

## COVID-19 outbreak related apprehension among general public of Kerala.

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### Abstract

The present study was conducted to assess COVID-19 outbreak related apprehension among general public of Kerala. The objectives of the study were to assess the level of COVID-19 outbreak related apprehension among general public and to find out the association between COVID-19 outbreak related apprehension and selected socio demographic variables. Non experimental descriptive research design was used for the study. Three hundred and seventy nine General public within the age group of 20-50 years who have accessibility to online platforms and who satisfied the inclusion criteria participated in the study by Non probability Snow ball sampling technique. Socio demographic questionnaire and Self report questionnaire consisting of 20 statements to assess level of apprehension related to COVID-19 outbreak were distributed through google forms and data was collected. The findings showed that 49.92% of general public had low level of apprehension, 44.1 % had moderate and only 6% had high level of apprehension related to COVID 19 outbreak. The study showed a statistically significant association between COVID 19 outbreak related apprehension and education ( $p < 0.005$ ), place of residence ( $p < 0.001$ ) and current residential status ( $p < 0.005$ ). The study concludes that the general public residing in Kerala had low level of apprehension related to COVID 19 outbreak. This may be due to the high recovery rate in the state, low incidence during the period of study and trust in existing health care delivery system and governmental efforts to combat the disease.

**Key words:** COVID-19 outbreak related apprehension, general public.

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### I. Introduction

In January 2020, the World Health Organization (WHO) declared the outbreak of novel corona virus disease, COVID -19, as public health emergency of international concern. In March 2020, WHO made the assessment that COVID- 19 can be characterized as a pandemic. It is a time of crisis generating stress throughout the population.<sup>1</sup>

The emergence of Corona Virus Disease 2019 (COVID-19) has caused confusion, changed people's living conditions, including commuting restrictions, fear of disease transmission, and closure of schools and businesses, and brought about devastating psychological impacts, like anxiety.<sup>1</sup>

The growing concern of the general public regarding the spread of infection from suspected COVID-19 positive individuals has created a panic mode in the community. This has also led to significant fear and anxiety related to spread of infection in the general public. Excessive fear and apprehension of spread of infection can lead to acute stress, anxiety, and subsyndromal to syndromal level of depression in vulnerable individuals.<sup>2</sup>

The study on the public psychological states and its related factors during the COVID-19 outbreak revealed that females' anxiety risk was 3.01 times high compared to males and there were anxiety in 6.33% and depression in 17.17% of the study participants.<sup>3</sup>

An article was published by American Journal of Managed Care on, how has covid-19 affected mental health & severity of stress among employees. Nearly 7 in 10 employees indicated that the COVID-19 pandemic is the most stressful time of their entire professional career, which has aligned with stark increases in new prescriptions of antidepressant, anti-anxiety, and anti-insomnia medications.<sup>4</sup>

An article published was by Human Resource Executive on impact of the COVID-19 pandemic on employees. Workers reported experiencing moderate to extreme stress over the past 4 to 6 weeks. Among those reporting stress, 62% noted losing at least 1 hour a day in productivity and 32% lost at least 2 hours a day due to COVID-19-related stress.<sup>5</sup>

An online survey was conducted among 622 adult Indian population, during the Covid-19 pandemic regarding knowledge attitude, anxiety and perceived mental health care need. The responders had a moderate level of knowledge and attitude towards Covid-19 showed peoples willingness to follow government guidelines on quarantine and social distancing. Anxiety levels identified in the study were high and sleep difficulties, paranoia about acquiring Covid-19 infection and distress related to social media were reported in 12.5%, 37.8% and 36.4% participants respectively. The perceived mental health care need was seen in 80% of participants.<sup>6</sup>

### **Statement of the problem**

An exploratory study to assess COVID-19 outbreak related apprehension among general public of Kerala.

### **Objectives**

- Assess the level of COVID-19 outbreak related apprehension among general public.
- Find out the association between COVID-19 outbreak related apprehension and selected socio demographic variables.

### **Hypothesis**

H<sub>1</sub>: There is statistically significant association between COVID-19 outbreak related apprehension and selected socio personal variables such as age, gender, education, occupation and place of residence.

### **Materials and methods**

**Research design:** Non experimental descriptive design.

**Setting:** Online platform accessible to general public residing in Kerala.

### **Population**

**Target population:** General public of Kerala belonging to age group of 20-50 years.

**Accessible population:** General public of Kerala belonging to age group of 20-50 years and those who are accessing online platforms.

**Sample:** General public within the age group of 20-50 years, who have accessibility to online platforms.

**Sample size:** 379

**Sampling technique:** Non probability Snow ball sampling

### **Criteria for sample selection**

#### **Inclusion criteria**

- General public who are willing to participate in the study.
- General public who are able to read and understand English.

#### **Exclusion criteria**

- General public who does not have accessibility to online communication resources.
- General public who are health care professionals.
- General public who are students.

### **Description of the tool**

The data was collected by Self report questionnaire consisting of two sections.

Section A: Questionnaire to assess sociopersonal variables.

Section B: Self-report questionnaire consisting of 20 statements to assess level of apprehension related to COVID-19 outbreak among general public.

### **Data collection procedure**

Ethical clearance was obtained from Institutional Review Board. The data collection for the study was done from 05-05-2020 to 11-05-2020. An online self-report questionnaire was developed by using google forms, with a consent form appended to it. The link of the questionnaire was sent through e-mail, WhatsApp and other social media to the contact of investigators. The participants were encouraged to roll out the survey to as many people as possible. Thus the link was forwarded to people apart from first point of contact and so on.

## **II. Results**

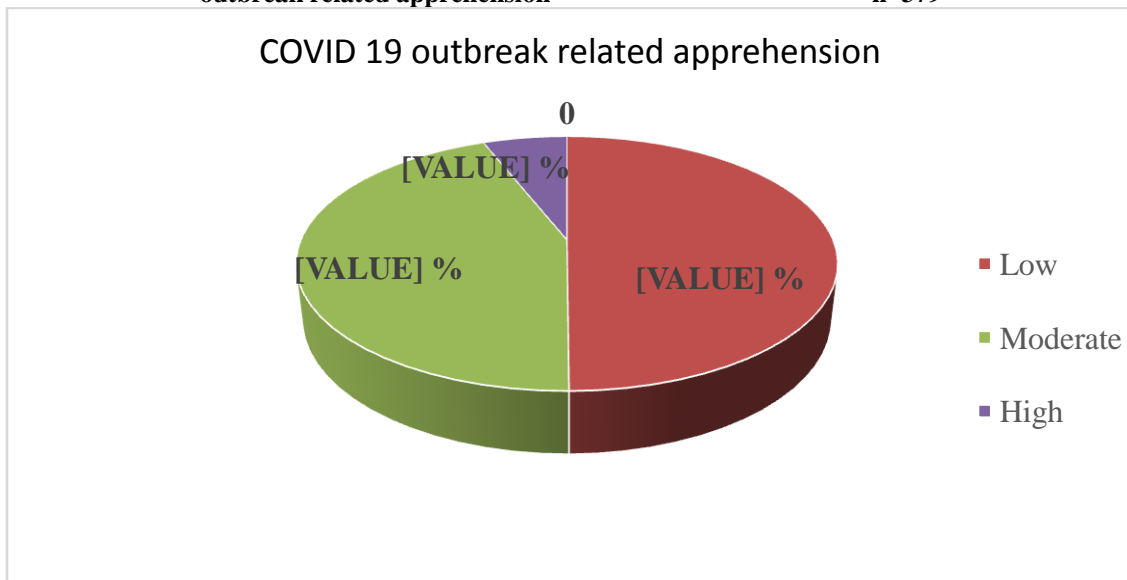
The data obtained was analyzed by using descriptive and inferential statistics.

### **Section 1: Sample characteristics based on socio personal variables.**

Socio personal data showed that 47.8 % of general public were within age group 20 to 30 years and 52 % were males. Among the study participants, 47.5 % were graduates, 54.6 % were private employees, 50.1 % were from Trivandrum, 93.7 % of were staying with their family members and 93.1 % did not had any health problems.

**Section 2: Level of COVID 19 outbreak related apprehension among general public.**

**Figure 1: Pie diagram showing distribution and percentage of general public based on COVID-19 outbreak related apprehension n=379**



**Figure 1** shows that 49.9% of general public had low level of apprehension, 44.1 % had moderate and only 6% had high level of apprehension related to COVID 19 outbreak.

**Section 3: Association between level of COVID 19 outbreak related apprehension and selected socio personal variables**

**Table 1: Chi square value showing association between COVID 19 outbreak related apprehension and education and current residential status. n=379**

Socio personal variable	COVID-19 outbreak related apprehension						df	$\chi^2$
	Low		Moderate		High			
	f	%	f	%	f	%		
<b>Education</b>								
High school	5	71.4	2	28.6	0	0		
Higher secondary	13	40.6	14	43.8	5	15.6	6	14.2**
Graduate	102	56.7	68	37.8	10	5.6		
Post graduate	69	43.1	83	51.9	8	5		
<b>Current residential status</b>								
Staying alone	7	63.6	3	27.3	1	9.1		
Staying with family	179	50.4	158	44.5	18	5.1	4	16.86**
Staying with friends	3	23.1	6	46.2	4	30.8		

\*\* Significant at 0.005

Table 1 shows that there is statistically significant association between COVID 19 outbreak related apprehension and education and current residential status ( $p < 0.005$ ).

**Table 2: Chi square value showing association between COVID 19 outbreak related apprehension and place of residence. n=379**

Place of residence	COVID-19 outbreak related apprehension						df	$\chi^2$
	Low		Moderate		High			
	f	%	f	%	f	%		
Alappuzha	10	38.5	14	53.8	2	7.7		

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Ernakulum	11	57.9	8	42.1	0	0		
Idukki	4	80	1	20	0	0		
Kannur	1	33.3	2	66.7	0	0		
Kollam	23	31.9	41	56.9	8	11.1		
Kottayam	14	51.9	12	44.4	1	3.7	22	54.55***
Malappuram	0	0	0	0	1	100		
Palakkad	1	100	0	0	0	0		
Pathanamthitta	6	24	15	60	4	16		
Trivandrum	116	61.1	67	35.3	7	3.7		
Thrissur	3	33.3	6	66.7	0	0		
Wayanad	0	0	1	100	0	0		

\*\*\*Significant at 0.001

Table 2 shows that there is statistically significant association between COVID 19 outbreak related apprehension and place of residence ( $p < 0.001$ ).

There was no statistically significant association between COVID 19 outbreak related apprehension and other socio personal variables such as age, gender, occupation and presence of health problems.

### III. Discussion

A review of existing literature on impact of COVID-19 on mental health suggests that symptoms of anxiety and depression (16–28%) and self-reported stress (8%) are common psychological reactions to the COVID-19 pandemic, and may be associated with disturbed sleep. In the present study 49.92% of general public had low level of apprehension, 44.1 % had moderate level and 6% had high level of apprehension related to COVID 19 outbreak.

### IV. Recommendations

- A similar study can be conducted among general public residing in other states of India.
- A comparative study can be conducted among general public residing in urban and rural areas.
- The study can be replicated with a larger sample size.
- A comparative study can be conducted among male and female population.

### V. Conclusion

The study concludes that the general public residing in Kerala had low level of apprehension related to COVID 19 outbreak. This may be due to the high recovery rate in the state, low incidence during the period of study and trust in existing health care delivery system and governmental efforts to combat the disease.

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