

# A Study to Assess the Psychological Impact of the COVID-19 Pandemic among Adults of Age 18–30 Years in Vengara Panchayath of Malappuram District, Kerala

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## ABSTRACT

**Introduction:** The coronavirus disease 2019 (COVID-19) pandemic hit India in 2020. The first case of infection was reported in the State of Kerala on January 27, 2020, and the continuous surge of cases, variants of concern, lockdown restrictions, social distancing, and economic impacts were increasingly testing the psychological resilience of the masses. When the global focus has been chiefly on testing, preventing transmission, and vaccination, people are going through a myriad of psychological problems in adjusting to their current lifestyles and fear of the disease. **Materials and Methods:** An online survey was conducted using principles of convenience sampling and by invitation through text messages to participants. The survey collected data on socio-demographic details and specific incidents that triggered participants' mental health and measured psychological impact with the help of the Impact of Event Scale-Revised (IES-R) scale. **Results:** There were 275 responses from the Vengara Panchayath of Malappuram district, Kerala. The respondents' ages ranged from 18 to 30. Overall, 93.54% of respondents had an extended psychological impact (IES-R score >24). Using the Chi-square test, there is no significant association between the demographic variables and the psychological impacts of COVID-19. Financial hardship during COVID-19 triggered respondents' mental health (Male-62.67%, Female-58.4%). **Conclusion:** During the COVID-19 pandemic in India, almost one-third of respondents had a significant psychological impact. This shows a need for a more longitudinal and systematic assessment of the psychological needs of the population, which can help the government formulate holistic interventions for affected individuals.

**Keywords:** COVID-19, Psychological impact, IES-R scale, Kerala, Mental health

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## INTRODUCTION

The 18–30 age group continues to face extended shutting of schools and colleges, working from home, job loss, difficulty finding earnings, increased household activities and expenditure, out-of-pocket expenditure, early marriages, and less socialization among women. While looking at gender-based differentials, males face difficulty finding earnings, social isolation, and early marriages in Vengara Panchayat. In the case of females, relatively little socialization, early weddings, shutting schools and colleges, increased pressure on household activities, etc., appear to have affected them. In early November 2021, after the near-complete easing of lockdown, all public activities were relaxed, and educational institutions were opened. Still, COVID cases were high in Kerala and Vengara.<sup>[1]</sup> The study assessed the impact among the 18–30-year age group in the period following the opening of educational institutions and easing public activities in December 2021.

## MATERIALS AND METHODS

### Study Area

The study area is Vengara Panchayath in Malappuram district, Kerala.

### Study Period

The study period was from December 2021 to June 2022.

### Study Design

It was a quantitative study with a cross-sectional study design that included socio-demographic details and data collected through

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the impact of event scale revised (IES-R) for the diagnostic and statistical manual of mental disorders, fourth edition—DSM-IV. The study was conducted online, and data was collected using Google Forms. The translation, validation, and pilot testing of the questionnaire were done before data collection.

### Population

Compared to other age groups, adults aged 18–30 are usually occupied with diverse activities, including higher education, searching for employment, socializing, marriage, etc. The unprecedented crisis has disrupted this age group like never before, where they have to restrict themselves from staying at their residence. Due to this social detachment, fear of life, the question of life has substantially increased, and a lot of psychological

problems have increased among this population, according to the existing literature. Hence, I restricted the age limit to 18–30 years to assess their lives with the psychological impact of the coronavirus disease 2019 (COVID-19) pandemic. The study included those aged between 18 and –30 years residing in the Vengara Panchayath of Malappuram district, Kerala.

## Sampling Technique

### Convenient sampling

#### Sample size

The sample size of the study was 275 participants.

## Eligibility Criteria

### Inclusion criteria

- Adult population aged 18–30 years who reside in Vengara Panchayath of Malappuram district, Kerala.
- Any gender.
- Residents who are willing to participate in the study.
- Participants with internet access.

### Exclusion criteria

- Age <18 and above 30 years.
- People outside Vengara Panchayath of Malappuram district, Kerala.
- Unwilling and not providing informed consent for the study.

## Ethical Issues

Ethical approval was taken from the SOCHARA Institutional Scientific and Ethical Committee before the conduct of the study. The subjects were informed about the purpose of the study, and consent was taken from all the participants. They were assured that all the information would be kept confidential and used only for research and study purposes. In addition, participants' willingness to participate in the study was respected in every manner, and participants were assured that they could withdraw their participation at any point in time.

## RESULTS

Data analysis and interpretation were conducted using the MS Excel application and IBM Statistical Package for Social Sciences Statistics V22.0. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were done to describe the socio-demographic characteristics and psychological impact of the study sample.

### Data Collection

Data were collected online (anonymously) as per the Indian government's pandemic-related recommendations to minimize face-to-face or physical interaction as citizens continue to isolate themselves at home. Respondents were invited through a text message, which led them to a Google form to fill out. In addition, using the principles of convenient sampling, the link was circulated through social media to capture data from young adults (who have access to the Internet). We collected data anonymously without collecting

information that could identify the respondents. The period of data collection was between December 2021 and June 2022. Data was collected using the IES-R scale. The IES-R is a self-report measure of current subjective distress in response to a specific traumatic event.<sup>[2]</sup>

The 5 points on the scale are 0 (not at all), 1 (a little bit), 2 (moderately), 3 (quite a bit), and 4 (extremely). The sum of the means of each subscale instead of raw sums is recommended.<sup>[2]</sup>

The intrusion subscale includes 8 items related to intrusive thoughts, nightmares, intrusive feelings, and imagery associated with the traumatic event.

Intrusion subscale: Question No. 14, 15, 16, 19, 22, 27, 29, 33.

The avoidance subscale includes 8 items related to avoidance of feelings, situations, and ideas.

Avoidance subscale: Question No. 18, 20, 21, 24, 25, 26, 30, 35.

The hyperarousal subscale includes six items related to difficulty concentrating, anger and irritability, psychophysiological arousal upon exposure to reminders, and hypervigilance.

Hyper-arousal subscale: Question No. 17, 23, 28, 31, 32, 34.

When asked about socio-demographic characteristics such as marital status, 46.67% of males and 44.8% of females are married. However, factors such as marital status, educational qualifications, and type of family do not have any statistical significance [Table 1].

When asked about the specific incident that triggered respondents' mental health, most respondents replied that it was difficult to travel. In contrast, only 15% of respondents have marriage-related issues that trigger their mental health [Table 2].

When asked about the duration of those specific incidents that triggered their mental health, 33% of respondents replied that it was only for a few days. However for 27% of respondents, those memories still exist [Table 3].

Among the respondents, 68.8% didn't seek treatment for their mental health issues. But for 18.2% of respondents, nothing could be done. 10.4% took medicine, and 2.6% of respondents were subject to counseling [Table 4].

The average intrusive sub-scale value (mean = 1.84) and median fall at 1.50. While the average value of the avoidance sub-scale fell to 1.87, the median remained at 1.75. The average value of the hyper-arousal sub-scale remained (mean = 1.87) and the median was 1.75 [Table 5].

## DISCUSSION

The current study investigated the psychological impact of the COVID-19 outbreak among young adults (18–25 years

**Table 1:** Frequency and percentage distribution of socio-demographic characteristics of the participants (n=275)

Socio-demographic characteristics	Male, n=150, (%)	Female, n=125, (%)	P-value*
Age	24.33±3.48	23.9±3.77	Nil
Marital status			
Married	70 (46.67)	56 (44.8)	0.76
Unmarried	80 (53.33)	69 (55.2)	
Educational qualification			
Plus 2	26 (17.33)	21 (16.8)	0.58
ITI	24 (16)	27 (21.6)	
Diploma	25 (16.67)	25 (20)	
Degree	45 (30)	29 (23.2)	
PG and above	30 (20)	23 (18.4)	
Type of family			
Extended family	22 (14.7)	19 (15.2)	0.80

\*Statistically significant variable is considered as  $P < 0.05$

old). As the disease progressed, concerns regarding health, economy, and livelihood increased day-to-day. The findings of the pandemic’s impact on mental health could help inform health officials and the public to provide mental health interventions to those who are in need. This can guide researchers in planning prospective longitudinal studies to assess treatment needs. Mental health concerns like anxiety, worries, and insomnia, especially after the declaration of lockdown in India on March 24<sup>th</sup>, 2020.<sup>[3,4]</sup> The government of India has launched helpline numbers to provide guidance and

counseling in collaboration with different institutes of national importance.<sup>[5-7]</sup> The World Health Organization has urged us to take the necessary precautions to tackle the negative impact of the spread of coronavirus on psychological health and well-being.<sup>[8]</sup> Overall, among the 275 respondents, 94.54% had a significant (mild, moderate, or severe) psychological impact regarding COVID-19. This finding is similar to the study conducted in China,<sup>[9]</sup> which reported that 53.8% of respondents suffered a psychological impact from the outbreak, ranging from moderate to severe among 1210 respondents, and the study conducted by Nathiya *et al.*, where 92.88% of respondents had a significant psychological impact.<sup>[10]</sup> In the past, during outbreaks such as the “Ebola Virus,” individuals and communities at national and international levels had a major and wide spectrum of psychosocial impacts due to the sudden outbreak of the disease.<sup>[11]</sup> People are likely to relate contracting the virus with a fear of falling sick, helplessness, hopelessness, stigma, and even death. Providing psychological first aid and counseling is quintessential during an epidemic. It helps to reduce psychological distress and to promote adaptive coping strategies to deal with the situation. Despite the efforts of WHO and other public health authorities to contain the COVID-19 outbreak, this time of crisis is generating stress not only in the Vengara Panchayath of Malappuram district but also throughout the country, much like its impact on its global counterparts. Constant support for mental and psychosocial well-being in different groups during the outbreak should be the highest priority. Demographic variables showcase that males had a lesser psychological impact on the COVID-19 outbreak as compared to their female counterparts. The impact on females was found to be statistically significant. These findings were similar to the study conducted in India by<sup>[12]</sup> that found males had a lesser psychological impact on the COVID-19 outbreak than their female counterparts. The impact on females was found to be statistically significant. This also corresponds to previously available extensive epidemiological literature, which shows that women are at a higher risk.<sup>[10]</sup>

While considering the socio-demographic characteristics, there is no association with psychological impacts, which differs from the study conducted by Ahmed *et al.*, where predictors of anxiety were gender, religion, occupation as business or self-employed, marital status, family size, health status, and sleep deprivation.<sup>[13]</sup> When asked about the specific incident that triggered respondents’ mental health, most respondents replied that it was difficult to travel. In contrast, only 15% of respondents have marriage-related issues that trigger their mental health. These findings were not similar to those of,<sup>[14]</sup> who studied the

**Table 2:** Frequency and percentage distribution of specific incidents that triggered mental health (n=275)

Variable	Male, n=150, (%)	Female, n=125, (%)	P-value*
Financial hardship	94 (62.67)	73 (58.4)	0.47
Travel difficulty	80 (53.33)	70 (56)	0.66
Marital problems	66 (44)	60 (48)	0.51
Educational issues	77 (51.33)	57 (45.6)	0.34
Work-related difficulties for you or your parents	74 (49.33)	62 (49.6)	0.96
Death of a loved one by COVID infection or for some other reason	69 (46)	60 (48)	0.74
You or someone in your family has been injured or hospitalized due to COVID-19	64 (42.67)	64 (51.2)	0.16

\*Statistically significant variable is considered as P<0.05

**Table 3:** Frequency and percentage distribution of duration of those memories

Duration of those memories	Male, n=150, (%)	Female, n=125, (%)	P-value*
Lasted for a few days	35 (23.33)	32 (25.6)	0.66
Lasted for weeks	28 (18.67)	35 (28)	0.07
Lasted for months	41 (27.33)	29 (23.2)	0.43
Still continuing	46 (30.67)	29 (23.2)	0.17

\*Statistically significant variable is considered as P<0.05

**Table 4:** Frequency and percentage distribution of treatment sought

Treatment sought	Male, n=150, (%)	Female, n=125, (%)	P-value*
Took the medicine	23 (15.33)	31 (24.8)	0.049
Subjected to counseling	27 (18)	22 (17.6)	0.93
Nothing done	24 (16)	49 (39.2)	0.00
Nothing could be done	50 (33.33)	23 (18.4)	0.005

\*Statistically significant variable is considered as P<0.05

**Table 5:** Frequency and percentage distribution of psychological impact in response to the COVID-19 pandemic and analysis based on sub-scales

S. No.	Scale derived values	Categories	Frequency (n=275)	Percentage
1.	Impact of event scale	Minimal (0–23)	15	5.45
		Mild (24–32)	24	8.73
		Moderate (33–36)	23	8.36
		Severe (>36)	213	77.45
<i>Sub-scale (range of scores)</i>	<i>Sub-scales</i>	<i>Items</i>	<i>Mean</i>	<i>Median</i>
2.	Intrusivity sub-scale	Q*-14, 15, 16, 19, 22, 27, 29, 33	1.84	1.50
3.	Avoidance sub-scale	Q-18, 20, 21, 24, 25, 26, 30, 35	1.87	1.75
4.	Hyper arousal sub-scale	Q -17, 23, 28, 31, 32, 34	1.87	1.75

\*Q: Question number from IES-R scale

factors that led to suicide during COVID-19 due to fear of getting infected by COVID-19.

## CONCLUSION

The COVID-19 pandemic has caused a lot of uncertainty in the lives of the young adult population. Our survey is one of the few mental health-related studies regarding the adult population during the COVID-19 pandemic and indicated that a significant proportion of them have had a psychological impact during the crisis. There is a need to consider mental health issues among policymakers. While dealing with mental health, a psychological support team has been instituted in Kerala. The team has devised many strategies to manage stress and other mental health concerns resulting from the pandemic. District Mental Health Program and DISHA under the Department of Health and Family welfare are brought together to strategize and implement mental health initiatives. Authorities should monitor and evaluate whether the programs are reaching the ground level.

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