technique was employed to select the study participants. Safety norms like social distancing measures, proper use of face mask and restricted movement and lockdowns, data were collected through personal interview, via a self-reported questionnaire. This study aimed to maximize reach and gather data from as many respondents as possible.

The complete questionnaire consisting of 33 questions about demographic characteristics and KAP dimensions was used.

RESULTS

Socio-demographic Characteristics

The majority of respondents (23%, n=23/100) were in the age range of 25-34 years. In terms of sex, majority (53%, n=53/100) participants were females. Regarding marital status (72%, n=72/100) of the participants were married. Out of the total study participants in terms of educational status, the majority (52%, n=52/100) were intermediate or above. Most (90%, n=90/100) of the participants were employed. [Table 1]

Table 1 Socio-demographic Characteristics Of The Respondents

Socio-demographic characteristics	Frequency (%)
Sex	
Female	53%
Male	47%
Age (years)	
18–24	16%
25–34	23%
35–44	14%
45–54	18%
55–64	14%
65 or more	15%
Marital Status	
Single	22%
Married	72%
Divorced	0%
Widowed	6%
Education	
Professional degree	6%
Graduate or Postgraduate	26%
Intermediate or Post high school diploma	20%
High school	22%
Middle school	13%
Primary school	5%
Illiterate	8%
Occupation	
Legislators, Senior Officials & Managers	4%
Professionals	8%
Technicians and Associate Professionals	6%
Clerks	9%
Skilled Workers and Shop & Market Sales Workers	29%
Skilled Agricultural & Fishery Workers	1%
Craft & Related Trade Workers	6%
Plant & Machine Operators and Assemblers	8%
Elementary Occupation	19%
Unemployed	10%

Knowledge of respondents towards Covid-19

Regarding information about Covid-19 pandemic, the majority (78%, n=78/100) of the study participants has got information from mass media (TV and Newspaper) [Table 2]. In terms of knowledge about the transmission mode of Covid-19 disease, the majority of the respondents knew that the virus can transmit through handshakes, face to face talk, coughing or sneezing by infected person and direct contact with patient's personal items.

Majority of the respondents (82%, n = 82/100), (66%, n = 66/100), (59%, n = 59/100) and (40%, n = 40/100) knew fever, shortness of breath, dry coughing and sore throat are the clinical symptoms of the disease, respectively. The majority of the respondent (93%, n = 93/100) responded isolation and treatment of people who are infected with COVID-19 were effective ways to reduce the spread of viruses.

Table 2 Source Of Information Among Study Participants.

S.No.	Source of Information	Percentage*
1	World Health Organisation (WHO) website/recommendations	7%
2	Television/Newspaper	78%
3	Family Members	31%
4	Health Educators	14%
5	Social Media	29%

*Multiple response.

Attitude Of The Respondents Towards COVID-19

This study showed that (33%, n = 33/100) of the participants were never been out during pandemic spread. The majority (42.0%, n = 42/100) of the respondents have been disinfecting food packages bought during pandemic. The present study showed that (91%, n=91/100) of the respondents were optimistic regarding the possibility of finding a treatment of Covid 19.

Taking into account the measures taken by Indian Government most (76%, n = 76/100) of the participants agreed that sufficient measures were taken by the government while 13% (n = 13/100) were disagreed for the same.

Practices Of The Respondents About COVID-19

Vast majority of the surveyed participants of this study (87%, n = 87/100) frequently wash their hands with soap and water. Similarly (60%, n = 60/100) avoided going to crowded public places. Most (83%, n = 83/100) of the surveyed participants were not using gloves as a method to prevent being contaminated. This study revealed that (84%, n = 84/100) of the study participants were not eating raw meat.

Table 3 Preventive Behaviour Adapted By Study Participants.

S.No.	Preventive Behaviour Adapted	Always (100%)	Often (80-90%)	Occasionally (10-20%)	Never (0%)
1	Washing your hands frequently with soap and water	87%	7%	2%	4%
2	Avoiding crowded public places	60%	17%	5%	18%
3	Using gloves	8%	2%	7%	83%
4	Disinfecting your shoes if you were out	13%	6%	5%	76%
5	Disinfecting your clothes if you were out	30%	7%	6%	57%

Above table depicts the various prevented behaviour adapted by participants and it was found that majority (87%, n = 87/100) of them were always washing their hands with soap and water. Similarly, 60% (n = 60/100) were avoiding crowded public places while 83% (83/100) never used gloves as a preventive method.

DISCUSSION

The present survey evaluated community knowledge, attitude, practices towards COVID-19 among a heterogeneous, adult population of Surajkund Area Meerut. In the present study 76% of the study participants had positive attitudes towards successful control of COVID-19 pandemic by the Indian government. 39% of the participants doesn't know about the cause of Covid-19 have a viral aetiology. In this study 87% of the respondents frequently wash their hands with soap and water. This indicates the practicing habit of the respondents were very poor. In the present study (66.8%) of the study participants did not practice social distancing to prevent the spread of COVID-19 pandemic. Of the total respondents 80.0% said that the communities were obeying the government restriction strategy of staying at home to prevent COVID-19 pandemic. The reason of low practice to stay home might be due to socio-economic problems faced by the community. Our findings revealed only (33%) of the respondents were obeying the government restriction strategies of avoiding going out, in the presence of crowded people without practicing social distancing. This might be due to lack of strict enforcement of the required lockdown. The reason for this difference might be due to socioeconomic, religious and educational differences between the study population.

CONCLUSION

The present study assessed the community knowledge, attitude and practices of Covid 19 disease among habitants of urban area in Western Uttar Pradesh. Even with some limitations, our findings present valuable information about the KAP dimensions and their dynamics among study participants

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