

Perception of Indian citizens toward the available COVID-19 vaccines: Need to create increased awareness

INTRODUCTION

Coronavirus disease (COVID-19) is an infectious disease caused by the newly discovered coronavirus having high mortality in severe cases.^[1] India has borne the loss of 354K people to date, and the dire news of crematoriums overflowing with dead bodies way past the expected accommodation highlights the need for a vaccination scheme. On January 16, 2021, India started its national vaccination program against the COVID-19. The drive initially prioritized the health-care workers and frontline workers, those over the age of 60 years, and then, those over the age of 45 years and suffering from certain comorbidities. Two vaccines – Covaxin and Covishield – have been developed and released in India.^[2,3]

The efficacy in terms of percentage for Covishield and the number of doses to be taken for either Covaxin or Covishield is all that was made public with the launch of each of them in January for health-care professionals. About 253M doses have been administered and 47.2M people have been fully vaccinated as of June 16, 2021, which makes it 3.5% of the Indian population being fully vaccinated. From June 21, 2021, the vaccines will be made freely available to everyone above the age of 18. While we are witnessing this ground-breaking news, it is imperative to find how the people of India, the general public as well as health-care workers are responding to the vaccines available. Hence, this study was carried out to understand their perception toward the COVID-19 vaccines available in India.

METHODS

The survey questionnaire was designed using a single Google Form validated (CVI and CVR scores of 0.88 and 0.97, respectively) and circulated widely. The questionnaire inquired about the personal details of the participant and vaccination status. Based on their vaccination status, further questions were framed to understand their perception of the available vaccines. The responses

obtained were extracted onto a Microsoft Excel 2010 and analyzed.

RESULTS

The questionnaire was filled by 1026 people among whom 26.5% were health-care professionals and the rest were general public with 40.6% students, 7.31% educators, and the rest belonging to various other professions. Around 87.07% of the health-care professionals had taken the vaccine and 97.89% felt that prevention was better even though the efficacy of the vaccine was unclear. This was followed by 74.28% reasoning that there were many strains and the vaccine surely could not protect them against all of them. Out of the relatively smaller population of health-care professionals who had not taken the vaccine, most of them felt that social distancing was the ultimate solution to curb the spread of the SARS-COV2 virus (77.14%). About 2.85% who refused to take the vaccine were based on religious grounds.

Among the general public, 55.70% of people had taken the vaccine. Like the health-care professionals, 94.29% of them felt that prevention is best even though the efficacy of the vaccines is unclear and a striking 90.39% of them mentioned that easy availability of the vaccines played a major role in them saying yes to the vaccine. Out of the people who had not taken the vaccine, most appeared to have been waiting for the vaccine to become available for their age group (80.83%). Around 53.9% did not get vaccinated because they were apprehensive about the vaccine's efficacy and its side effects.

DISCUSSION

Health-care workers responded differently to the vaccine as compared to the general public. If they were better educated about which narrow population underwent the adverse reactions and fatalities upon being administered the vaccine, more number of them would accept the vaccine. Easy accessibility played a very big role in the general

public saying yes to the vaccine, and the government could help in propagating easy accessibility in every corner of the country. The following steps may be taken by the government to address this issue: (1) standardizing a lower price for the vaccine across the country, (2) declaring small clinics around the block opened for the administration of the vaccine, (3) imbursing the further production and release of vaccine as there is a glaring shortage, (4) calling interns and medical students closer to graduation for vaccine administration duty.

The general public had few concerns, and the biggest concern was the development of fever and myalgia postadministration. However, even though the long-term effects of the vaccine are unclear and the efficacy of neither vaccine has been precisely determined and made public, the vaccines are surely more beneficial than not.

The limitation of this survey was that we could not reach the rural areas to understand their perception, and the survey was filled by only a few health-care professionals in a short period. Nevertheless, the survey helped us to understand where to focus while educating health-care professionals and the general public that taking the vaccine is a better choice. Furthermore, the government must ensure adequate preparedness to vaccinate large numbers.

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Conflicts of interest

There are no conflicts of interest.

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REFERENCES

1. Bhatt A. Real-world data in COVID-19 pandemic: An essential unmet health-care need. *Perspect Clin Res* 2020;11:103-5.
2. Thiagarajan K. What do we know about India's Covaxin vaccine? *BMJ* 2021;373:n997.
3. Knoll MD, Wonodi C. Oxford-AstraZeneca COVID-19 vaccine efficacy. *Lancet* 2021;397:72-4.

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