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Knowledge and perception on COVID vaccination among adults

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ABSTRACT

COVID is a devastating pandemic that we haven't dreamed of it in 21st century. Being in this era, man couldn't able to control its spread despite various researches and advanced technologies. At present, vaccines are the most effective means of health measures to protect the public from the pandemic. The present study is carried out to assess the knowledge and perception of Covid vaccination among adults. A Quantitative research approach with a descriptive design was adopted in this study. A structured knowledge questionnaire and 5-point Likert scale to assess perception on Covid vaccination are used to assess the knowledge and perception on Covid vaccination. The findings reveal that 54 % of participants had moderate knowledge, 33% had adequate knowledge and 13 % of them had inadequate knowledge on Covid vaccination. Regarding perception, 35% of the participants had medium perception, 27% of them had high perception, 29% of them had very high perception, 9% had low perception on Covid vaccination. A positive relationship ($r=0.87$, $-1 \leq r \leq 1$) had been found between knowledge and perception on covid vaccination. Adequate awareness regarding covid vaccination among rural areas helps to improve the acceptance rate and thereby pandemics can be kept under control.

Keywords: Knowledge, Perception, Covid Vaccination.

1. INTRODUCTION

COVID -19, an unexpected pandemic ruling the world one can never accept its persistence in this era. The spike virus originated from Wuhan has shaken the whole universe by creating a dreadful situation. Despite various researches and advanced technologies, controlling viral dispersion remains a query. At present, vaccines are the most effective means of health measures to protect the public. According to the recent data published by the Ministry of health and family welfare (14th July 2021), Tamilnadu occupies the fourth position among the highest newly reported cases in the state. The state has a very low vaccination rate covering only 9% of the first dose. The percentage of people fully vaccinated varied in different districts (48% in Nilgiris, 8%.inCheyyar and Tiruvannamalai). If this continues at this rate, it will take at least three years to vaccinate all the adults in Tamil Nadu. Hesitancy, fear and non-availability were the common reasons for the public not getting vaccinated

The government is taking various steps to cover up all the adults and old age population in the country to receive herd immunity and halt its aggressive spread. Even though various vaccines were identified, the public is in panic to receive them due to their ill effects in certain aspects. Most of the public are hesitating to receive the vaccines knowing their benefits.

The researcher found out that most of the neighbourhood members in the community refused to receive the vaccines which are given free of cost. Even though the mass media has given adequate information about the importance of vaccination; they are scared to receive the shots. The main reason is that the public has not perceived the severity of the illness, and still they have a lack of knowledge and perception towards Covid vaccination. Hence the researcher conducted a study to identify the current knowledge and perception regarding COVID vaccination among the adults residing in the selected rural areas of the Kanyakumari district.

2. STATEMENT OF THE PROBLEM

A Descriptive Study to Assess the Knowledge and Perception on Covid Vaccination among Adults in a Selected Rural Area, Kanyakumari District.

3. OBJECTIVES

- To assess the knowledge and perception of Covid vaccination among adults.
- To assess the relationship between knowledge and perception on Covid vaccination among adults.
- To find out the association between the selected demographic variables with the level of knowledge and perception on Covid vaccination among adults.
- To find out the association between the selected clinical variables with the level of knowledge and perception on Covid vaccination among adults.

4. HYPOTHESIS

- There is a significant relationship between knowledge and perception of Covid vaccination among adults.

5. RESEARCH METHODOLOGY

A Quantitative research approach with a descriptive design is adopted in this study. A total of 100 adults between 30-70 years of age residing in a selected rural area of Kanyakumari district are selected by using a non-probability convenient sampling technique. Permission is obtained from the Institutional Ethical Committee and the Block Medical officer. The purpose of the study is explained and informed written consent is obtained from the participants. Data is collected using a structured knowledge questionnaire to assess knowledge on Covid vaccination and a 5-point Likert scale is used to assess perception on Covid vaccination.

6. MAJOR FINDINGS

The findings of the study are discussed based on the objectives of the study.

Demographic Variables

The frequency and percentage distribution of demographic variables among adults, majority 37 (37%) are between the age of 30 – 40 yrs, 61(61%) are males, 56 (56%) are Christians, 56 (56%) of them belonged to joint family, 46(46%) are earning between Rs. 11,000– Rs 20,000/- per month, 67(67%) are educated up to school education, 38(38%) of them are homemaker.

Clinical variables

The study findings of clinical variables among adults revealed that 27(27%) have a history of diabetes mellitus. 89(89%) of the participants have not been exposed to any recent covid infection.

The first objective of the study is to assess the knowledge and perception of Covid vaccination among adults

The study findings show that the majority 54% of the participants had moderately adequate knowledge. 33% of the participants have adequate knowledge and the remaining 13% of the participants have inadequate knowledge on Covid vaccination. At the same time, the majority 35% of the participants have medium perception, 29% and 27% of the participants have very high and high perception and very few 9% have a low perception of Covid vaccination.

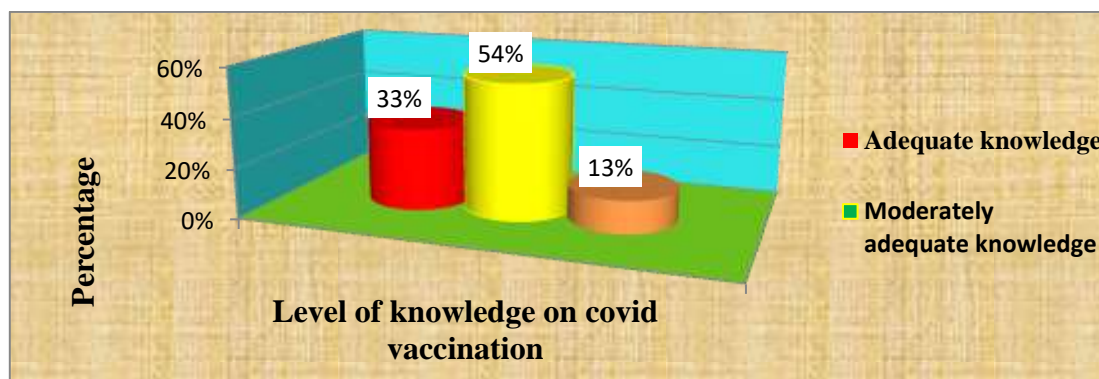


Fig 1: Bar diagram representing the level of knowledge on Covid vaccination

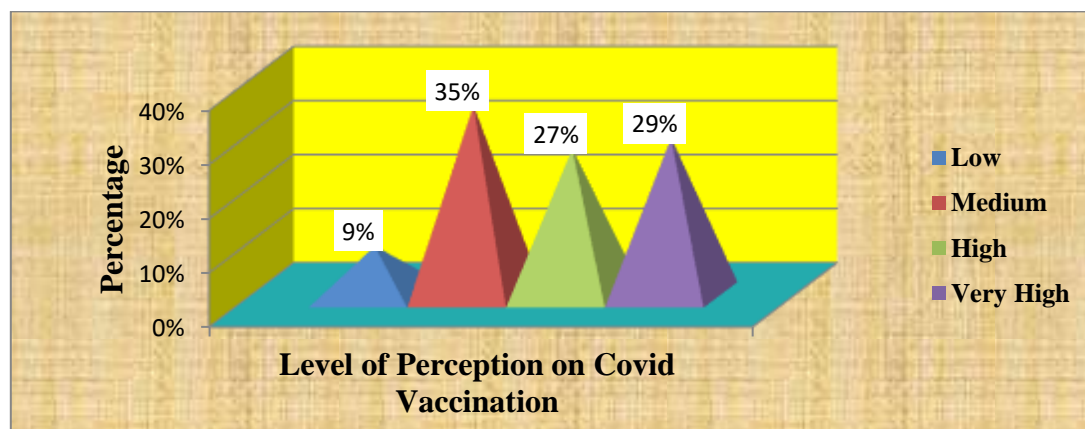


Fig 2: Bar diagram representing the level of perception on Covid vaccination

The study findings are congruent with the cross-sectional survey conducted by Saiful Islam et al.,(2021) in Bangalore and reported that the knowledge regarding COVID-19 vaccinations is low among more than half of the population and it is significantly associated with education, family type, monthly income of a family, and previous vaccine uptake experience. The majority of participants (78%) showed a positive attitude towards the COVID-19 vaccine. Most participants (89%) believed that the newly discovered COVID-19 vaccine may have side effects. Over half of participants (56%) responded that if everyone in the society maintains the preventive measures, the COVID-19 pandemic can be eradicated without vaccination and (35%) responded that they would not purchase the vaccine at their own expense if it was not provided free of charge by the government

The second objective of the study is to assess the relationship between knowledge and perception on Covid vaccination among adults.

Table: 1 Relationship between knowledge and perception on covid vaccination N=100

VARIABLES	MEAN SCORE	R VALUE	P - VALUE
Knowledge	1849	0.87	0.001*(0.321)
Perception	6049		

*significant at 0.001 level of significance

The data presented in the above table 1 shows that the coefficient of correlation between knowledge and perception is 0.87 and also there is a significant relationship between knowledge and perception ($p < 0.001$). This proves that as knowledge increases, perception also tends to increase.

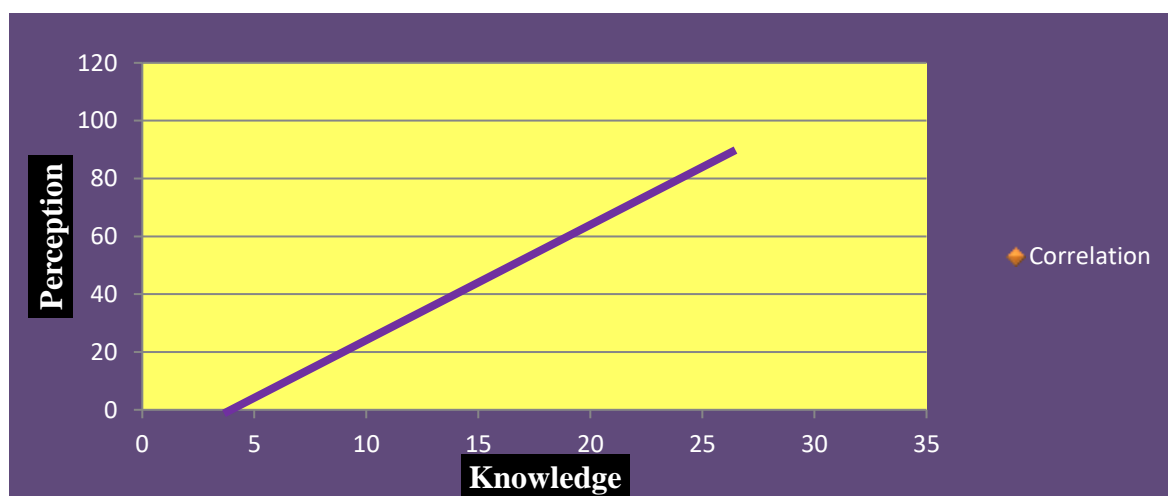


Fig 3: Scatter diagram showing the relationship between knowledge and perception on Covid vaccination

The study findings are supported by a descriptive study conducted by Federico Ciardi et al., (2021) on Knowledge, Attitudes and Perceptions of COVID-19 Vaccination among Healthcare Workers of an Inner-City Hospital, New York. The study findings reported a strong correlation between participants' knowledge about COVID-19 infection and positive attitude towards receiving COVID-19 vaccination ($r = 0.18, p < 0.001$). Hence the research hypothesis has been accepted.

The third objective of the study is to find out the association between the selected demographic variables with the knowledge and perception of Covid vaccination among adults

The findings revealed that there is a statistically significant association between age ($\chi^2=28.79, p < 0.001$), religion ($\chi^2=32.40, p < 0.001$), family income ($\chi^2=59.28, p < 0.001$), educational status ($\chi^2=61.47, p < 0.001$), occupational status ($\chi^2=49.10, p < 0.001$) and there is no association found between demographic variables such as gender, type of family with the level of knowledge among adults.

A statistically significant association is found between the educational status ($\chi^2=67.22, p < 0.001$), occupational status ($\chi^2=41.90, p < 0.001$) with the level of perception.

The fourth objective of the study is to find out the association between the clinical variables with the knowledge and perception of Covid vaccination among adults

The findings revealed that there is a significant association found between clinical variables like the history of co-morbidities ($\chi^2=40.67, p < 0.001$) with the level of knowledge among the adults and also significant association found between like the history of co-morbidities ($\chi^2=44.33, p < 0.001$) and the perceptions on Covid vaccination among adults.

7. CONCLUSION

At present, Covid vaccines are the treasures of our life which we shouldn't neglect unknowingly. Vaccines are being undergone with various clinical trials and are ready for the use of public. While considering the risk and benefits, benefits outweigh the risk. Hence the public should come forward to receive the shots and protect our generations from the deadly virus. The research

findings reveal that adults have a moderate level of knowledge and perception about covid vaccination. There is a significant relationship found between knowledge and perception which proves that as the knowledge on covid vaccination increases, perception also tends to increase.

Adequate awareness regarding covid vaccination among rural adults is essential which may change their level of perception. These factors are directly related to the acceptance of vaccination. Covid Vaccines should be given higher priority to control the infection rate and keep the pandemic under control.

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