



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

INTERNATIONAL JOURNAL
OF CURRENT RESEARCH

International Journal of Current Research
Vol. 15, Issue, 04, pp.24307-24309, April, 2023
DOI: <https://doi.org/10.24941/ijcr.45045.04.2023>

RESEARCH ARTICLE

THE SAGACITY OF GENERAL POPULATION ABOUT COVID-19 VACCINE

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ARTICLE INFO

Article History:

Received 04th January, 2023
Received in revised form
10th February, 2023
Accepted 16th March, 2023
Published online 25th April, 2023

Key words:

Pandemic, Vaccine, Perception,
Community Knowledge, Hesitancy.

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Citation: Dr. Aanchal Kakkar, Dr. Namita Saraswat, Dr. Sarita Prasad and Dr. Mohandeep Kaur. 2023. "The sagacity of general population about covid-19 vaccine". *International Journal of Current Research*, 15, (04), 24307-24309.

ABSTRACT

Introduction: Coronavirus has emerged as a global health threat creating havoc worldwide. The Government of India started COVID-19 vaccination on 16th January 2021. General community knowledge, perception and disposition towards the COVID-19 vaccine must be understood to make it a success. Thus, this study was aimed to investigate community knowledge, perspective and disposition towards the COVID-19 vaccine which can help to strengthen the vaccination drive in our country. **Methodology:** After obtaining institutional ethical clearance, a cross-sectional study was conducted in Delhi, India over two months. A questionnaire-based e-survey was conducted among individuals above 45 years of age, coming for 1st dose of vaccination. **Results:** There was almost equal participation of both genders for COVID-19 vaccination. Most were married (94%) and all were educated with a minimum qualification of 10+2. 61.9% were self-motivated to get vaccination shows that the urban population is aware of the importance and benefits of vaccination against coronavirus. 75% were concerned about safety profile and side effects/allergic reactions, and 20% had doubts about vaccine efficacy, yet they participated. **Conclusion:** There is self-motivation for vaccination in the population with equal participation of sexes. People are concerned about side effects and efficacy, yet they have taken the vaccination, suggesting the fear of COVID and also the faith in India's own vaccine. It is hereby important to educate people about the safety profile of vaccination and not to be worried about its side effects.

INTRODUCTION

Coronavirus has emerged as a global health threat creating havoc in India and worldwide. To fight this pandemic, the Government of India started COVID-19 vaccination on 16th January 2021 for the frontline workers. From 1st March, the vaccination was open for the elderly population above 60 years along with those above 45 years with comorbidities. To curb the pandemic, herd immunity should be achieved rapidly, by mass vaccination. So, taking a step further, the population above 45 years age group even without comorbidities were eligible for vaccination from 1st of April 2021. Since the vaccination was not mandatory, people were left to their own knowledge to opt for the vaccine. Hence, everyone had different apprehension or attitude towards the vaccine. Vaccination has always been controversial and throughout history, a part of the population has always resisted it.^{1,2} Thus, to make vaccination drive success, it is important to be aware of the perception, attitude, and knowledge about COVID-19 vaccination among individuals. In other words, it is awareness about the sagacity of people for COVID-19 vaccination that will give the right direction in convincing vaccine-hesitant individuals.³

Two home-grown vaccines (COVAXIN and COVISHIELD) have been approved against coronavirus disease (COVID-19) in India. General community knowledge, perception and disposition towards the COVID-19 vaccine must be understood to make it a success. Thus, this study was undertaken to investigate knowledge, perception and disposition towards the COVID-19 vaccine which can ultimately help to strengthen the vaccination drive in our country.

MATERIAL AND METHODS

After obtaining institutional ethics clearance and CTRI registration, a cross-sectional study was conducted in Delhi, India over two months. An anonymous questionnaire-based e-survey was conducted among individuals above 45 years of age, coming for 1st dose of vaccination. The frontline or healthcare workers were not included in the survey. The study aimed to obtain real information regarding their perception and apprehensions about the vaccine. A structured questionnaire was designed and incorporated into the Google survey tool (Google Forms) and data were collected at the designated vaccination centre of the hospital after obtaining informed consent. **Data Analysis:** The questionnaire included questions asking demographic profile, educational status, and occupational status.

It further asked about being unemployed because of COVID-19. Questions were also included to know the health status and chronic diseases as that may influence the decision to take the vaccine. We also asked about various motivational factors (self-motivated, social media, scared of COVID 19 infection, family pressure). The other questions inquired about COVID infection or death in the family as it may scare people of disease and push them to be vaccinated. We also asked specific concerns about vaccine-like side effects and efficacy.

RESULTS

Demographic: A total of 851 complete surveys were included in the final analysis. Of them, 55.8% were males and 44.2% were female. The participants' mean age was 53 years (53.09±12.74). Most were married (94%) and all were educated with a minimum qualification of 10+2, 46.3% were undergraduates and 25.1% were postgraduates.

Occupational status: 63.1% of the participants were employed, 34.9% were retired and the rest of them (2%) lost their job due to an ongoing pandemic. Though 2% appears to be a small percentage, in our sample size this amounts to 17 individuals out of 851 who lost their jobs to COVID.

Health Status: Out of 851 participants, 18.3% were suffering from diabetes, 26% were hypertensive, 41.5% did not have any comorbidities and the rest (14.2 %) had associated other comorbidities.

Motivation: 61.9% were self-motivated to get the vaccination and 19.3% came for vaccination out of fear of getting infected with COVID, 13.9% came due to pressure from family members or others, rest (4.9 %) were influenced by social media. Only 35.4% had a healthcare worker in their family who could influence them to take the vaccine (Fig 1).

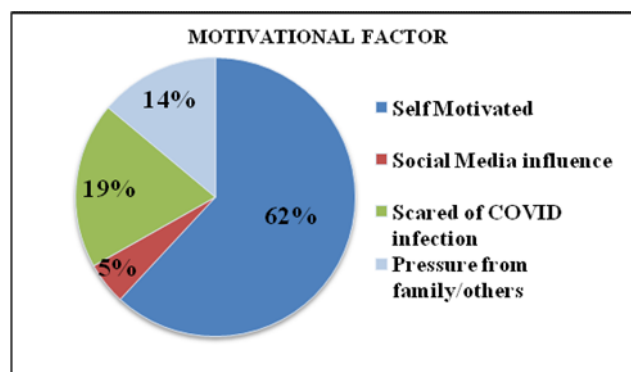


Fig 1. Motivational factor

Perception towards COVID-19 Vaccination: On enquiring about concerns regarding vaccine 75% were worried about the safety profile and side effects including allergic reactions to the vaccine, whereas only 20% had doubts about vaccine efficacy (Fig.2).

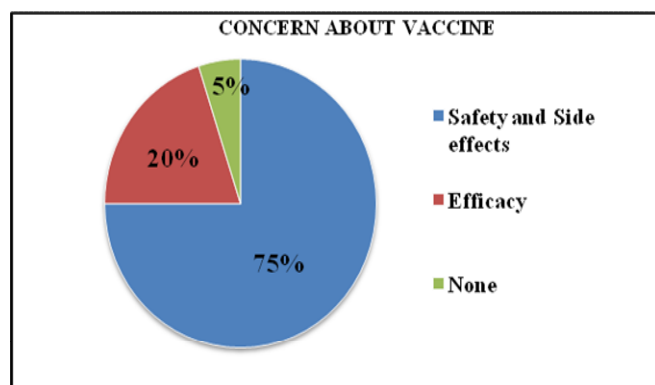


Fig 2. Concern about vaccine

There was no significant difference between the motivation factors with respect to the presence and type of diseases (Table1). It was heart-warming to know that 96.6% were aware of continuing precautions post-vaccination in form of wearing a mask and maintaining social distancing. 47.1% were keen to get antibodies titre done post-vaccination. Out of 851 participants, 78.3% never had COVID infection previously.

Table 1. Comparison between motivational factor and disease

Motivation	Non-communicable disease	Other diseases	None	p-value
Self-motivation	277	34	216	0.394
Social media influence	15	4	23	
Scared of covid infection	88	9	67	
Pressure from family or others	60	11	47	

However, 49.1% of participants family members were infected with COVID and 13.3 % faced the death of a family member due to COVID infection, amounting to 113 people out of 851 who had lost a family member due to COVID.

DISCUSSION

To curb the current menace caused by the coronavirus, the best solution is vaccination. The Government of India aims to vaccinate all Indians by the end of the year 2021, but the drive has been hobbled by the slow pace, shortage of vaccine doses and vaccine hesitancy. To strengthen the vaccine drive it is important to divulge the apprehensions about covid 19 vaccination among individuals. India had vaccinated 9.54 crore of its 94.5 crore adult population till July 2021, according to the Ministry of Health and Family Welfare 15.2% of the population of Delhi had been vaccinated till July 27, 2021. Several clinical trials have recently been released with positive results, leading to several countries approving various vaccines for implementation in vaccination programs.⁴ This study was conducted to assess the knowledge, attitudes, and perceptions towards COVID-19 vaccinations among individuals coming for vaccination. The findings reflect multiple factors influencing knowledge, attitudes, and perceptions towards COVID-19 vaccinations and therefore our findings will be crucial in developing COVID-19 vaccination-related awareness and health education programs.

We found that most of the individuals taking vaccine are self-motivated, but a major fraction (75%) had concerns about the side effects (including allergic reaction) of vaccine but still took the jab, implying the fear of having severe infection if unvaccinated. Our study population included educated people who were able to overcome their anxiety and hesitancy to take the vaccine, but our results point out that majority and that these concerns were more than the concerns for efficacy. Therefore, it is very important to educate all about the safety profile of the COVID-19 vaccination. Sharing their own experiences about the vaccine by the common public in the community can help alleviate vaccine hesitancy. Also, we found that approximately 35% of our sample data had healthcare workers in their families, making it obvious that it had a positive impact on overcoming vaccine hesitancy.

The Healthcare system is the backbone of every society. Healthcare workers can influence the mindset of a population by presenting the facts and taking away the myths. This was further evident by the result that social media has little influence on motivating people for vaccination, even though this is a millennial era. We also found that more 113 people out of 851 had lost their family member to COVID. This points out to the high mortality caused by COVID infection during 2nd wave in India, making vaccination all the more a must for everyone. It is heart-warming to know that 96.6% were aware of continuing precautions post-vaccination in form of wearing a mask

and maintaining social distancing. This depicts those individuals will remain careful and adhere to precautions even after vaccination. The exceptionally rapid pace of vaccine development leads to the scepticism of certain groups of science in its efficacy and effectivity. But all this can be cleared by health experts which in turn can help in motivating people to take the vaccine.^{5,6}

LIMITATIONS

The limitation of our study was that it caters mainly educated urban population and the duration of the study was short. The larger population should be surveyed to deduct further conclusions. Nevertheless, this is the first study of community perceptions about COVID-19 vaccinations in Delhi, India and will be crucial for health policymakers and planners who are aiming to vaccinate the highest proportion of the population possible to mitigate the impacts of the pandemic.

CONCLUSION

Mass vaccination with the COVID-19 vaccine provides a possible light of hope for the future. With the above survey, we conclude that there is self-motivation for vaccination in the population with equal participation of both genders. People are concerned about side effects and efficacy, yet they have taken the vaccination, suggesting the fear of COVID and also the faith in India's own vaccine. However, more health education programs regarding the safety profile and efficacy of vaccines should be advertised by respective health authorities to gain more momentum for a successful vaccination drive.

Financial support and sponsorship: Nil.

Conflicts of Interest: There are no conflicts of interest

REFERENCES

1. Marshall G.S. Vaccine Hesitancy, History, and Human Nature: The 2018 Stanley A. Plotkin Lecture. *J Pediatric Infect Dis Soc* 2019;8(1):1–8.
2. Rashid H, Khandaker G, Booy R. Vaccination, and herd immunity: what more do we know? *Curr Opin Infect Dis* 2012;25:243–9.
3. McAteer J, Yildirim I, Chahroudi A. The VACCINES Act: Deciphering Vaccine Hesitancy in the Time of COVID-19. *Clin Infect Dis* 2020;71(15):703–5.
4. Sharma O, Sultan AA, Ding H, Triggle CR. A Review of the Progress and Challenges of Developing a Vaccine for COVID-19. *Front Immunol* 2020 Oct 14;11:585354.
5. Dror A, Eisenach N, Shahar T, Nicole G, Matti M, Asaf Z, *et al.* Vaccine hesitancy: the next challenge in the fight against COVID-19. *Eur J Epidemiol* 2020;35:775–9.
6. Paul E, Steptoe A, Fancourt D. Attitudes towards vaccines and intention to vaccinate against COVID-19: Implications for public health communications. *Lancet Reg Heal – Eur* 2021;1:100012.
