# A Descriptive Study to Assess the Knowledge About Facts and Prevailing Myths Regarding COVID-19 in General Public

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#### **ABSTRACT**

**Objective:** To assess the knowledge about coronavirus disease 2019 (COVID-19) among the population. To assess the prevailing myths regarding COVID-19. **Methodology:** This survey with descriptive design was conducted on 117 residents of Ghaziabad, to assess the facts about COVID-19 as well as prevailing myths regarding COVID-19. A structured questionnaire was used to conduct the survey. Participants participated actively in this research. **Result:** Data was analyzed using descriptive statistics. Out of 117 respondents, 82 were males and 35 were females. Out of 117 subjects, 71.65% had correct knowledge of COVID-19, and 28.35% did not have the correct knowledge regarding the disease. Myths were not prevalent among the study subjects. **Conclusion:** The study showed that most people had correct knowledge about the facts of COVID-19. Myths were not prevalent.

Keywords: Novel coronavirus, pandemic, quarantine, outbreak, myths and facts

he coronavirus disease 2019 (COVID-19) pandemic is an alarming condition, which has rapidly spread across the world. A global pandemic is really life-threatening. Also, people find it difficult to adjust with a sudden occurrence of an outbreak. While the world is searching for solutions to overcome this pandemic, it is important for us to have correct knowledge regarding facts and dispel prevailing myths about this pandemic. When headlines start carrying the word "pandemic", people start becoming fearful, and fear is linked with misinformation and rumors, leading to myths in the population at large and among certain groups e.g., eating garlic helps prevent infection from novel coronavirus. The fact is that garlic is a healthy food that may have some antimicrobial properties. However, there is no evidence from the current outbreak that eating garlic prevents new coronavirus infection. Spraying alcohol or chlorine all over the body kills the new coronavirus is another myth that is prevalent. The fact is that spraying alcohol or chlorine all over the body will not kill viruses that have already entered the body. According to World Health Organization (WHO), there are elevated rates of myths, due to quarantine and lockdown in affected areas. The number of COVID-19 cases continue to climb every day across the world, including in India. Thus, the researcher felt the need to assess the knowledge about facts and prevailing myths regarding COVID-19.

#### **OBJECTIVES**

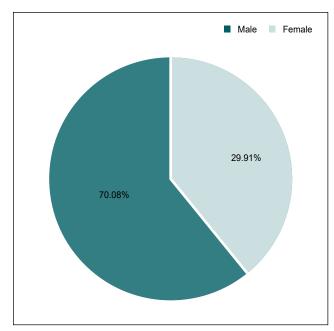
- To assess the knowledge of COVID-19 among the population.
- To assess the prevailing myths regarding COVID-19.
- To know the impact of prevailing myths on general public regarding COVID-19.

#### **METHODOLOGY**

"Research design" is the overall plan for obtaining answers to the question being studied and for handling some of the difficulties encountered during the research. This descriptive survey design was conducted on residents of Ghaziabad, to assess facts and prevailing myths about the disease. This survey with descriptive design was conducted on 117 persons using a structured questionnaire.

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**Figure 1.** Percentage of males and females who have actively participated in the research.

#### **RESULTS**

Data was analyzed using descriptive statistics and interpreted to assess the knowledge of myths and facts regarding COVID-19.

To begin with, the data were entered in the Google forms in the form of questions for statistical processing.

Respondents have actively participated in the research study and have shown their interest in answering the questions on myths and facts regarding COVID-19. There are total 117 respondents.

Out of 117 respondents, 82 (70.08%) were males and 35 (29.91%) were females (Fig. 1).

Table 1 shows the percentage of the participants who have participated in the research. A total of 117 participants participated in the survey. The average of right answers is 116.214.

#### DISCUSSION

To the best of our knowledge, there is no published study, which has evaluated the knowledge about facts and prevailing myths regarding COVID-19 in general public. COVID-19 is an alarming disease, which has affected the individuals around the world. It has affected the lifestyle of the individuals. There have been several deaths and large numbers of affected cases of the COVID-19 all around the world. Every day thousands of new cases are being reported.

**Table 1.** Percentage of the Participants Who have Participated in the Research

Survey question no.	Right answer (%)	Wrong answer (%)	Respondents out of 117
Q 1.	68.4 (n = 80)	31.6 (n = 37)	117
Q 2.	79.1 (n = 91)	20.9 (n = 24)	115
Q 3.	64.9 (n = 74)	35.1 (n = 40)	114
Q 4.	85.3 (n = 99)	14.7 (n = 17)	116
Q 5.	79.5 (n = 93)	20.5 (n = 24)	117
Q 6.	28.2 (n = 33)	71.8 (n = 84)	117
Q 7.	79.1 (n = 91)	20.9 (n = 24)	115
Q 8.	47.9 (n = 56)	52.1 (n = 61)	117
Q 9.	63.2 (n = 74)	36.8 (n = 43)	117
Q 10.	90.4 (n = 103)	9.6 (n = 11)	114
Q 11.	82.9 (n = 97)	17.1 (n = 20)	117
Q 12.	88.9 (n = 104)	11.1 (n = 13)	117
Q 13.	65.8 (n = 77)	34.2 (n = 40)	117
Q 14.	79.5 (n = 93)	20.5 (n = 24)	117
Q 15	100 (n = 117)	0 (n = 0)	117
Average	73.54 (n = 86)	26.46 (n = 31)	116.214

The condition is worsening day by day. This global pandemic has affected the individuals mentally as well, which can lead to many myths and generate panic, stress or anxiety, etc. The study is done in view of the alarming increase in the myths about the disease among the general public. The WHO information has been used in awareness and reducing the stigma-related to COVID-19 among general public.

#### CONCLUSION

COVID-19 is an alarming disease these days. It was first identified in Wuhan city of China in 2019. It is the most discussed disease as its vaccine is not discovered yet.

The study showed that most people had correct knowledge about Coronavirus pandemic. All the respondents were from the urban areas. Myths were not prevalent among population of Ghaziabad surveyed.

#### Acknowledgment

We would like to thank all the study participants for their voluntary participation.

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#### **ANNEXURE**

#### Demographic Variable (Part A)

- 1. Age:
  - a. 16-18
  - b. 19-21
  - c. 21 and above
- 2. Gender:
  - a. Male
  - b. Female
- 3. Type of family:
  - a. Joint family
  - b. Nuclear family
- 4. Number of siblings:
  - a. 1
  - b. 2
  - c. 3
- 5. Knowledge regarding facts and prevailing myths on COVID-19
  - a. Family Friends
  - b. Television
  - c. Newspaper
  - d. Social media

#### Self-Structured Questionnaire (Part B)

- 1. Can regularly rinsing your nose with saline water help prevent infection with new coronavirus?
  - a. Yes
  - b. No
- 2. Can an ultraviolet disinfection lamp kill the new coronavirus?
  - a. Yes
  - b. No
- 3. Can spraying alcohol and chlorine all over body kill the new coronavirus?
  - a. Yes
  - b. No

- 4. Can pets at home spread the new coronavirus?
  - a. Yes
  - b. No
- 5. Do vaccines against pneumonia protect you against the new coronavirus?
  - a. Yes
  - b. No
- 6. Is it safe to receive a letter from China?
  - a. Yes
  - b. No
- 7. Are hand dryers effective in killing the new coronavirus?
  - a. Yes
  - b. No
- 8. Can gargling with warm water protect you from infection with new coronavirus?
  - a. Yes
  - b. No
- 9. Can eating garlic help you prevent infection from new coronavirus?
  - a. Yes
  - b. No
- 10. Does putting sesame oil block the new coronavirus?
  - a. Yes
  - b. No
- 11. Can holding breath for 10 seconds help you prevent coronavirus?
  - a. Yes
  - b. No
- 12. Can drinking alcohol protect you from the new coronavirus?
  - a. True
  - b. False

- 13. Can taking a hot water bath protect you from the new coronavirus?
  - a. True
  - b. False
- 14. From where do you come to know the above stated myths?
  - a. Newspaper
  - b. Television

- c. Social media
- d. Family friends
- 15. Can you tell that the new coronavirus affects which age group of population?
  - a. Infants
  - b. Younger
  - c. Older
  - d. All age group

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#### Povidone-iodine has Proven Efficacy Against SARS-CoV-2

As of August 5, 2020, close to 19 million people have been infected with SARS-CoV-2, the virus that causes COVID-19.<sup>1</sup>

Respiratory droplets and physical contact from contaminated surfaces are the primary sources of transmission of the SARS-CoV-2 virus. Therefore, adequate hand hygiene and oral decontamination appear to be pivotal to prevent the spread of the virus, besides other measures, such as wearing a mask and maintaining physical distance.

Povidone-iodine (PVP-I) has long been known for its antimicrobial potential. PVP-I is there on the WHO List of Essential Medicines. Besides that, PVP-I mouthwash is a part of the WHO R&D blueprint for experimental treatment options against COVID-19.

A study by Anderson et al<sup>2</sup> recently assessed the virucidal activity of four PVP-I products against SARS-CoV-2 at an exposure time of 30 seconds. The four products included an antiseptic solution, a skin cleanser, gargle and mouthwash and a throat spray. All the products were found to attain  $\geq$ 99.99% virucidal activity against the virus, which corresponded to  $\geq$ 4 log<sub>10</sub> reduction of virus titer, within a contact time of 30 seconds. The findings validate the rapid virucidal activity of PVP-I against the virus that has wreaked havoc across the globe.

Current guidelines, in relation to COVID-19, such as those from the Australian Dental Association and the US CDC, also recommend the use of a pre-procedural mouthwash such as a PVP-I mouthwash.<sup>3,4</sup>

PVP-I products have a potential role in infection prevention owing to their broad-spectrum antimicrobial and rapid virucidal activities.

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