

A Study to Assess the Attitude Towards Covid-19 Vaccination among Adults Residing in a Selected Community

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DOI: <https://doi.org/10.52403/ijhsr.20231116>

ABSTRACT

Covid-19 vaccine is a major step towards reducing the spread of the pandemic and further reducing associated diseases and death. Covid-19 vaccination is a critical prevention measure to help end the Covid-19 pandemic. The study was done to assess the level of attitude of people towards Covid-19 vaccination and to find association of attitude of adults' towards Covid-19 vaccination with selected demographic variables. A descriptive study was done using non-probability convenience sampling technique. The data was collected using self - prepared 5-point Likert scale with 30 questions. Results: The finding of the study revealed that majority of the people had a positive attitude towards Covid-19 vaccination. There was no significant association between demographic variables with attitude towards Covid-19 vaccination.

Key words: Vaccination, Attitude, Covid-19, community.

INTRODUCTION

Severe acute respiratory syndrome (SARS) is a viral respiratory illness caused by the corona virus called SARS associated corona virus. It is the largest RNA virus from the corona virus family, Coronaviridae subfamily orthocoronavirinae¹. Covid-19 is transmitted when people breathe in air which is contaminated by small airborne particles or droplets containing the virus. The risk of breathing the virus is highest when people are in close proximity; but they can be inhaled over longer distances also.² India had the second-highest number of confirmed cases in the world after the United States of America with 4,30,14,687 cases.³ Vaccination is a global health and development success story saving millions of lives every year. It was estimated that by

the end of 2021, nearly all countries had introduced Covid-19 vaccination and by early 2022 one billion doses of Covid-19 vaccine had been delivered through Covaxin. In India, 59.7% of population were fully vaccinated. 62.8% of the world population has received at least one dose of a Covid-19 vaccine. 12.79 billion doses have been administered globally and 4.54 million are now administered each day. 22.9% of people in low-income countries have received at least one dose. Covid-19 vaccine has an impact on its physical and mental well-being so perception of people is an important component in evaluating the mentality of people about Covid-19 vaccine.⁴ The vaccination is given to individual in three forms; 1st dose, 2nd dose and booster dose. The Delta variant, first

detected in India, has been shown to have increased transmissibility, potential reduction in neutralization by some monoclonal antibody treatments and reduction in neutralization by post-vaccination sera.⁵ Thus, this study aims to investigate adults' attitude towards Covid-19 vaccination in the community.

OBJECTIVES

- To assess the level of attitude of people towards Covid-19 vaccination.
- To find association of attitude of adults' towards Covid-19 vaccination with selected demographic variables.

METHODOLOGY

A descriptive research design using non-probability convenience sampling technique was adopted for the study. Sample size for the study was 100 and data was collected by using a self-prepared questionnaire in which 15 were positively worded and other 15 were negatively worded and rating is done using Likert scale. The tool was validated by 10 experts. This includes doctors, nurses, biostatisticians and lecturers. The tool was translated in to Marathi language which was then revalidated. The questionnaire was tested by administering it to the participants using Test – Retest Method for testing its reliability. The r value =0.9. A pilot study was also conducted on 10 subjects in a selected community and the study was found to be feasible.

FINDINGS OF THE STUDY

The collected data was tabulated, analyzed, organized and presented in three sections.

Section I: Analysis of data based on demographic variables

The study showed that a majority of the participants were of age group of 26-40 years (39.00%) and minimum were from age group of 41+years (30.00%). The mean \pm SD is 35.14 ± 13.04

Majority of the study participants 70.00% were males and 30.00% were females.

Among all the study participants, a majority were Hindus 71 (71.00%) The rest were Muslims 19 (19.00%), Buddhists 9 (9.00%) and least from Christian 1 (1.00%).

Most participants were married 62 (62.00%) whereas the single subjects were 36 (36.00%), and only 2 (2.00%) were separated.

Most of the subjects i.e 26 (26.00%) had monthly income from, 7887-13160, and the rest were from ≤ 2640 , 18 (18.00%), 2641-7886, 14 (14.00%), 13161-19758, 15 (15.00%), 19759-26354, 8 (8.00%), 26355-52733, 6(6.00%) and ≤ 52734 income 13 (13.00%).

With respect to education, majority 30 (30.00%) of the participants were graduate / post graduate. The middle, 22(22.00%), higher school, 17(17.00%), post higher school 17 (17.00%), professional, 4 (4.00%) were other participants.

Based on occupation the participants were categorized under unskilled 28 (28.00%), semiskilled 16 (16.00%), skilled 22 (22.00%), professional 34 (34.00%).

Of 100 participants, a majority 80(80.00%) belong to joint families and the rest were from nuclear families 20(20.00%).

In the study participants, 97 (97.00%) were vaccinated and only 3 (3.00%) were not vaccinated.

It was found that, 5 (5.00%) participants had received the 1st dose, 74 (74.00%) had received the 2nd dose and 18 (18.00%) had received the booster dose.

A total of 70 (70.00%) had received Covishield vaccine whereas Covaxin vaccine was received by 30 (30.00%) participants.

In the study the 66 participants (66.00%) received vaccination by self. The others received vaccination through the influence of family / friends, 15 (15.00%), government / corporation 16 (16.00%) and 3 (3.00%) received through frontline worker / doctor / nurse etc.

In this study, a total of 30 questions were included among which 15 questions were positive and 15 questions were negative.

The findings of the study showed that 67 participants (67%) had a positive attitude and 33 (33%) participants had a negative attitude.

The average score of positive attitudes is 58.91 ± 9.39 whereas that of negative is 51.6 ± 11.68 and the mean difference score is 7.31.

A Paired t-test between positive and negative attitude was done and the mean score gave a p-value = 0.0000.

None of the demographic variables is associated with positive or negative attitude, (as all p-value > 0.05). A chi-square test tests the association between the attitude and demographic variables. A p-value < 0.05 is considered statistically significant.

Section II: Analysis of data based on attitude questionnaire.

Table 1: Analysis of data based on attitude questionnaire		
ATTITUDE TOWARDS COVID-19 VACCINATION AMONG SUBJECT	PARTICIPANTS	PERCENTAGE
Positive Attitude	67.00	67.00%
Negative Attitude	33.00	33.00%

The above table 1 shows that people have a high positive attitude towards Covid-19 vaccination

Findings

67% of people had positive attitude towards Covid-19 vaccination and have a strong positive opinion towards Covid-19 vaccination

51% of people strongly agreed that it is mandatory to take Covid-19 vaccination and is also easily available even after registration and also stated that they will encourage their family to get vaccinated

46% people agreed that Covid-19 vaccination will eradicate Covid-19 infection and will help to boost the natural immunity.

Getting vaccinated for Covid-19 is a good way to protect family and other people against infection was strongly agreed by 45% of people.

34% of people perceived that after taking Covid-19 vaccination the immunity will increase and also reduces the spread of infection.

33% of people had negative attitude towards Covid-19 vaccination. Where 47% of people stated that they are not willing to take vaccination even if it is mandatory since 28% believed that it can cause complications.

45% and 42% comprehended that during pregnancy vaccination will cause death of fetus and vaccination can cause menstrual problem in women respectively.

31% of people declared that Covid-19 vaccination can cause respiratory problems whereas 38% agreed that vaccination can cause cardiovascular diseases.

Covid-19 vaccination may increase the blood sugar level in patients with diabetes was disagreed by 44% of people.

Out of 100, 32% of people disagreed and 14% strongly disagreed that home remedies are better than Covid-19 vaccination.

Section II: Analysis of data to find the association of attitude among adult towards Covid-19 vaccinations with selected demographic variables.

SR.NO	DEMOGRAPHIC VARIABLE	POSITIVE		NEGATIVE		TOTAL	p-value
		COUNT	%	COUNT	%		
1.Age	<=25 Years	20	64.5	11	35.5	31	0.9
	26-40 Years	26	66.7	13	33.3	39	
	41 + years	21	70.0	9	30.0	30	
2.Gender	Male	50	71.4	20	28.6	70	0.15
	Female	17	56.7	13	43.3	30	
3.Religion	Hindu	50	70.4	21	29.6	71	0.374
	Muslim	11	57.9	8	42.1	19	

4.Marital Status	Christian	0	0	1	100.0	1	0.75
	Buddhist	6	66.7	3	33.3	9	
	Single	23	63.9	13	36.1	36	
	Married	43	69.3	19	30.6	62	
	Separated	1	50	1	50	2	

The above table 2 shows that there is no association of selected demographic variables with the attitude towards Covid-19 vaccination.

DISCUSSION

Statistically in India, 100% vaccination is available then also 59.7% of population were fully vaccinated. The result in this study reveal that a majority of the people have positive attitude towards Covid19 vaccination because it is easily available while the presence of complications after vaccination lead to negative attitude towards Covid19 vaccination. A similar research study was conducted among 1,096 adults in America in the year 2021 to assess their public attitude towards Covid-19 vaccination and the role of the incentives and attributes in Covid-19 vaccination. The Americans were recruited through a lucid platform and their attitudes were examined. The findings showed that higher degrees of vaccine efficacy led to more interest of people in Covid-19 vaccination while the presence of side effects led to decreased interest of Covid-19 vaccination.⁶

CONCLUSION

The study finding revealed that a majority of the people had a positive attitude towards Covid-19 vaccination. Findings showed that 67% had a positive attitude and 33% had a negative attitude towards Covid-19 vaccination. The study also shows that, there was no significant association between demographic variables such as age, gender, occupation, religion, marital status, monthly income, family type and education with attitude towards Covid-19 vaccination.

Recommendations

- In this study the following recommendation can be given:
- Same study can be done on a large sample size.

- This study can be done in different settings
- An exploratory study can be conducted on knowledge and attitude of the adults towards Covid - 19 vaccinations.
- A comparative study can be done on both male and female subjects, who are vaccinated.
- A correlation study can be conducted on knowledge and attitude of the adults towards Covid - 19 vaccinations.
- A comparative study can be done on both vaccinated and non-vaccinated adults.
- A further study can be conducted to find out knowledge of the adult about Covid-19 vaccinations

Declaration by Authors

Ethical Approval: Approved

Acknowledgement: None

Source of Funding: None

Conflict of Interest: The authors declare no conflict of interest.

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How to cite this article: Snehal Sanjay Satpute, Pranali Dilip Sawant, Sneha Elizhbeth Roy, Tanaya Prakash Solase, Saloni Premdas Telgote, Vaishnavi Vinod Thengari et.al. A study to assess the attitude towards Covid-19 vaccination among adults residing in a selected community. *Int J Health Sci Res.* 2023; 13(11):130-134. DOI: <https://doi.org/10.52403/ijhsr.20231116>
