



A CROSS SECTIONAL WEB BASED SURVEY TO ASSESS THE KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS COVID-19 AMONG THE GENERAL RURAL AND URBAN POPULATION OF UDAIPUR CITY, RAJASTHAN

Community Medicine

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ABSTRACT

Background: The understanding level of knowledge, attitudes, and practices towards communicable diseases can role as barrier for community spread. Thus it become needful to apply necessary measures in forms of health education and behavior change communication method to prevent spread of communicable disease like COVID-19.

Aims: Present study aimed to examine the KAP toward COVID 19 among the general population.

Methods: This was a cross-sectional, web based, observational study among the general population of rural area. It was carried out from 14 October to 24 October, 2020 using google form, WhatsApp application. Information related to demographic characteristics and KAP about COVID 19 was collected and analyzed in Microsoft Excel.

Results and conclusion: The mean age of the participants was 49 years, with 1140(57%) male and 860(43%) female. In order to deal appropriately to the newly spread infectious disease, people need to have basic knowledge about disease, positive attitude and good practices for prevention of disease. The present study found that a majority of the participants had good sufficient level of knowledge on COVID-19 virus. Even people are not very sure about how long this pandemic situation will stay and also how government can win on COVID-19 virus to avoid spreading.

KEYWORDS

KAP Study, COVID-19, pandemic

INTRODUCTION

In December, 2019, the Corona virus disease 2019 (COVID-19) caused by a novel corona virus emerged in Wuhan, China. WHO declared it as global pandemic. More than 200 countries are infected due to COVID-19. Worldwide corona virus cases cross 41.04 million, death to all over 1.12 million till November 2019. While in India till 19 November, the number of COVID-19 cases were reported 90 lakh with 1,32,177 deaths according to data collected from various State Health Departments. The first case of corona pandemic in Indian State of Rajasthan was reported on 2, March, 2020.² 26 April 2020, there are 26,384 corona case with mortality of 826 are reported in India. It is highly infectious, contagious and the main symptoms are fever, dry cough, sore throat, breathlessness and loss of taste or smell or both, fatigue. But majority of the people who fall sick with COVID-19 will experience mild to moderate symptoms and recover without special treatment within certain period of time. Corona virus spreads through droplets generated when an infected person coughs sneezes or exhales. The characteristics of these droplets are heavy to hang in air and quickly fall on surfaces around. One can be infected by breathing in the virus if the person is within the close proximity of someone who has COVID-19, or by touching a contaminated surface and thereby touching one's eyes, mouth or nose. Precautions include, regular cleaning of hands with sanitizer, maintaining 1m distance ie social distancing, avoid touching eyes, nose and mouth unnecessarily, follow good respiratory hygiene, wear mask, prefer to stay home, avoid unnecessary outing.^{1,4}

Lockdown has significantly declined growth rate of COVID 19 cases and had shown potential to slow down the spread of COVID 19 in India and rest of the world.⁵ In India, Nationwide lockdown was commenced on 25th March 2020. Lockdown is the short-term measure to reduce community transmission and rapid spread, but as a long term measure an Individual's knowledge about COVID 19, their attitude and routine preventive practices plays a pivotal role in the containment of spread of the disease.⁶⁻⁸ Although there is wide spread media campaign already running by the Government and Civil Organizations, there is a need to understand community awareness for COVID 19 before lockdown is terminated or moderated. In the present study we aim to assess Knowledge(K), Attitude(A) & Practices(P) about COVID 19 in the general public of Udaipur, Rajasthan during the nationwide lockdown period.

The study objectives are

- 1) To assess the Knowledge, Attitude and Practice regarding COVID 19 in General Population
- 2) To know the association between socio demographic characteristics and Knowledge, Attitude and Practice of an Individual regarding COVID 19

METHODOLOGY:

A cross-sectional online web based survey was conducted to achieve the objectives of this study. The call for participation was made in social media. The survey was conducted during August to October in

rural and urban area of Udaipur City, Rajasthan. Persons residing in Udaipur aged above 18 years were participated. Convenient random sampling technique was used to select 2000 participants.

Pre tested questionnaire on knowledge, attitude and practice (KAP) towards COVID-19 developed by a researcher in China was adopted. It consists of demographic variables such as age, gender, religion, occupation income category. It consists of 13 items to measure the level of knowledge about COVID-19 and 3 items each on attitude and practice respectively.

In knowledge part, four questions were related to clinical manifestations and management of COVID 19 while 3 questions were related to prevention and control of disease. Participants were given options to choose 'true', 'false', or 'not sure' on each item of knowledge and practice questionnaire, whereas 'agree', 'disagree' or 'not sure' options were given to choose on items of practice (mode of spread, symptoms and high-risk group)

INCLUSION CRITERIA:

It was an online web based study. Participants with access to the internet, who are using WhatsApp, age more than 18 years who able to understand English/Hindi language and willing to give informed consent were included in the current survey.

Ethical Issue:

No ethical clearance was required. Being only KAP survey and does not determine the health status of any individual.

RESULTS

A total of 2000 residents of Udaipur city, of Rajasthan were participated in the study. The average age of the respondents was 49 years, 57% were men and 43% were women. 63% of the population belongs to Hindu religion. Majority of the population are employed and 69% of the respondents belong to higher income group.

Table-1 Knowledge of Participants About COVID-19 (N= 2000)

Sr. No.	Test items on Knowledge	Responses	n	%
1	The main clinical symptoms of COVID-19 are fever, fatigue, dry cough and body aches	True	1875	94%
		False	115	6%
		Not Sure	10	1%
2	Unlike the common cold, stuffy nose, runny nose and sneezing are less common in persons infected with the COVID-19 virus.	True	1286	64%
		False	708	35%
		Not Sure	6	0%
3	Currently there is no effective cure for COVID-19, but early symptomatic and supportive treatment can help most patients recover from the infection.	True	1657	83%
		False	287	14%
		Not Sure	56	3%

4	Not all persons with COVID-19 will develop to severe cases. Only those who are elderly and have chronic illness are more likely to be severe cases.	True	984	49%
		False	862	43%
		Not Sure	154	8%
5	Eating or touching animals would result in the infection by the COVID-19 virus.	True	359	18%
		False	1196	60%
		Not Sure	445	22%
6	Persons with COVID-19 cannot infect the virus to others if they do not have a fever.	True	14	1%
		False	1849	92%
		Not Sure	137	7%
7	The COVID-19 virus spreads via respiratory droplets of infected individuals.	True	1483	74%
		False	19	1%
		Not Sure	498	25%
8	The COVID-19 virus is airborne.	True	426	21%
		False	854	43%
		Not Sure	720	36%
9	Ordinary residents can wear face masks to prevent the infection by the COVID-19 virus.	True	1927	96%
		False	63	3%
		Not Sure	10	1%
10	It is not necessary for children and young adults to take measures to prevent the infection by the COVID-19 virus.	True	13	1%
		False	1968	98%
		Not Sure	19	1%
11	To prevent the infection by COVID-19, individuals should avoid going to crowded places and avoid taking public transportation.	True	1796	90%
		False	189	9%
		Not Sure	15	1%
12	Isolation and treatment of people who are infected with the COVID-19 virus are, effective ways to reduce the spread of the virus.	True	1506	75%
		False	446	22%
		Not Sure	48	2%
13	People who have contact with someone infected with the COVID-19 virus should be immediately isolated in a proper place. In general, the isolation period is 14 days.	True	1674	84%
		False	256	13%
		Not Sure	70	4%

Table 1 shows the knowledge of the respondents about COVID-19. The results show that 94% of the population knew about the symptoms of COVID-19 and 83% of the participants believed that early symptoms can be recovered with supportive treatment. 49% of the participants expressed that only elderly persons and people with chronic illness were high risk group. Only 18% answered correctly when asked 'eating and touching animals could result infection'. Majority of the participants had exact information on the spread of COVID-19, but 25% believed that COVID-19 is airborne.

Table 2: Attitude Of Participants Towards COVID-19 (N= 2000)

Sr. No.	Test items on Attitude	Responses	n	%
1	Do you agree that COVID-19 will be successfully controlled?	Agree	423	21%
		Disagree	389	19%
		Not Sure	1188	59%
2	Do you have confidence that INDIA can win the battle against the COVID-19 virus?	Agree	428	21%
		Disagree	278	14%
		Not Sure	1194	60%
3	The Government of India is handling the COVID-19 health crisis very well.	Agree	689	34%
		Disagree	956	48%
		Not Sure	355	18%

Table 2 shows the attitude of participants towards COVID-19. Only 423(21%) of respondents agreed that COVID-19 would successfully be controlled whereas 389(19%) were disagreed and almost half that is 1188(59%) of respondents were not sure. Out of 2000 respondents 428(21%) of the population had confidence that INDIA would win the battle against COVID-19 whereas 278(14%) were disagreed and 1194(60%) were not sure. About 689(34%) agreed that the Government of India was handling the COVID-19 health crisis well where as 956(48%) were disagreed.

Table 3: Practice Of Participants Towards COVID-19 (N=2000)

Sr. No.	Test items on Practice	Responses	n	%
1	In the week before the MoHFW guidelines, did you avoid going to crowded places such as marriages and functions?	Yes	289	14%
		No	1342	67%
		Don't Know	409	20%

2	In the week before the MoHFW guidelines, did you wear a face mask when leaving the home?	Yes	74	4%
		No	1924	96%
		Don't Know	2	0%
3	In the week before the MoHFW guidelines, did you practice proper hand-hygiene using hand sanitizer?	Yes	169	8%
		No	1849	92%
		Don't Know	18	1%

MoHFW: Ministry of Health and Family Welfare

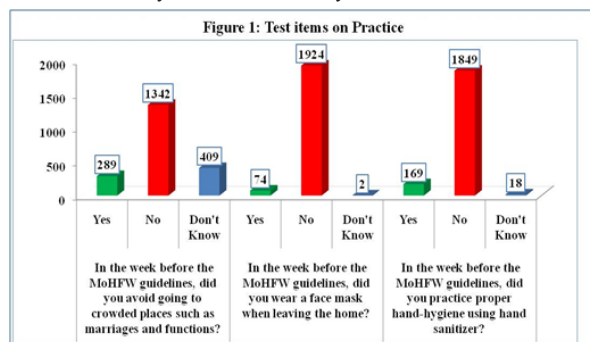


Table 3 / Figure 2 show the practice of the respondents towards COVID-19. For the first question 289(14%) of the population reported that they were avoiding crowded places whereas more than half of the respondents 1342(67%) did not avoid crowded places. Very negligible only 74(4%) of the participants were wearing masks when outside the home during the week before MoHFW guidelines, the remaining 1924(96%) did not wear a mask. On a question asked about hand sanitization, a very few 169(8%) reported that they were practicing hand hygiene frequently before MoHFW guidelines, the remaining 1849(92%) of the population were not practicing proper washing of their hands using sanitizer.

DISCUSSION:

To the best of our knowledge, this is the first study in Udaipur, Rajasthan examining the Knowledge, Attitude, and Practice (KAP) towards COVID-19 among general population. Objective of the study was to determine the knowledge, attitude, practice towards COVID 19 among general population using a web based, semi-structured Questionnaire (In English as well as Local language).

In order to deal appropriately to the newly spread infectious disease, people need to have basic knowledge about disease (its symptoms and mode of transmission), positive attitude and good practices for prevention of disease. The present study found that a majority of the participants had good sufficient level of knowledge on COVID-19 virus. Most of the population held positive attitude towards overcoming COVID-19. But Very negative response found for practicing offhand sanitizers, and avoiding crowd before MoHFW guidelines. Even people are not very sure about how long this pandemic situation will stay and also how government can win on COVID-19 virus to avoid spreading.

CONCLUSIONS:

The findings suggest that the residents of Udaipur City have a good level of knowledge on overcoming the pandemic. Consistent and frequent public health programs by the Government authorities could benefit the public to raise the levels of knowledge on COVID-19 and could bring a positive behavioral change in practice.

LIMITATIONS

Limitations of this study included a small geographical area with a limited number of participants. Also, the residents of Udaipur city only were included due to lockdown restrictions.

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