Original Article

A study to determine knowledge of COVID 19 among rural area families

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Abstract

The SARS-CoV-2 virus is the infectious agent that causes the corona virus illness (COVID-19). This virus can cause mild to moderate respiratory sickness in infected individuals, but they can recover without the need for special medical care. Little was known about the level of COVID-19 knowledge among inhabitants in such a dire scenario. The purpose of the study was to ascertain the general population's degree of knowledge and attitude toward COVID-19 in Karad Taluka. METHOD: For this study, 300 residents of Kale Village who are part of the community were enrolled. The design of the study was cross-sectional. For this investigation, a practical sampling strategy was employed. Participants' knowledge and attitude were evaluated using a structured knowledge questionnaire. In the two months from December 2021 to January 2022, data collecting was finished. RESULTS: The majority of participants, 180 (60%) had average knowledge of Covid 19, 100 (33.33%) had bad knowledge, and only 20 (6.66%) of the individuals had strong understanding of Covid 19. People have a favourable view toward covid 19. CONCLUSION: The data show that people have a positive attitude and have an average level of knowledge of COVID 19.

Keywords: Covid 19, Knowledge, Attitude, Rural Area.

INTRODUCTION

The SARS-CoV-2 virus is the infectious agent that causes the corona virus illness (COVID-19). This virus can cause mild to moderate respiratory sickness in infected individuals, but they can recover without the need for special medical care. However, some people will develop serious illnesses and need specialised medical care. 1 Numerous cases of pneumonia with an unknown cause were discovered in Wuhan, China, in December 2019. These instances were later given the COVID-19 diagnosis. From China, this illness spread quickly to every country in the world. It has reached 216 nations in the month of June 2020. 2 On March 11, 2020, COVID-19 was declared a pandemic and WHO recognised the severity of the disease. This illness was spreading from person to person. The covid 19 infection rate is really high. The first case was reported in India on January 30, 2020, and from that point on, cases have been steadily rising throughout the country. To combat rapidly spreading disease, the Indian government has implemented a number of measures, including a nationwide lockdown beginning on March 24, 2020, improvements to current healthcare facilities, training for healthcare professionals, etc. There were numerous reasons why the national lockdown was not prolonged. On March 9, 2020, in Pune, the state of Maharashtra, the first case was officially confirmed. Maharashtra was the epicentre of this epidemic, accounting for almost 22.35% of all cases and over 30.55% of all deaths in India. Pune, 150 kilometres from Karad, was the most severely afflicted district in Maharashtra as of May 10, 2021, with roughly 930,809 cases. Satara District finished third in Maharashtra. After Mumbai and Pune, Satara district has the largest number of active cases, according to the Covid-19 chart. The Karad Taluka had the most Covid 19 instances in Satara District. 3Under such dire circumstances, nothing was known about the level of COVID-19 knowledge among residents from various Satara District regions. The study's goal was to examine the general population's knowledge and attitudes toward COVID-19 in Karad Taluka..

MATERIAL AND METHODS

The village of Kale, which is a rural field practise area connected to the Department of Community Health Nursing at the Krishna Institute of Nursing Sciences in Karad, Maharashtra, India, was the site of this cross-sectional study. The study's participants were Kale Villege residents. In the two months from December 2021 to January 2022, data collecting was finished.

Inclusion Criteria:-

- Who gave consent to participate in the study.

Inclusion Criteria:-

- Who had Covid 19 Infection.
- Not willing to participate in study.

Sample size calculation: Sample size was calculated using formula of n=Z2pq/d2; taking 95% Confidence Interval (CI), 10% absolute error (d) and p as 45.5% based on the study done by Preeti Gupta, Anshi Gupta, Sumeet Dixit,and Hemant Kumar in the year of September 2020 in rural population in a northern Indian District 4. Based on that by adding 10% non-response rate to the initial sample size, the final sample size was 300.

Ethical Considerations Before data collection, ethical permission was obtained from Institutional Ethics Committee of Krishna Institute of Medical Sciences Deemed to be University Karad, Maharashtra India.

Data Collection: The goal and scope of the investigation were thoroughly stated to the study subjects. Following receipt of the participant's written consent, data was gathered using a structured knowledge questionnaire. Data was acquired using a pretested structured questionnaire after receiving informed consent. A thorough examination of the literature was conducted before creating the study's questionnaire. The study tool was initially written in English before being translated into the regional Marathi tongue. The study tool asks 30 questions regarding the participant's knowledge of Covid 19 and includes the participant's sociodemographic information.

Plan for data Analysis:

Data analysis was carried as mentioned in below mentioned steps

- Organizing the data in master sheet
- Demographic variables was described by using Frequency and percentage
- Tables and diagrams were used to present the analysed data.

Confidentiality and Anonymity:

The participants were assured of confidentiality of their information during an informed consent process.

Statistical Analysis

The data was analyzed Statistical Package for the Social Sciences (SPSS) version 23.0. p-value >0.05 was taken as the predictor of statistical significance. A correct response for every question was given a score of 1 and a score of 0 was given for every incorrect answer.

RESULTS

A total of 300 subjects participated in the study. Participants involved in this study were in the age group of 18-73 years. The socio-demographic characteristics of the study participants are explained in table-1.

Table-1: Socio-demographic characteristics of the respondents (N=300).

Characteristics	**N(300)**	**%**
Gender		
Male	109	36.33
Female	191	63.66
Age in Years		
Below 30 yrs.	20	6.66
31- 45	93	31
46-60	125	41.66
Above 61yrs.	62	20.66
Marital Status		
Married	276	92
Single	24	8
Religion		
Hundu	211	70.33
Muslim	89	29.66
Type of Family		
Nuclear	267	89
Joint	33	11
Education		
Primary	47	15.66
Secondary	127	42.33
Graduation	53	17.66
Post-Graduation	73	24.33
Occupation		
Employed	254	84.66
Unemployed	46	15.33
Monthly Income		
5000-15000	10	3.33
16000-30000	48	16
31000-45000	142	47.33
Above 46000	116	38.66

Table -2. Overall Knowledge regarding Covid 19.

Sr.No.	knowledge score	Knowledge Regarding Covid 19	
		Number	Percentage
1	Poor(1-10)	100	33.33
2	Average(11-20)	180	60
3	Good(21-30)	20	6.66

Table no. 2 reveals that 180 individuals (60%) had average knowledge of Covid 19, 100 people (33.33%) had bad knowledge, and just 20 participants (6.66%) had strong understanding of Covid 19.

Table -3 Attitude towards Covid patient

Variables		N	%
Opinion about seriousness of covid disease	Very serious	160	53.33
	Somewhat serious	100	33.33
	Not very serious	20	6.66
	Don't know	20	6.66
Anybody can get Covid	Yes	230	76.66
	No	60	20
	Don't Know	10	3.33
Reaction if diagnosed with Covid	Fear	140	46.66
	Surprise	90	30
	Confident	15	5
	Hopelessness	32	10.66
	Embarrassment	12	4
	Don't Know	11	3.66
Feeling towards people with Covid	Compassion and desire to help	160	53.33
	Feel compassion, but tend to stay away from them	32	10.66
	It is their problem, I can't get Covid	31	10.33
	I fear them because they may infect me	24	8
	No particular feeling	26	8.66
	Don't know	27	9

Table No. 3 summarises the participants' attitudes toward Covid 19 in the study. The majority of participants, 220 (73.33%), had favourable attitudes of Covid 19. About 160 (53.33%) of the participants thought Covid 19 was a very dangerous sickness, while 20 (6.66%) did not. 230 participants, or 76.33 percent, were also aware that anyone could obtain Covid 19. Regarding the "participant's reaction," of the 140 people who stated they would feel worry if they were given the Covid 19 diagnosis, just 15 (5%) said they would be confident in their ability to handle it. When asked about how they would behave toward people with Covid 19, the majority of the 160 participants (53.33%) said they would feel compassion for them. Of these, 64 (60.38%) of the subjects were willing to assist, while the remaining would try to stay away from the infected people.

DISCUSSION

In the current study, 180 participants (60%) had average knowledge of Covid 19, 100 people (33.33%) had bad information, and only 20 participants (6.66%) had strong knowledge about Covid 19 and a positive attitude toward Covid 19 patients. These findings are consistent with research by Saudi AO et al. The majority of survey participants had a general understanding of COVID-19. Indicating an average level of knowledge, the mean COVID-19 knowledge score was 17.96 (SD = 2.24, range: 3-22). The average attitude score was 28.23, which indicates a favourable attitude toward the COVID 19 patients. 5 However, Md. Kamal Hossain Ripon et alstudy .'s demonstrates that people have a more positive attitude with COVID-19 and are better educated about its causes. 6 Lihu Ma and others The near observer observation time item had the greatest item scoring rate of 87.2%, the lowest was 16.2%, and the overall average knowledge score was 39.75 6.703; the total scoring rate was 65.5%. (spread rate). The highest score was 98.9%, while the overall belief/attitude score was 45.40 3.341, totaling 84.7%. In their study, 7El-Gilany et al. found that the majority of the study group had enough understanding of COVID-19 and a favourable attitude toward it. Piyoosh Kumar Singh and others, 8 More than half of the study's participants reported having high knowledge and a good attitude, with percentages of 58.6% and 62.1%, respectively. The knowledge and attitude aspects reveal a considerable difference according to education.

CONCLUSIONS

The study's findings show that participants knew about COVID 19 on average. A positive outlook toward a person with the covid 19 was advantageous. To attain a covid-19-free India, health education must be provided at the rural level in order to prevent, identify, and cure covid-19.

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