

# Attitude of Adults Towards Covid 19 Vaccination in Kannur District

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## Abstract

**Introduction:** The COVID-19 pandemic caused almost incomparable impairment to many nations' lives, health, and economies. The SARS-CoV-2 has caused an enormous burden of illness worldwide.

**Methods:** A descriptive study with a quantitative approach was conducted from January to April 2022. The sample consisted of 242 adults, selected through the snowball sampling technique. Data were collected using a modified attitude scale, which was prepared and administered online by the investigators.

**Results:** The mean percentage of attitude score was 63.7. The findings of the study showed that most (61.57%) of the adults had a highly favorable attitude towards Covid 19 vaccination; whereas, 38.01% had a favorable and only 0.41% had an unfavorable attitude.

**Discussion:** Understanding the perception and attitude toward vaccination can play a vital role in dealing with pandemics, and vaccination can be an important protective behavior from COVID-19. As the disease continues to desolate the world, scientists and organizations around the globe are working to develop safe and effective vaccines to control the infection, which is one of the most successful and cost-effective healthcare interventions for preventing infectious diseases.

**Keywords:** Attitude; Covid 19 vaccination; Adults.

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## INTRODUCTION

Coronavirus disease (COVID-19) is a deadly virus that continues to afflict many countries worldwide. A COVID-19 vaccine is a vaccine intended to provide acquired immunity against severe acute respiratory syndrome coronavirus. Vaccination has been shown to contribute to reducing deaths and severe illness from Covid-19.<sup>1</sup>

A cross-sectional study was undertaken to assess

the attitude towards the Covid 19 vaccine among the general public of Kerala during the period from 16 January 22 February 2021. Among the 1345 adults aged above 18 years who participated in the survey, selected through snowball sampling, most (88.8%) of the subjects agreed to take the vaccine, and the majority (88.2%) were confident that they would get protected through vaccination. At the same time, about 69.45 of them worried about the side effects of the vaccine in the future. More than half (65.2%) of the samples were doubtful about the efficacy of the vaccine.<sup>2</sup>

The COVID-19 pandemic continues to damage the world. A vaccine provides the best hope for a permanent solution to controlling the pandemic. However, to be effective, a vaccine must be accepted and used by a large majority of the population. Vaccination is a safe and effective way to prevent disease and save lives now more than ever. Vaccines are a vitally important application of scientific research that saves millions of lives worldwide every year.<sup>3</sup>

### ***Need for the study***

A community based cross-sectional study in urban and rural communities among 564 people was conducted to understand the attitudes towards Covid 19 vaccine and hesitancy to accept it, in Tamil Nadu, India. Sampling technique used was multistage random sampling and the tool used was Vaccine Attitude Scale (VAX) in measuring attitude and acceptance of the vaccine was captured by responses to a direct question. More than 50% of the participants had a positive attitude towards vaccination. The prevalence of vaccine hesitancy was 40.7 %, while 19.5% of the respondents were vaccine deniers.<sup>4</sup>

***An online cross-sectional questionnaire:*** based survey was conducted to assess the acceptance and concerns regarding the vaccination against Covid 19 in Kerala. A convenient sampling technique was used and a total of 314 participants took part in the survey. Over 92% indicated that they were aware of the vaccination guidelines. About 42% obtained information through printed media, 55% through social media, and 27% through health care professionals. Among the 84% who were willing to take the vaccination, over 39% expressed that their willingness was due to their trust in the government's awareness campaigns, 29% due to fear of contracting the diseases, 27% due to instructions from health care professionals. Among the 16% unwilling to take the vaccine, over 86% were anxious about the side effects or adverse

reactions of the vaccine, and over 56% were anxious regarding the effectiveness of the vaccine.<sup>5</sup>

The Covid 19 pandemic has caused an unprecedented threat to mankind, health, and the whole economy. It has caused a mammoth burden in the health sector. Since vaccination is one of the most proficient ways to reduce the severity of the disease, Covid 19 vaccines are seen as vital to the control. Understanding the perception and attitudes towards vaccination plays a pivotal role in dealing with the pandemic. Knowledge about people's willingness to get the vaccine is very limited in India, which will help in predicting the future trends in vaccine uptake and developing strategies to improve acceptability.<sup>6</sup>

### ***Problem statement***

A study to assess the attitude of adults towards Covid 19 vaccination in Kannur district.

The objectives of the study are to;

- Identify the attitude of adults towards Covid 19 vaccination.
- Associate between selected demographic variables and attitude.

### **HYPOTHESIS**

To achieve the stated objectives, the hypothesis will be tested at a 0.05 level of significance.

**H<sub>1</sub>:** There will be a significant association between the attitude of adults towards Covid-19 vaccination and selected demographic variables.

### **ASSUMPTIONS**

***The study assumes that***

- The adults have both positive and negative attitudes towards Covid 19 vaccination.
- The adults have anxiety and fear about Covid 19 vaccination.
- The attitude of the adults can be measured using an attitude scale.
- Attitudes lead to action.

### **MATERIALS AND METHODS**

#### ***Research Approach***

A research survey approach was adopted for

this study to assess the attitude of adults towards COVID-19 vaccination in the Kannur district.

### Research design

A descriptive survey design was adopted for this study to assess the attitude of adults toward the Covid 19 vaccination.

### Setting of study

This study was conducted in the Kannur district.

### Variables

The demographic variables were age, gender, religion, education, occupation, marital status, type of family, place of residence, and source of information on the Covid 19 vaccine.

### Sample and sampling technique

The sample comprised 242 adults in the Kannur district, selected through the snowball sampling technique.

## INCLUSION CRITERIA

### Adults who are:

- Willing to participate in this study.
- Aged between 20 and 60 years of age.
- had an android phone to use.

## EXCLUSION CRITERIA

### Adults who are

- not willing to take part in the study.
- Aged less than 20 and more than 60 years.
- Didn't have an android phone to use.

### Description of the tool

**Tool 1: Part 1:** Baseline characteristics' consisted of 9 items.

**Part 2:** Modified Attitude scale, which has three points, and the total statements were 30. Points were Agree (3), Uncertain (2), and Disagree (1). The total score was 90.

## RESULTS

### Distribution of sample according to level attitude

towards Covid 19 vaccination

To facilitate the analysis and interpretation, the score of the level of attitude was graded into

**Table 1:** Level of attitude towards Covid 19 vaccination

| Grading          | Range   | Frequency | Percentage | n = 242 |
|------------------|---------|-----------|------------|---------|
| Unfavorable      | 01 - 30 | 01        | 0.41       |         |
| Favorable        | 31 - 60 | 92        | 38.01      |         |
| Highly favorable | 61 - 90 | 149       | 61.57      |         |

highly favorable 61 – 90, favorable 31 – 60, and unfavorable 01 – 30.

Data in the diagram show that most (61.57%) of the adults had a highly favorable attitude towards

**Table 2:** Range, Mean, median, and Standard Deviation of attitude towards Covid 19 vaccination

| Attitude of Adults | Range   | Mean | Median | Standard Deviation | n = 242 |
|--------------------|---------|------|--------|--------------------|---------|
|                    | 30 - 90 | 63.7 | 62     | 11.69              |         |

Covid 19 vaccination, and 38.01% had a favorable attitude whereas only 0.41% of them had an unfavorable attitude.

Chi-square values between attitude and selected demographic variables.

**H<sub>0</sub>:** There is no significant association between mean attitude scores and selected demographic variables.

To test the null hypothesis, an alternative hypothesis was stated.

**H<sub>1</sub>:** There is a significant association between mean attitude scores and selected demographic variables.

A Chi-square test was used to find the association. It is identified that there was no association between

**Table 3:** Association between attitude and selected demographic variable.

| Sl. No | Variables             | X <sup>2</sup> | P Value | n = 242 |
|--------|-----------------------|----------------|---------|---------|
| 1.     | Age                   | 9.48           | 0.227   |         |
| 2.     | Gender                | 5.99           | 0.951   |         |
| 3.     | Religion              | 12.59          | 1.0     |         |
| 4.     | Education             | 21.056         | 0.097   |         |
| 5.     | Occupation            | 12.59          | 0.949   |         |
| 6.     | Marital Status        | 9.48           | 0.622   |         |
| 7.     | Type of Family        | 9.48           | 0.441   |         |
| 8.     | Place of Residence    | 5.99           | 0.521   |         |
| 9.     | Source of information | 5.99           | 0.933   |         |

p≤ 0.05 \*Significant

mean scores of the attitude of adults towards Covid 19 vaccination and the demographic variables.

n =242

At a 5% confidence level, the test is not statistically significant as  $p>0.05$  for all demographic variables, so that, the null hypothesis was accepted and the research hypothesis was rejected.

Descriptive and inferential statistics were employed to analyze the data and the analysis was carried out based on the objectives and hypothesis of the study. The mean score of the attitude of adults was 63.7, the median, was 62 and the standard deviation was 11.69. There was no association between the attitude and selected demographic variables such as age, gender, religion, education, occupation, marital status, type of family, place of residence, and source of information at 0.05 levels.

### Implications

The rapid spread of Covid 19 and the high mortality rate associated with Covid 19 pneumonia have caused to create a pandemic crisis across the globe. This has a direct impact on the health, economic and social life of people all over the world. Nurses, the frontline warriors along with nursing students should focus on health education, the first and foremost domain, and screening services and support of the general public, especially the vulnerable groups, who are in a panic.<sup>8</sup> Education should cover the strategies like prevention of infection, early detection of symptoms, and the importance of isolation. The focus should be given to diet patterns also.

### CONCLUSION

The World Health Organization declared Covid 19 a pandemic in March 2020. This disease has become a burden to all the countries with a vast number of morbidity and mortality globally. The disease has also triggered great socio-economic and psychological impacts on people and countries. Safe vaccination is an urgent need to combat the crisis.<sup>7</sup>

**Ethical clearance:** The ethical clearance of this study was obtained from the Institutional Ethical Committee (IEC) of Lourde College of Nursing.

**Source of funding:** Self-funded project within the Institution.

**Conflict of Interest:** The authors declare that there is no conflict of interest.

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