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# **Original Research**

# To study the Knowledge, attitudes, and practices (KAP) toward COVID-19 appropriate behaviours among general Population

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#### ABSTRACT:

**Aim:** To study the Knowledge, attitudes, and practices (KAP) toward COVID-19 appropriate behaviours among general Population. **Methods:** The current cross-sectional research was carried out before study ethical authorization was obtained from the department. This research covered a population of more than 25-year-olds who willingly participated in this survey. The Convince sampling approach was used to pick 200 research participants. The questionnaire was pre-tested. The questionnaire included data on knowledge, attitudes, and the practise of covid-19 appropriate behaviours. **Results:** The majority of participants (83.5%) had appropriate knowledge of the virus, communicability, route of transmission, mild, moderate, and severe symptoms, and preventative measures for covid-19. The results of attitude toward COVID -19 acceptable behaviour demonstrate that the majority of participants had a good attitude about avoiding large crowds, following hand washing, and so on. It was also discovered that only around 52 percent of individuals recognised that they were practising covid-19 acceptable behaviour and taking preventative steps, while the remainder participants were not. **Conclusion:** The knowledge and attitudes of COVID -19 appropriate behaviours among study participants show that knowledge scores of the general public are adequate, but KAP-GAP observed where population has knowledge but not practising it because only more than 52 percent of participants were practising preventive precautionary behaviours and attitudes of COVID -19 appropriate behaviours towards covid-19.

Keywords: Knowledge, attitudes, practices, COVID-19

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#### **INTRODUCTION**

The coronavirus disease (COVID-19) is a severe acute respiratory illness that first appeared in a patient with viral pneumonia-like symptoms in December 2019 in Wuhan, Hubei Province, China.<sup>1</sup> The pathogen that caused the illness is known as acute respiratory syndrome coronavirus-2 (SARS-CoV-2) and is a new kind of coronavirus that was first labelled as novel coronavirus (nCoV).<sup>2</sup> This extremely infectious, zoonotic virus began infecting people in a tiny city and quickly spread to most regions of the globe, causing a worldwide health disaster. On March 12, 2020, the World Health Organization (WHO) proclaimed the situation a worldwide pandemic and urged for a coordinated effort to address it.3 As of February 12, 2022, the COVID-19 situation dashboard recorded 40,

49,10,528 confirmed cases and 57, 83,776 fatalities worldwide from this lethal virus.<sup>4</sup>

The first incidence of COVID-19 in India was reported on January 27th in Trissur, Kerala, in a 20year-old woman with a travel history to China.<sup>5</sup> The quick mobility of individuals from worldwide epicentres and across cities aided COVID-19 transmission in India, and infection spread to major Indian cities. Active government action, such as travel suspension, contact foreign tracing, containment, and mitigation methods, were begun in response to the surge in cases and to break the transmission cycle. Despite the preventive efforts, the illness continued to spread throughout the nation, with confirmed cases reaching 4,25,86,544 as of February 12, 2022.<sup>6</sup> To prevent the spread, evidencebased NPIs, namely social distance, personal and respiratory hygiene, as well as persistent public

collaboration in the various areas, are necessary.<sup>7</sup> The WHO has also produced specific guidelines for infection prevention and control in the general public and hospital settings. Maintaining hand cleanliness using alcohol-based hand sanitizers, face masks, social distance, crowd avoidance, self-isolation, and medical assistance for a person with moderate symptoms are all part of it (Fever, Cough and headache).<sup>8</sup> The exponential increase in the number of cases has strained and strained the healthcare systems of all nations, including rich and developing ones. Initial efforts also revealed that the Medicare initiative alone would not be sufficient to address the problem. The developing or poor nations have had an extra barrier in accommodating active patients in medical facilities due to inadequate, unprepared health systems. The quick shutdown was seen as a critical measure to stop viral propagation and was followed by several nations. The Indian government also intended to impose a rigorous statewide curfew in order to decrease social interaction and viral community spread. This action has the extra advantage of decreasing the pressure on the country's health system and allowing for the necessary time for health system preparation. The policy includes a total ban on movement, non-essential activity, and travel. The continually changed government rules governed these unexpected limits, causing public alarm and uncertainty, which encouraged migrant workers to travel great distances to their homeland, thereby increasing the danger of infection in other towns.

Any anti-contagion measure's efficacy is based on an understanding of knowledge, attitudes, and practises (KAP) at the macro and micro levels, which will drive people' intended engagement in these interventions.<sup>9</sup> As a result, public education is regarded as one of the most critical initiatives that may substantially assist in efficiently executing these interventions, as has been the case with MERS or SARS.<sup>10,11</sup> As a result, the Ministry of Health and Family Welfare (MOHFW) and state health authorities took aggressive measures to educate the general public and offer correct and genuine information about COVID-19. Because of the unique nature and indistinctness of COVID-19, many sources of information and ideas were produced to guide persons about transmission and procedures for infection prevention. With the varied character of the population and varying education level, the whole process of delivering knowledge and instructions becomes more difficult. Unregulated social media and a lack of crisis communication provided a plethora of disinformation and deceit, which moulded the hazy understanding of COVID-19, fear, and uncertainty.<sup>12</sup> Despite the widespread and extended lockdowns, the doubling time of illnesses decreased, and the number of new cases increased in India.<sup>13</sup> In response to these active intervention activities, pertinent issues about population comprehension and attitudes concerning COVID-19 were raised. We have some lessons learned from the last SARS epidemic, which show the link between knowledge and attitudes and terror and emotion, which may impair preventative measures to stop illness spread.<sup>14</sup>

### MATERIALS AND PROCEDURES

The current cross-sectional research was carried out before study ethical authorization was obtained from the department. This research covered a population of more than 25-year-olds who willingly participated in this survey. The Convince sampling approach was used to pick 200 research participants. The questionnaire was pre-tested. The questionnaire included data on knowledge, attitudes, and the practise of covid-19 appropriate behaviours. The data was gathered methodically and the scores were put into MS-Excel software. The descriptive statistics were computed, and the chi-square test statistics were used to determine the relationship between the variables. Statistical significance was determined at p<0.05. For data analysis, the statistical programme SPSS version 25.0 was employed.

# RESULTS

83.5 percent of the 200 participants (Table No.1) were between the ages of 25 -35. In terms of educational qualification, 67.5 percent were graduates, followed by 17.5 percent with a 12th. Local health care personnel informed 28.5 percent of participants about COVID-19, whereas television informed 25 percent. 48.5 percent of subjects were vaccinated after the first dosage, 34 percent were not immunised, and 17.5 percent were vaccinated after the second dose.

The majority of participants (83.5%) had appropriate knowledge of the virus, communicability, route of transmission, mild, moderate, and severe symptoms, and preventative measures for covid-19.(Table 2) The results of attitude toward COVID -19 acceptable behaviour (Table 3) demonstrate that the majority of participants had a good attitude about avoiding large crowds, following hand washing, and so on. It was also discovered that only around 52 percent of individuals recognised that they were practising covid-19 acceptable behaviour and taking preventative steps, while the remainder participants were not. (Table 4). There was a statistically significant relationship between knowledge and age. Age and attitude levels were not statistically significant. The relationship between covid-19 acceptable behaviour practises and age is not statistically significant at the 5% level of significance.

Paramatars	Frequency	Percentage
	Frequency	1 el centage
Age (years)	167	83.5
25-55	107	05.5
55-45	13	1.5
43-55	12	0
Above 55	0	3
Gender	70	20.5
Male	19	<u> </u>
Female	121	60.5
Community	102	<b>51.5</b>
Urban	103	51.5
Rural	97	48.5
Qualification	• •	10
10 <sup>m</sup>	20	10
12 <sup>th</sup>	35	17.5
Graduate	135	67.5
Above UG	30	15
Occupation		
Working in government sector	37	18.5
Working in private sector	67	33.5
Unemployed	96	48
Income		
Lower class	52	26
Middle class	103	51.5
Upper class	45	22.5
Source of Covid information		
Health worker	57	28.5
Television	50	25
Newspaper	48	24
Social Media	45	22.5
Chronic illness		
YES	20	10
NO	180	90
Do you know someone affected with Covid -19		
YES	140	70
NO	60	30
Do you know someone died with Covid -19		
YES	125	62.5
NO	75	37.5

Table 1: Demographical variables

#### Table 2: Distribution of Knowledge in the general Population

Knowledge	Yes	No	Don't know
Covid -19 is pandemic disease	165	20	15
Covid -19 is caused by novel corona virus	157	30	13
Covid -19 is an acute Respiratory disease	162	26	12
Covid -19 can be confirmed through RT- PCR and Rapid test	164	21	15
Covid -19 spreads mainly between people who are in close contact	162	25	13
Covid -19 virus can spread easily in crowded places	171	7	22
Covid -19 spreads via droplets of infected individual	162	5	23
Mild symptoms of Covid -19 are fever, cough and body pains	157	30	13
Severe symptoms Covid -19 are shortness of breath, diarrhea and	168	17	15
nasal congestion			

# Table 3: Distribution of Attitude in the general public

Attitude	Yes	No
Safe travelling within the country	105	95
Opening schools for children is safe	108	92

Quarantine/ isolate myself if I have a fever and a cough		95
Mass gathering causes covid cases	120	80
Wearing mask	125	75
Stay at home and business closure to decrease covid cases	123	77
Washing hands thoroughly	110	90
Keep the distance from others	114	86

Table 4: Distribution of Practices in the general public

Practices	Yes	No
Discriminating against anyone impacted by covid-19	104	96
Maintaining proprer ventilation	110	90
Consuming immunity boosting foods	120	80
Doing Physical activityfor self-fitness	168	32
Meditatation to remove psychological well being	159	41
Avoiding unnecessary social gathering during pandemic	175	25
Avoiding unnecessary travelling during pandemic	158	42
Cleaning and disinfecting of frequently touched surfaces	157	43
Washing hands thoroughly and frequently with soap	178	22
Touching of eyes, mouth, nose with contaminated hands	170	30
Washing of cloth mask regularly	180	20
Wearing face mask	185	15
Maintaining physical distancing	178	22
Greeting without physical contact	150	50

### DISCUSSION

Despite several attempts by countries throughout the globe to combat COVID-19, it continues to pose a danger to all parts of people's life. Understanding and enhancing people's KAP about COVID-19 are critical for successful COVID-19 prevention and management. Knowledge of any public health concern may play an important role in improving public preventive behaviour, as our results also indicated that knowledge was connected with attitudes and preventive behaviours. Evidence indicates that successful preventive activity is influenced by one's knowledge, attitude, and other socio-demographic variables. Most crucially, a slew of circulating rumours, misunderstandings, and misperceptions about the virus's propagation, treatment, and nature may have a significant impact on people's knowledge, attitude, and adherence to routine Covid-19 preventative measures.<sup>15</sup>

The current research aims to investigate the information knowledge scores of the general population (aged 25 and above) about knowledge, attitudes, and practises of covid-19 appropriate behaviours. Similar results were seen by Amin N. Olaimat, who found that 83.5 percent of 200 subjects had appropriate understanding of covid-19. <sup>16</sup>

The results about attitude toward COVID -19 proper behaviour demonstrate that the majority of participants had a good attitude toward avoiding large gatherings, following hand washing, and so on, which is pretty comparable to the findings of Devina Adella Halim et al.<sup>17</sup>

The majority of the people had a favourable opinion of covid-19 acceptable behaviours. Covid-19 acceptable behaviour practises among the general public Out of 200 subjects, 52 percent protect their lips with their flexed elbow or tissue paper while coughing or sneezing. The study discovered that just 52 percent of participants practised preventative precautionary behaviours and attitudes of COVID -19 acceptable behaviours toward covid-19 among young people, indicating a KAP-GAP, where the public has information but does not practise it. Quite comparable outcomes were reported in a study conducted by Mohammed K et al. <sup>18</sup> Researchers also discovered a few limitations of this research, such as a small sample size, the use of merely an online survey rather than an in-depth interview, and so on.

# CONCLUSION

The knowledge and attitudes of COVID -19 appropriate behaviours among study participants show that knowledge scores of the general public are adequate, but KAP-GAP observed where population has knowledge but not practising it because only more than 52 percent of participants were practising preventive precautionary behaviours and attitudes of COVID -19 appropriate behaviours towards covid-19.

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