



CODEN [USA]: IAJPBB

ISSN : 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**

SJIF Impact Factor: 7.187

<http://doi.org/10.5281/zenodo.4028775>Available online at: <http://www.iajps.com>

Research Article

**KNOWLEDGE, ATTITUDE & PRACTICES REGARDING
COVID 19****¹Dr. Shahzeb Ahmad, ¹Muhammad Zaid, ¹Adnan Afzal, ¹Muhammad Idrees,
²Dr. Bushra Azam Hashmi**¹Ameer-ud-Din Medical College Lahore²Lahore General Hospital Lahore**Article Received:** July 2020**Accepted:** August 2020**Published:** September 2020**Abstract:**

Background: Coronavirus disease (COVID-19) is a deadly disease that is affecting most of the countries worldwide. Public understanding, including knowledge about signs and symptoms, mode of transmission, and hygiene of COVID-19, is vital for designing effective control strategies during a public health crisis. Corona virus has affected 177 countries and 2.5 million have contracted virus, out of which ten thousand people have died around the globe. Pakistan being a developing country and facing other major issues in the form of economy may not be able to tackle the outbreak of COVID-19 at a larger level. However, awareness in general people regarding sign and symptoms, mode of transmission, hygiene and precautions may help Pakistan to control this pandemic.

Objective: To investigate the public's perspective about COVID-19, including their knowledge, attitude, and practices.

Methods: Survey was conducted in which data from general population of Pakistan was collected from 323 participants; data was administered during the rapid outbreak of COVID-19 in Pakistan. Questions were focused on the prevention, transmission, clinical features, and control of COVID-19. In addition, the attitudes and practices of the participants were explored.

Results: Out of 323 participants, 54.4% were males and 45.5% were females, 80.8% were aged between 20 and 30%, 86.7% participants were single, 57.9% of participants were living in household of greater than 6 Marla's, 76.8% of participants were students, 61.6% were having qualification level of bachelor's, 65.5% perceived fever to be symptom of corona virus and 69% perceived dry cough to be symptom of corona virus, only 2.8% were tested for COVID 19, 88.2% had no history of direct contact with infected person, 41.4% rated their health 10 (on scale of 10 and 10 being the fittest), 87.3% thought COVID 19 spread by respiratory droplets, 62.5% showed level of confidence in diagnosis of COVID 19, 62.5% showed confidence in health information received regarding COVID 19, 63.8% thought that there was screening test availability for COVID 19, 41.8% perceived that symptomatic treatment was given to patients of COVID 19 by health care professionals, 91.9% thought of no vaccine availability worldwide, source of information for 68.4% participants was social media, 96.6% perceived increase in number of COVID19, 90.7% perceived increase in death rate due to COVID19, 60.7% perceived that chances of surviving through COVID19 were present, 74% said they are practicing precautionary measures and 57.6% said they feel worried during pandemic.

Conclusion: The participants demonstrated good knowledge and reasonable attitudes and practices toward most aspects of the COVID-19 outbreak. Improvements in certain areas could be made by mass-level education.

Keywords: Awareness, Coronavirus, COVID-19, Developing countries, health, Pakistan, Pandemic

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Please cite this article in press Shahzeb Ahmad et al, **Knowledge, Attitude & Practices Regarding Covid 19**, Indo Am. J. P. Sci, 2020; 07(09).

INTRODUCTION:

Coronavirus disease (officially abbreviated as COVID-19), which mainly targets the respiratory system of the body, was first detected in 2019 in Wuhan, China. More than 1000 deaths have been reported in fifteen countries, including the United States, Spain, Italy, Germany, China, Iran, the UK, Belgium, the Netherlands, Canada, Sweden, Turkey, France, Brazil, and Switzerland—all attributed to COVID-19. This viral outbreak across the world has paralyzed the healthcare system of nearly every country, potentiating the risk of mortality and morbidity day by day. Due to the spread of COVID-19 across the majority of countries outside China, a global pandemic was declared by the World Health Organization (WHO) on 12 March 2020. As of April 22, 2,594,835 confirmed cases of COVID-19, and 181,170 deaths were reported worldwide. The intensity of the catastrophic effects of COVID-19 is equally faced by developing and developed nations; however, the situation could be worse in countries with fragile healthcare systems. (1)

Pakistan is a low- and middle-income country with a population of 197 million. It has four provinces, namely Punjab, Sindh, Khyber Pakhtunkhwa (KPK), and Balochistan, and three territories, including Islamabad Capital Territory, Gilgit-Baltistan, Azad Jammu, and Kashmir. The first two confirmed cases of COVID-19 in Pakistan were reported on 26 February 2020, which rang the bell for the upcoming storm. At the time of writing this article, there were 10,076 confirmed COVID-19 cases and 212 deaths across the country. (2) Punjab province was severely hit by COVID-19 as it topped the ranks in terms of the number of COVID-19 cases (with 4328 cases as of 22 April 2020). The government has opted for some unprecedented strategies, including partial lockdown, social distancing, travel restrictions, suspension of public transport, setup of quarantine centers, diagnostic laboratories, and isolation wards. Despite these measures, the numbers are continuously amplifying every minute. (3)

The impact of COVID-19 will strongly depend on the behavior of people, which in turn will rely on their understanding of COVID-19. There is a massive spread of disinformation and misinformation about COVID-19 on various social media platforms, making it difficult for the public to determine which ones they should trust. To prevent people's misunderstanding about this viral disease, the WHO had to launch a page entitled "myth busters" on their webpage. (4)

The effectiveness of government-run information campaigns significantly depends on what people perceive and know about COVID-19. Therefore, it

will be of great importance to educate the public about hygiene principles, the spread of diseases, and possible options to treat it. This will further help in tailoring and installing effective control measures. (5)

The commitment of Pakistanis to these control measures is necessary to win the battle against COVID-19, which primarily depends on their knowledge, attitude, and practices (KAP), as highlighted by the KAP theory. Substantial efforts to contain this virus have already been made by the health authorities of Pakistan; however, education and public awareness are part and parcel among these measures as described during the spread of Severe Acute Respiratory Distress Syndrome (SARS). Therefore, the present study was designed with the goal of exploring the understanding of the public toward COVID-19. (6) Coronavirus disease (COVID-19) is a deadly disease that is affecting most of the countries worldwide. Public understanding, including knowledge about signs and symptoms, mode of transmission, and hygiene of COVID-19, is vital for designing effective control strategies during a public health crisis. Study aimed to investigate the public's perspective about COVID-19, including their knowledge, attitude, and practices.

METHODS:

Survey was conducted in which data from general population of Pakistan was collected from 323 participants; data was administered during the rapid outbreak of COVID-19 in Pakistan. Questions were focused on the prevention, transmission, clinical features, and control of COVID-19. In addition, the attitudes and practices of the participants were explored.

RESULTS:

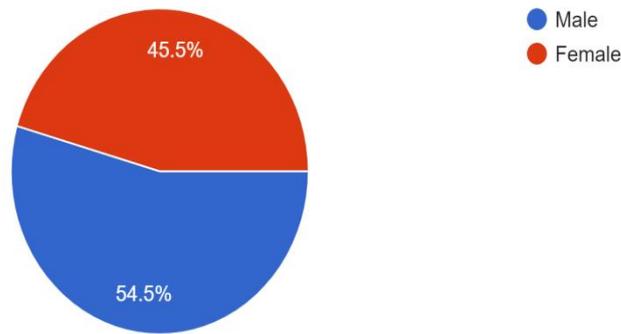
Out of 323 participants, 54.4 % were males and 45.5% were females, 80.8% were aged between 20 and 30%, 86.7% participants were single, 57.9% of participants were living in household of greater than 6 Marla's, 76.8% of participants were students, 61.6% were having qualification level of bachelor's, 65.5% perceived fever to be symptom of corona virus and 69% perceived dry cough to be symptom of corona virus, only 2.8% were tested for COVID 19, 88.2% had no history of direct contact with infected person, 41.4% rated their health 10 (on scale of 10 and 10 being the fittest), 87.3% thought COVID 19 spread by respiratory droplets, 62.5% showed level of confidence in diagnosis of COVID 19, 62.5% showed confidence in health information received regarding COVID 19, 63.8% thought that there was screening test availability for COVID 19, 41.8% perceived that symptomatic treatment was given to patients of COVID 19 by health care professionals, 91.9%

thought of no vaccine availability worldwide, source of information for 68.4% participants was social media, 96.6% perceived increase in number of COVID19, 90.7% perceived increase in death rate due to COVID19, 60.7% perceived that

chances of surviving through COVID19 were present, 74% said they are practicing precautionary measures and 57.6% said they feel worried during pandemic.

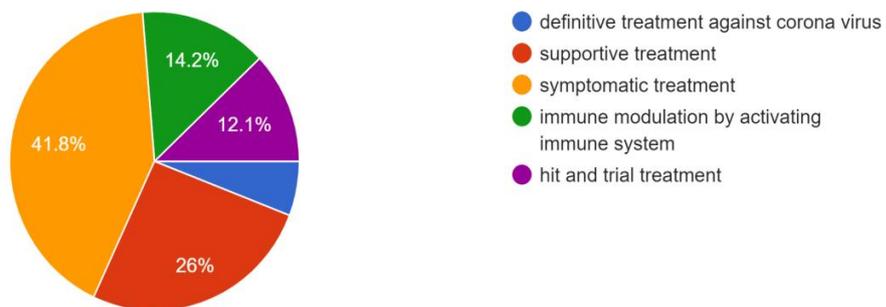
Gender

323 responses



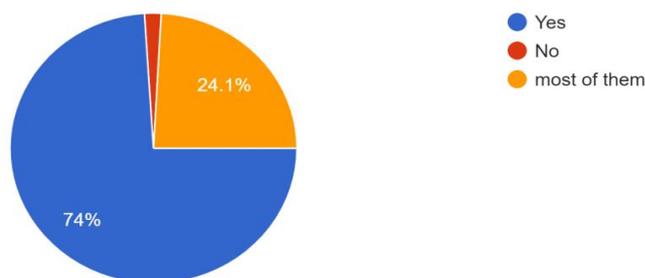
treatment given to COVID patients by health care providers

323 responses



Are you practicing these precautionary measures

323 responses



DISCUSSION:

The world is facing severe life-threatening effects due to the recent outbreak of COVID-19. To the best of our knowledge, the current study, which employed the convenience and snowball sampling techniques, is the first to report the perspective of Pakistani residents toward COVID-19. This study revealed that the COVID-19-related knowledge of most of the study participants was good, as 64.8% answered most of the questions related to the disease correctly. Moreover, their attitudes and practices toward COVID-19 were optimal.

The high rate of correct responses of the study participants was surprising, as this study was undertaken during the initial phase of the COVID-19 outbreak. However, this may be because most of the participants in this study were well educated (bachelor's degree = 43.3% and master's degree = 37.5%). Additionally, due to a rapidly changing situation and overwhelming news related to COVID-19 in Pakistan and worldwide, this survey population may have engaged themselves in understanding the basics of COVID-19 from numerous informative channels, and the official website of the government for COVID . Moreover, awareness campaigns using print and electronic mediums have also been launched by the government to help improve the understanding of the general public about COVID-19. This is further affirmed by the significant association between knowledge score and education. A recent study conducted in China also found similar results.(7)

An optimistic attitude was observed among survey participants toward COVID-19, as more than seventy percent believed that COVID-19 would be controlled successfully (74.0%), and Pakistan would be able to win the battle against this deadly virus (77.0%). This optimistic attitude of the participants may be due to the unprecedented preventive measures that the government of Pakistan took once COVID-19 reached the country. First, the government shut down its flight operation and then imposed a lockdown in most of the regions. Besides, all educational institutes, including schools, colleges, and universities, were closed. All non-essential businesses were also prohibited. Moreover, travel restrictions were also applied. This has surely boosted the confidence of the survey respondents in the belief that COVID-19 would be contained. Furthermore, the participants' knowledge about COVID-19 was higher, which also confirms this speculation.(8)

Most of the survey participants avoided visiting any crowded place and wore masks when they left their homes to help prevent the spread of COVID-19. This is possibly due to extensive government broadcasting about the transmission of the virus,

which can easily occur via respiratory droplets from infected to healthy individuals; due to the ban on public gatherings; and because of the participants' good knowledge. Despite this, a handful of the participants (17.9%) had visited crowded places. This risky behavior was observed among male participants aged 16–29 years and those who were unmarried. This risk-taking attitude among young people has been well demonstrated in previous studies. A significant link was found between students and going to a crowded place, which may be explained by their young age. A few participants (14.2%) avoided wearing masks. This may be attributed to the less serious situation of the COVID-19 outbreak in their respective regions. Secondly, the masks were also not available in some areas of Pakistan due to their huge demand.(9)

In this study, 88.1% of the participants practiced frequent handwashing. This practice has already been advised by the WHO to limit the spread of COVID-19. The participation of the young and students was higher in this study. However, this could be explained in a way that, in Pakistan, there are 76 million (36.2%) people who have internet access, and a recent survey carried out by the Pakistan Telecommunication Authority (PTA) concluded that most of the participants (63.0%) were 20–25 years old.(10)

CONCLUSION:

The participants demonstrated good knowledge and reasonable attitudes and practices toward most aspects of the COVID-19 outbreak. Improvements in certain areas could be made by mass-level education.

Acknowledgement: None

Disclaimer: None

Conflict of interest: None

Funding disclosure: None

REFERENCES:

1. Nishiura H, Oshitani H, Kobayashi T, Saito T, Sunagawa T, Matsui T, et al. Closed environments facilitate secondary transmission of coronavirus disease 2019 (COVID-19). *MedRxiv*. 2020.
2. Covid C, Team R. Severe outcomes among patients with coronavirus disease 2019 (COVID-19)—United States, February 12–March 16, 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69(12):343-6.
3. Lodigiani C, Iapichino G, Carenzo L, Cecconi M, Ferrazzi P, Sebastian T, et al. Venous and arterial thromboembolic complications in COVID-19 patients admitted to an academic

- hospital in Milan, Italy. Thrombosis research. 2020.
4. COVID TC. Characteristics of Health Care Personnel with COVID-19-United States, February 12-April 9, 2020. <https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6915e6-H.pdf>. 2020.
 5. COVID TC, Stephanie B, Virginia B, Nancy C, Aaron C, Ryan G, et al. Geographic Differences in COVID-19 Cases, Deaths, and Incidence-United States, February 12-April 7, 2020. *MMWR Morbidity and mortality weekly report*. 2020;69.
 6. Mehta P, McAuley DF, Brown M, Sanchez E, Tattersall RS, Manson JJ, et al. COVID-19: consider cytokine storm syndromes and immunosuppression. *Lancet* (London, England). 2020;395(10229):1033.
 7. Organization WH. Coronavirus disease 2019 (COVID-19): situation report, 72. 2020.
 8. Zu ZY, Jiang MD, Xu PP, Chen W, Ni QQ, Lu GM, et al. Coronavirus disease 2019 (COVID-19): a perspective from China. *Radiology*. 2020:200490.
 9. Organization WH. Coronavirus disease 2019 (COVID-19): situation report, 82. 2020.
 10. Rothan HA, Byrareddy SN. The epidemiology and pathogenesis of coronavirus disease (COVID-19) outbreak. *Journal of autoimmunity*. 2020:102433.