A Study to Assess the Prevalence of COVID-19 among People at Kalitheerthalkuppam, Puducherry"

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ABSTRACT

Coronavirus disease 2019 (COVID-19), caused by Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2), emerged in Wuhan, China in December 2019 and was declared a pandemic by the World Health Organization on March 11, 2020. The present study aimed to assess the prevalence of COVID-19 among people at Kalitheerthalkuppam, Puducherry, and to determine its association with selected demographic variables. A quantitative research approach with a descriptive research design was adopted. A total of 30 samples were selected using a convenient sampling technique. Data were collected over a period of two weeks using demographic variables and a rating scale. Descriptive and inferential statistics were used for data analysis. The findings revealed that 50% of participants had a moderate level of prevalence, 26.7% had a high level, and 23.3% had a low level of prevalence. The mean prevalence score was 16.03 with a standard deviation of 5.334. Among demographic variables, occupation and vaccination status showed a statistically significant association with prevalence ($p < 0.05$). Other variables such as age, sex, education, marital status, family type, comorbidities, and testing history were not significantly associated. The study concludes that moderate prevalence was observed among the majority of participants, highlighting the need for continued public health interventions and large-scale studies.

INTRODUCTION

COVID-19 entered into our lives at the end of 2019 in the whole world threatening the health of countless people and reached pandemic status as well. Since December 2019, there has been an outbreak of pneumonia of an unknown aetiology that was first reported in Wuhan, Hubei Province, China. The causative virus for the pandemic in China and other parts of the world by the World Health Organization On March 11, 2020 declared Covid-19 as a pandemic. Covid19 has affected more than 110 million peoples worldwide .Coronavirus disease 2019 (COVID-19) is a contagious disease caused by a virus, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The first known case was identified in Wuhan, China, in December 2019. The disease quickly spread worldwide, resulting in the COVID-19 pandemic. COVID-19 is caused by infection with a strain of coronavirus known as 'Severe Acute Respiratory Syndrome coronavirus 2' (SARSCoV-2).

Keywords: COVID-19, SARS-CoV-2, Pandemic, Infectious Disease, Public Health

Statement Of The Problem

"A study to assess the prevalence of covid-19 among people at kalitheerthalkuppam, puducherry"

Objectives Of The Study

- To assess the prevalence of COVID-19 among people in community.
- To associate the prevalence of COVID -19 among people with their selected demographic variables

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METHODOLOGY

The research approach used for this study was quantitative research approach. A descriptive Research design was used to assess the prevalence of covid-19 among people in Kalitheerthalkuppam at Puducherry. By using Convenient Sampling Technique 30 samples was selected for the present study. The period of data collection was two week. The tool consists of demographic data, and Rating scales methods. The outcome of the study was evaluated by using descriptive and inferential statistics.

Organisation Of The Data

Data collected were organized under the following sections.

Section A: Description of the demographic variables among community people.

Section B: Assess the prevalence of covid 19 among people at selected community people.

Section C: Assess the prevalence of covid 19 among community people with their selected demographic variables.

Section A: Description Of the Demographic Variables Among Community People

Table 1:- Frequency and percentage wise distribution of demographic variables among prevalence of covid 19.

(N=30)

SL. NO	DEMOGRAPHIC VARIABLES	FREQUENCY (N)	PERCENTAGE (%)
1	**Age in years**		
	a) 20-24	5	16.7
	b) 25-30	7	23.3
	c) 31-35	8	26.7
	d) Above 40	10	33.3
2	**Sex**		
	a) Male	10	33.3
	b) Female	20	66.7
3	**Educational Status**		
	a) Primary	4	13.3
	b) Secondary	11	36.7
	c) Graduate	12	40
	d) Illiterate	3	10
4	**Martial Status**		
	a) Married	22	73.3
	b) Unmarried	8	26.7
	c) Divorced	0	0
5	**Place of Living**		

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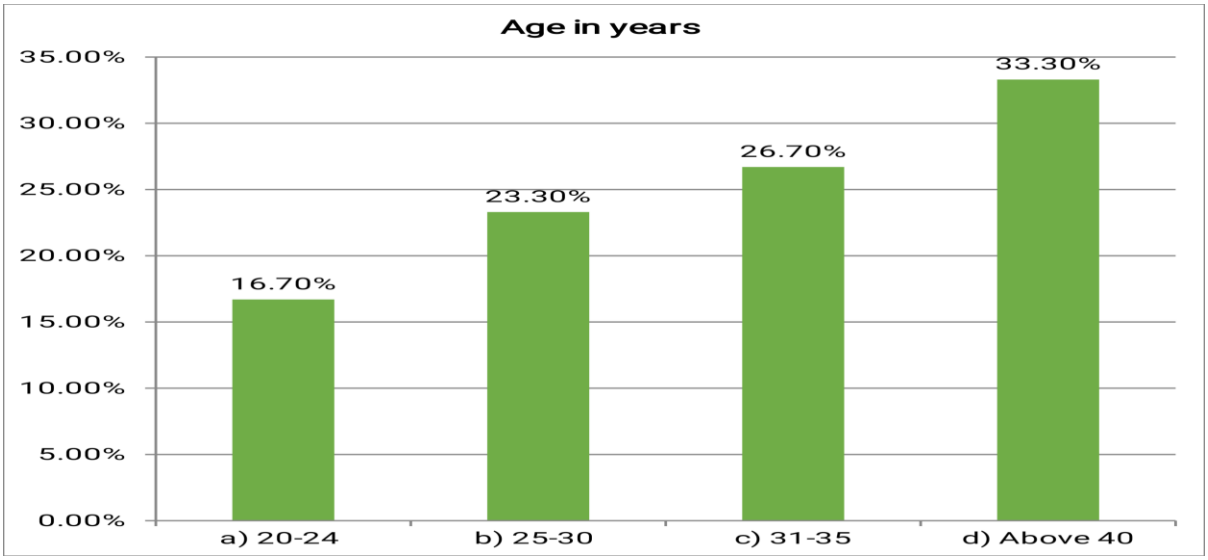
	a) Urban	0	0
	b) Rural	30	100
6	**Occupation**		
	a) Unemployed	13	43.3
	b) Private	15	50
	c) Government job	2	6.7
	d) Business	0	0
7	**Family Type**		
	a) Joint family	14	46.7
	b) Nuclear family	16	53.3
8	**Do you have any renal disease, heart disease, or diaberes so far?**		
	a) Yes	3	10
	b) No	27	90
9	**Do you get vaccinated?**		
	a) Yes	24	80
	b) No	6	20
10	**Have you ever been tested for covid?**		
	a) Yes	17	56.7
	b) No	13	43.3

Table 1 shows frequency and Percentage wise distribution of demographic variables among adults. Out of the 30 adults who were interviewed, Majority of the adults 10(33.3%) of study population were in the age group are above 40years. Majority of the adults were female 20(66.7%). Majority of the adults were Graduate 12(40%). Majority of the adults were married 22(73.3%). All of the adults were Rural 30(100%). Majority of the adults were had Private job 15(50%). Majority of the adults were Nuclear family 16(53.3%). Majority of the patients were had not renal disease, heart disease, or diabetes 27(90%). Majority of the adults were got vaccinated 24(80%). Majority of the adults were tested for covid 17(56.7%).



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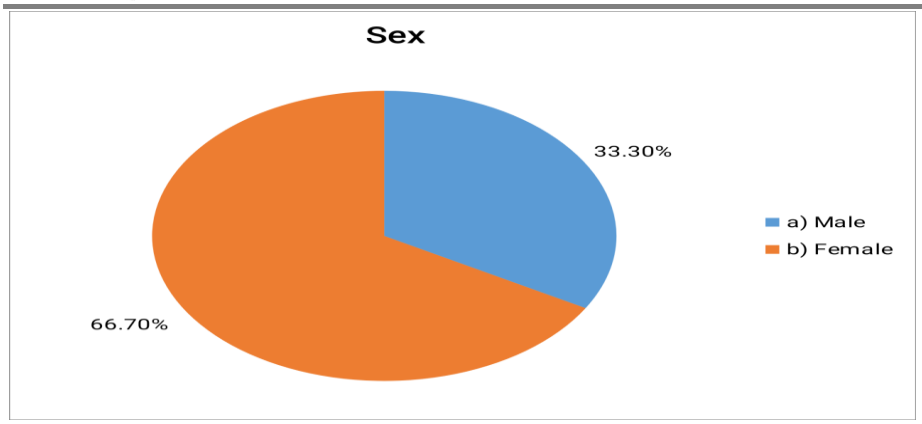

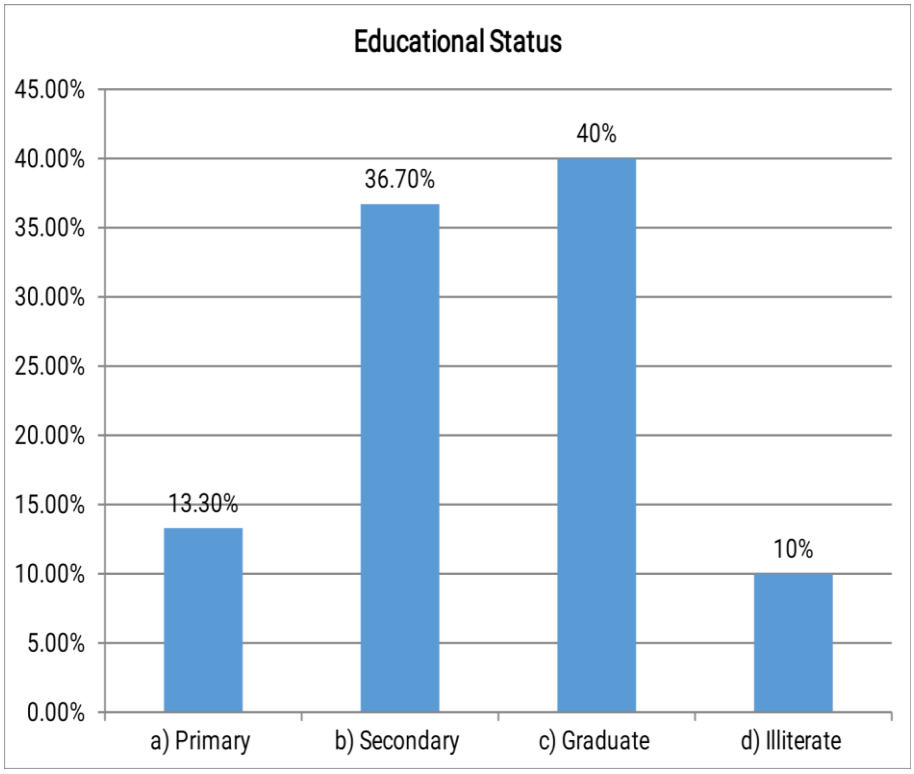

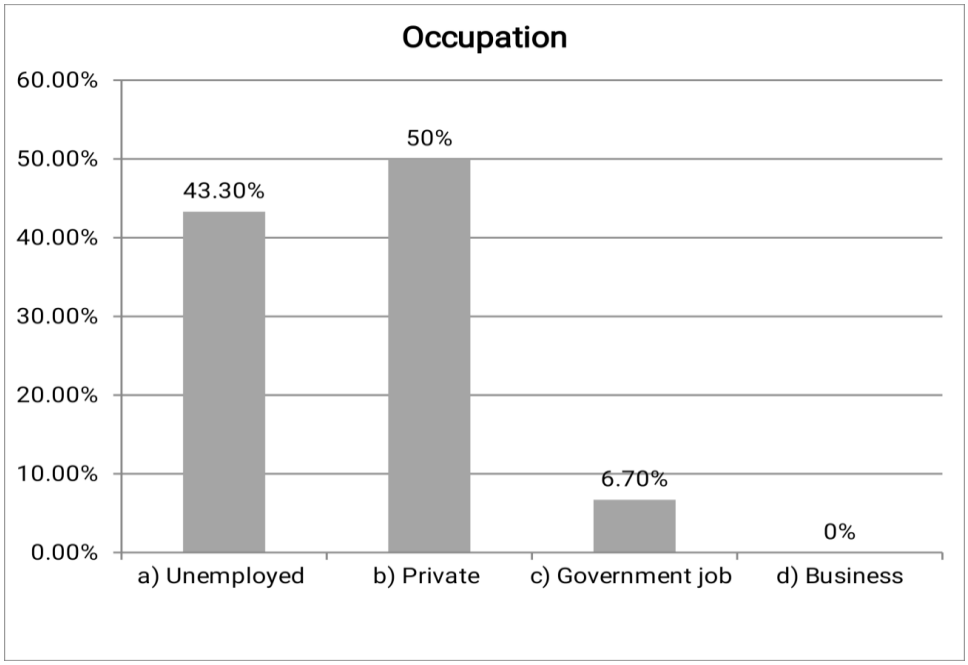

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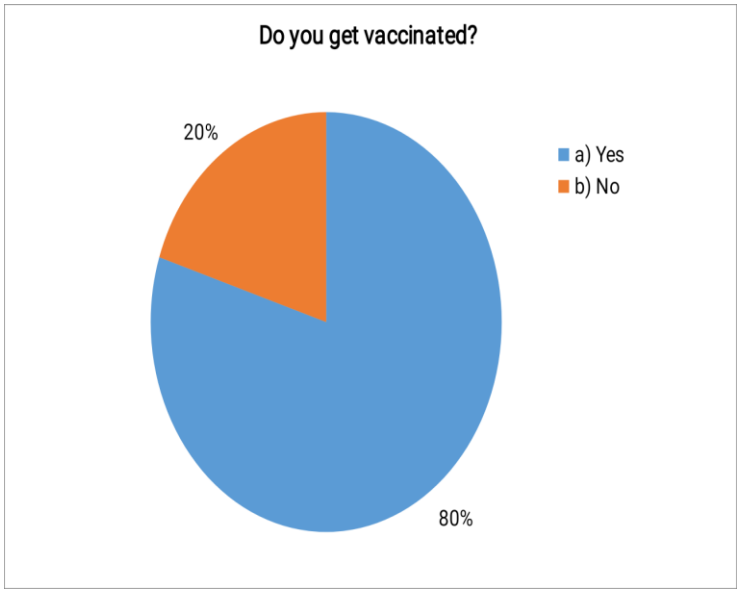


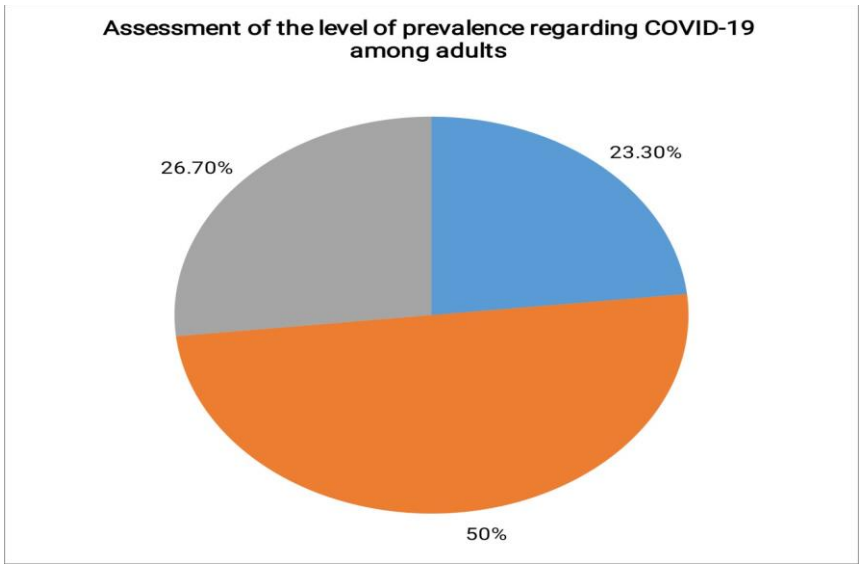
Section B: Assessment of the level of prevalence regarding COVID-19 among adults.

Table 2:- Frequency and percentage wise distribution of the level of prevalence regarding COVID-19 among adults.

(N = 30)

LEVEL OF PREVALENCE	FREQUENCY(n)	PERCENTAGE(%)
Low	7	23.3
Moderate	15	50
High	8	26.7
Total	**30**	**100**
Mean±Standard deviation	16.03±5.334	

Table –2 shows frequency and percentage wise distribution of the level of prevalence regarding COVID-19 among adults. Majority of the adults 15(50%) had moderate level of prevalence, 8(26.7%) had high level of prevalence and 7(23.3%) had low level of prevalence. The mean and standard deviation of the level of prevalence regarding COVID-19 among adults is (16.03±5.334) respectively.



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Section C: Association between the level of prevalence regarding COVID-19 among adults with their selected demographic variables.

Table –3: Association between the level of prevalence regarding COVID-19 among adults with their selected demographic variables.

(N=30)

SL. NO	DEMOGRAPHIC VARIABLES	LEVEL OF PREVALENCE						Chi-square X^2 and P-Value
		LOW		MODERATE		HIGH		
		N	%	N	%	N	%	
1	**Age in years**							X^2=7.37 Df=6 p =0.288 NS
	a) 20-24	1	14.3	2	13.3	2	25	
	b) 25-30	2	28.6	3	20	2	25	
	c) 31-35	0	0	7	46.7	1	12.5	
	d) Above 40	4	57.1	3	20	3	37.5	
2	**Sex**							X^2=0.536 Df=2 p =0.765 NS
	a) Male	3	42.9	5	33.3	2	25	
	b) Female	4	57.1	10	66.7	6	75	
3	**Educational Status**							X^2=3.85 Df=6 p =0.697 NS
	a) Primary	2	28.6	1	6.7	1	12.5	
	b) Secondary	2	28.6	7	46.7	2	25	
	c) Graduate	3	42.9	5	33.3	4	50	
	d) Illiterate	0	0	2	13.3	1	12.5	
4	**Marital Status**							X^2=2.733 Df=2 p =0.255 NS
	a) Married	6	85.7	9	60	7	87.5	
	b) Unmarried	1	14.3	6	40	1	12.5	
	c) Divorced	0	0	0	0	0	0	
5	**Place of Living**							CONSTANT
	a) Urban	0	0	0	0	0	0	
	b) Rural	7	100	15	100	8	100	
6	**Occupation**							
	a) Unemployed	1	14.3	8	53.3	4	50	**X^2=10.11**
	b) Private	6	85.7	7	46.7	2	25	**Df=4 p =0.039**
	c) Government job	0	0	0	0	2	25	***S**
	d) Business							
7	**Family Type**							X^2=1.72 Df=2 p =0.422 NS
	a) Joint family	2	28.6	7	46.7	5	62.5	
	b) Nuclear family	5	71.4	8	53.3	3	37.5	
8	**Do you have any renal disease, heart disease, or diaberes so far?**							X^2=0.384 Df=2 p =0.825 NS
	a) Yes	1	14.3	1	6.7	1	12.5	
	b) No	6	85.7	14	93.3	7	87.5	

9	**Do you get vaccinated?**							**X^2=10.84 Df=2 p =0.007 *S**
	a) Yes	6	85.7	11	73.3	7	87.5	
	b) No	1	14.3	4	26.7	1	12.5	
10	**Have you ever been tested for covid?**							X^2=2.97 Df=2 p =0.226 NS
	a) Yes	2	28.6	10	66.7	5	62.5	
	b) No	5	71.4	5	33.3	3	37.5	

***-p < 0.05 significant, *-p < 0.001highly significant, NS-Non significant**

The table 3 depicts that the demographic variable, **Occupation *and* Do you get vaccinated** had shown statistically significant association between the level of prevalence regarding covid-19 among adults with their selected demographic variables.

The other demographic variable had not shown statistically significant association between the level of prevalence regarding covid-19 among adults with their selected demographic variables respectively.

RESULTS

The major findings of the study were;

Majority of the people are 15(50%) had moderate level of prevalence, 8(26.7%) had high level of prevalence and 7(23.3%) had low level of prevalence. The mean and standard deviation of the level of prevalence regarding COVID-19 among adults is (16.03$\pm$5.334) respectively.

RECOMMENDATIONS

- The study can do at the large number of samples.
- The study can be implemented at the various states of India.

CONCLUSION

A study to assess the prevalence of COVID-19 among people at kalitheerthalkuppam, Puducherry. The result of the study is Majority of the people are 15(50%) had moderate level of prevalence, 8(26.7%) had high level of prevalence and 7(23.3%) had low level of prevalence of COVID-19 regarding towards COVID-19.

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