

# Knowledge, Awareness & Practice (KAP) for COVID-19 in the Pakistani Nation

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## ABSTRACT

**Objectives:** The study aimed to examine COVID-19 knowledge among the general public in Pakistan, to review their attitudes and views regarding the fast epidemic.

**Study Design:** Descriptive cross-sectional study.

**Duration of Study:** June-July 2020.

**Methodology:** A total of 679 respondents included. The questionnaires comprised of the following basic themes: basic demography, general & basic clinical/medical knowledge, attitudes, awareness, perceptions as well as a sense of prevention regarding COVID-19.

**Results:** The majority (75.5%) of the respondents were from Punjab province. Around half (54.5%) of the respondents had heard about the COVID-19 infection through different social media. The majority were 28.4% medical students. The majority of the respondents (80-95%) selected correct answers from the given choices for the questions related to some clinical knowledge. More than half of people (59-64%) think positively that COVID-19 will successfully be controlled and Pakistan will be successful in winning this battle of the pandemic. 61% were afraid of COVID-19 as it is highly contagious disease (37.7%). Around 60% always covered their noses and mouths while sneezing and coughing.

**Conclusion:** The people must have a thorough understanding of COVID-19 to successfully execute COVID-19 prevention strategies. Although we found enough knowledge, favorable perspectives, and readiness to follow SOPs, we believe that additional preventative and cautious attitudes, as well as awareness, are needed.

**Keywords:** COVID-19, Online Survey, KAP (Knowledge, Awareness & Practice), Standard Operating Procedures (SOPs)

## INTRODUCTION

COVID-19 is a pandemic that requires extraordinary measures to combat. Coronavirus illness, which has a particular propensity for affecting the human respiratory system, was first reported in Wuhan, China, in 2019. Pakistan's first coronavirus case was reported on 26th February 2020<sup>1-11</sup>. Hussain et al. 2020<sup>12</sup> recognized that adherence to the control measures by medical health workers and general public is very important to control and reduce the spread of COVID-19 which is strongly influenced by awareness, knowledge and sense of adopting preventive measures for COVID-19. The findings imply that health education initiatives are urgently needed to maintain positive attitudes and reestablish public trust in health facilities in local hospitals to avert a probable COVID-19 outbreak in Pakistan<sup>13</sup>. As the number of cases increased, the government made immediate efforts to contain the spread of the virus, although rapid person-to-person transmission had occurred and little was known about the virus<sup>14</sup>. Due to its secrecy, there have been many misunderstandings and misunderstandings about the virus, how to limit its transmission, and what preventive measures should be taken against it<sup>15</sup>. A page called "Myth Busters" was created on the WHO website to clear up common misunderstandings<sup>16</sup>. Awareness-raising is part of a larger campaign to bring about change in society. An assessment of the general public's knowledge and perceptions of COVID-19 would provide more information on how to address the lack of awareness about the disease and create preventive health promotion strategies and programs<sup>17-18</sup>. The present study was formulated to examine the perception, awareness, knowledge, and sense of taking preventive measures of COVID-19 among the general public in Pakistan. Afzal et al. (2020)<sup>19</sup> has also explained the perceptions of the Pakistani population regarding COVID-19. Wolf et al. (2020)<sup>20</sup> concluded that many adults with comorbid conditions lacked critical awareness of COVID-19 and did not change their routines or plans despite concerns.

## MATERIALS AND METHODS

A descriptive cross-sectional study was conducted from June-July 2020 and included respondents from the general Pakistani public through google form online questionnaire.

The general public from age from 18 to 50+ years was included in the study. People who were less than 18 years were excluded. Those with positive COVID-19 were also excluded.

The data was collected on a pre-designed google form from the general public with consent. The questionnaires comprised of: basic demography (age, location, gender, marital status, education, and occupation), general & basic clinical/medical knowledge, attitudes, awareness, perceptions as well as a sense of prevention regarding COVID-19 pandemic understanding and safe practicing of SOPs.

Section A was related to the public's basic clinical awareness and knowledge of COVID-19; Section B for basic perceptions on COVID-19 and Section C was related to questions related to distress from COVID-19. Section D was related to the public preventive attitudes.

## RESULTS

A total of 679 respondents participated in this survey with consents. The majority (75.5%) of the respondents were from Punjab province. Around half (54.5%) of the respondents had heard about the COVID-19 infection through different social media that is, Facebook, Twitter, Instagram, etc. 60% of respondents were female and a majority (78.4%) were from the age group: 18-29 years. Half of the respondents (55.6%) were having a Bachelor's degree. There were 28.4% medical students, 13.5% were non-medical students, 14.8% were health professionals, 13.25% were non-health professionals, 7.3% were self-employed. Table 1 showing: Questionnaire on basic clinical awareness of COVID-19 (Section A) (n=679). Questionnaire on the Perception of COVID-19 (Section B): Table 2 shows the detail on the answers received from the respondents on the public's perceptions for COVID-19. Questionnaire on the Distress of COVID-19 (Section C): Table 2 shows the detail on the answers received from the respondents on the public's distress for COVID-19. 61% were afraid of COVID-19 and the main reason was found with the following response: it is a highly contagious disease (37.7%). Questionnaire on the Preventive Attitudes of COVID-19 (Section D): Table 3 shows the detail on the answers received from the respondents on the public's adoption of preventive measures for

COVID-19. The majority (79%) did not go to crowded places; also the majority (92.3%) used masks when leaving home.

**DISCUSSION**

Overall, through this present survey study, we observed satisfactory knowledge, awareness, positive perceptions, and willingness to adopt preventive measures and follow SOPs to fight against the pandemic COVID-19. Following preventative measures and disseminating proper information through educational initiatives that target safe health behaviors and give adequate information on this infection are essential <sup>21</sup>. Medical students, particularly females and seniors, were well-versed in the necessary levels of knowledge, attitudes, and COVID-19 prevention strategies <sup>22</sup>. The participants of the study by Nadeem and Khaliq, (2021) <sup>23</sup> had a poor level of general awareness of COVID-19. According to the findings, 3/4 of the individuals experienced worry and dread as a result of the epidemic. Though the aforementioned media is critical for preventing the spread of the new Coronavirus pandemic, there is a need to raise greater awareness about the COVID-19 pandemic <sup>23</sup>. Almas et al (2020) <sup>24</sup> mentioned that although dental practitioners were knowledgeable about COVID-19, only a few felt confident in treating patients during the epidemic.

The rising incidence of coronavirus infections in Indonesia's general population raises concerns regarding public knowledge and attitudes about the pandemic. According to the findings of research by Sari et al (2021) <sup>25</sup>, the general public has a solid understanding of the COVID-19 pandemic and a positive attitude toward it<sup>25</sup>. In terms of understanding, attitudes, and behaviors concerning COVID-19, there is a significant disparity between India and Pakistan <sup>26</sup>. Azlan et al. (2020)<sup>27</sup> findings indicate that Malaysians have a sufficient understanding of COVID-19 <sup>27</sup>.

The data also showed that knowledge has a direct impact on attitudes. The KAP (knowledge, attitude, and practice) is closely

linked to the occurrence of a large number of infectious diseases <sup>28</sup>. According to a survey carried out in Iran by Puspitasari et al. (2020) <sup>28</sup>, mentioned that to control the spread of the disease, a global public health awareness campaign plan should be implemented. <sup>28</sup>. Hayat and Rosenthal (2020) <sup>29</sup> concluded that the knowledge of Pakistani population is having an average knowledge related to COVID-19. In addition, many participants believed that Pakistan could successfully eradicate COVID-19. Ferdous et al. (2020) <sup>30</sup> found that effective and tailored health education programs are needed to raise knowledge of COVID-19, resulting in more favorable attitudes and the application and maintenance of safe behaviors. Hussain et al. (2020) <sup>12</sup> suggested that Government and health professional associations should initiate training courses on various aspects of COVID-19. Saqlain et al. (2020) <sup>31</sup> conducted an online survey that showed that more than half of Pakistani have good awareness and the majority had positive practices after taking precautionary measures. Mailk et al. (2020) <sup>32</sup> found that most of the participants were well prepared for the pandemic. More studies are needed to assess the preparedness of health professionals concerning disaster management and risk assessment to avoid future public health crises. Jawed et al. (2020) <sup>21</sup> found that respondents had relatively good knowledge, but more training programs are needed. Hopefully, nations like Pakistan will be able to restrict the spread of COVID-19 infection by creating efficient preventive programs

**CONCLUSION & RECOMMENDATIONS**

Profound knowledge of COVID-19 is required in the population for a successful implementation of preventive measures against COVID-19. Despite the recent increase in COVID-19 instances in Pakistan, the participants showed an appropriate understanding and perceptions of COVID-19.

Table 1: Questionnaire <sup>39</sup> on basic clinical awareness of COVID-19 (Section A) (n=679)

Parameters	Sub-Parameters	Frequencies (n, %)
A1. Fever, tiredness, dry cough, and myalgia are the most common COVID-19 symptoms.	T	640(94%)
	F	15(2.2%)
	IDK	24(3.5%)
A2. Stuffy/runny noses and sneezing are less prevalent in people infected with the COVID-19 virus than they are in those who have a typical cold.	T	416(61%)
	F	156(22.9%)
	IDK	107(15.7%)
A3. Although there is presently no effective treatment for COVID-19, most individuals can recover with early symptomatic and supportive treatment.	T	630(92.7%)
	F	23(3.3%)
	IDK	26(3.8%)
A4. Not everyone who has COVID-19 will acquire severe symptoms. Only the elderly, those with chronic diseases, and those who are fat are more likely to be severe instances.	T	543(79.9%)
	F	93(13.6%)
	IDK	43(6.3%)
A5. COVID-19 infection can be contracted by eating or touching wild animals.	T	167(24.5%)
	F	354(52.1%)
	IDK	158(23.2%)
A6. When a person has COVID-19, they cannot spread the virus to others unless they have a fever.	T	52(7.65%)
	F	557(82%)
	IDK	70(10.3%)
A7. The COVID-19 virus spreads by infected people's respiratory droplets.	T	612(90.1%)
	F	25(3.68%)
	IDK	42(6.18%)
A8. Ordinary citizens can protect themselves from COVID-19 infection by wearing generic medical masks.	T	583(85.8%)
	F	71(10.4%)
	IDK	25(3.6%)
A9. Children and young adults do not need to take any precautions to avoid becoming infected with the COVID-19 virus.	T	69(10.1%)
	F	587(86.4%)
	IDK	23(3.3%)
A10. Individuals should avoid crowded locations such as railway stations and public transportation to avoid becoming infected with COVID-19.	T	644(94.8%)
	F	22(3.2%)
	IDK	13(1.9%)
A11. The most efficient approach to stop COVID-19 from spreading is to isolate and treat persons who have been affected.	T	651(95%)
	F	14(2%)
	IDK	14(2%)
A12. COVID contacts should be isolated for 14 days.	T	643(94.7%)
	F	18(2.6%)
	IDK	18(2.6%)

Key: T: True; F: False; IDK: I don't know

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Table 2: Questionnaire <sup>39</sup> on the perceptions related to COVID-19 – Section B (n=679) Key: T: True; F: False; MB: Maybe; IDK: I don't know; Y: Yes; N: No

Parameters	Sub-Parameters	Frequencies (n, %)
B1. COVID-19 is not life-threatening	T	82(12%)
	F	597(87.9%)
B2. Possible to cure at home?	Y	279(41%)
	N	168(24.7%)
	MB	230(33.8%)
B3. I will take corona vaccination	Y	430(63.3%)
	N	85(12.5%)
	MB	164(24.1%)
B4. Face mask is a preventative measure	Y	659(97%)
	N	20(2.9%)
C1. You fear COVID 19?	Yes	412(60.6%)
	No	267(39.3%)
C2. You are frightened about COVID -19?	The disease has no cure	137(20.1%)
	The disease is contagious	256(37.7%)
	It is a novel virus	103(15.1%)
	Less preventive methods	55(8.1%)
	Left blank	128(18.8%)
C3. Media is exaggerating COVID-19's	Yes	213(31.3%)
	No	299(44%)
	Maybe	164(24.1%)
	Left blank	3(0.4%)

Table 3: Questionnaire <sup>39</sup> on the preventive attitudes of COVID-19– Section D (n=679)

Parameters	Sub-Parameters	Frequencies (n, %)
D1. You been to crowded area in last few days?	Y	142(20.9%)
	N	537(79.0%)
D2. You wear mask when leaving the house?	Y	627(92.3%)
	N	52(7.6%)
D3. When you sneeze or cough, do you cover your nose and mouth?	NV	16(2.3%)
	RR	20(2.9%)
	ST	66(9.7%)
	OF	173(25.4%)
	AW	404(59.4%)
D4. Do you wash your hands before touching your face (eyes, nose, or mouth)?	NV	17(2.5%)
	RR	49(7.2%)
	ST	137(20.1%)
	OF	224(32.9%)
	AW	252(37.1%)
D5. You immediately wash your hands after coughing, sneezing, or touching contaminated surfaces?	NV	13(1.9%)
	RR	30(4.4%)
	ST	115(16.9%)
	OF	200(29.4%)
	AW	321(42.2%)

Key: Y: Yes; N: No; NV: Never; RR: Rarely; ST: Sometimes; OF: Often; AW: Always

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