

Fear of COVID-19: A cross-sectional study among general population in Telangana during lockdown

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Abstract

Background: The Novel Coronavirus-19, emerged from Wuhan, China, spread throughout the world. This pandemic with its influence on each and every aspect of life, posed a much greater impact on mental health. Heightened level of anxiety, fear of contracting the virus, future uncertainties are commonly seen among general population during pandemics.

Aim: To assess the fear of COVID-19 among general population of Telangana during lockdown period in India.

Materials and Methods: An online survey was conducted using Google Forms. Fear of Covid-19 scale was used for assessment. Non probability snow ball sampling technique was used for collecting data.

Results: A total of 245 responses were received, of which 10 responders had pre-existing psychiatric illness and were excluded. Of the remaining 235 participants, 47.2% were females and 52.8% were males. Mean age was 31.46 ± 9.82 years. 54% were educated till post-graduate level. 51.1% were married. 32% were health care professionals and involved in essential care services. The mean score of Fear of Covid-19 scale was 14.27 ± 4.29 . 74.9% participants had fear of Covid-19. 61.7% felt uncomfortable when thinking about the novel Corona virus. More than 39.6% candidates were distressed on hearing/watching news about Covid-19. Around 13% participants reported disturbance in their sleep due to worry of getting infected with Corona virus. Findings imply that there was fear of Covid-19 spread among general population of Telangana during lockdown period.

Keywords: COVID-19, Fear, Lockdown, Pandemic, Telangana.

Introduction

The novel corona virus probably started its spread in December 2019, from a sea food market in Wuhan China.^{1,2}

WHO declared it as a 'Public Health Emergency of International Concern' on 30th January 2020 due to its rapid spread across the globe.² The state of lockdown was applied to many parts of world. On 24th March 2020, Government of India ordered a nationwide lockdown for 21 days, limiting movement of the entire 1.3 billion population, as a preventive measure against the spread of the virus.³ The COVID-19 virus pandemic and the resulting lockdown globally, has had a severe impact on multiple facets of day to day life, functioning and mental health.²

According to Ministry of Health & Family Welfare (MoHFW), hearing about COVID-19 from various sources can give rise to fear, anxiety, panic.⁴

The emergence of COVID 19⁵ and its pandemic nature has exacerbated fears worldwide. The affected individuals also experienced stigma, in the form of discriminations, labelling, stereotyping and negative behaviours.⁶

On 18th March 2020 WHO has emphasised concerns relating to mental health issues, to reduce stigmatisation arising during COVID 19.^{2,7} According to a survey done among 130 countries by WHO, Corona virus pandemic has disrupted mental health services in 93% of countries worldwide, while demand for mental health is increasing.⁸

This study was done to assess the fear of Covid-19 among general population of Telangana, and was conducted during first phase of lockdown period, to increase awareness.

Materials and Methods

The study was a cross sectional, observational study. Non probability snow ball sampling technique was used. An online questionnaire consisting of socio-demographic details and Fear of Covid-19 scale, was developed using Google forms.

Inclusion criteria

Persons ≥ 18 years of age and those who could understand English.

Exclusion criteria

Participants with a history of psychiatric illness.

The study was started after obtaining approval from the Institutional Ethics Committee. Data collection was initiated from 15th April 2020, during first phase lockdown period in India, Online forms were available for a period of 30 days. Data collection was concluded after the allotted time period of 30 days.

The questionnaire was divided into two sections, with a consent form attached. The link of the questionnaire was circulated through sms, e-mail, WhatsApp and other social media applications. The participants were encouraged to roll out the survey to as many contacts as possible. After clicking on the link, the participants were directed to a page describing the study, and assuring them of the confidentiality of the data, along with the attached consent form.

After taking an informed consent, a set of questions would appear, which the participants had to answer.

Provisions were made to ensure only one response per question.

First section consisted of sociodemographic variables like age, gender, qualification, occupation, involvement in essential services. It also included medical history and history of pre-existing psychiatric illness. Responses of those with pre-existing psychiatric illness were excluded from the study, before analysis. Fear of Covid -19 scale (FCV-19), was used in the second section. It is a seven item scale and is a reliable and valid tool for assessing fear of Covid-19 among general population. It has an Internal consistency [$\alpha=0.82$] and test retest reliability [ICC=0.72].⁹ Though the scale was created by Iranian researchers, the authors felt that the questions were generic/non specific and could be applied to other populations as well.

At the end of questionnaire, candidates were requested to click on Submit option, for proper submission of their form.

All the questions were in multiple choice format, and the responses were rated on a 5 point Likert scale.

Data was entered in Microsoft excel and analysis was done using SPSS version 20. Descriptive statistical analysis was done. Results on continuous measurements are presented as Mean and Standard Deviation

Results on categorical measurements are presented as Percentages.

Significance is assessed at 5% level of significance ($p < 0.05$ - statistically significant).

Student t test (independent, two tailed) has been used to find out the significance of study parameters on a continuous scale between two gender groups.

Analysis of Variance (ANOVA) has been used to find out the significance of study parameters on a continuous scale between three and more age groups.

Results

An online survey, related to fear of Covid-19, was conducted among general population of Telangana during lockdown period in India.

Socio-demographic details

Total of 245 responses were received, from various parts of Telangana. 10 participants had pre-existing psychiatric illness, and were excluded. Thus, result was analysed for a total of 235 participants. The youngest participant was 18 years old and eldest was 79 years old. Mean age was 31.46 ± 9.82 years. (Table 1)

The gender ratio of respondents was almost equal (Males were 52.8%, Females were 47.2% (Fig. 1, Table 2). 51.1% of participants were married (Fig. 2, Table 2).

Minimum qualification was Class 12th and the maximum was post graduation. 40% of the participants were graduates and 54% were Post graduates. (Table 2)

31% of the participants were health care professionals and involved in Frontline services. (Table 2)

51.5% and 17.4% participants were residing in nuclear and joint families respectively (Fig. 3, Table 2).

II) Fear of Covid 19 scale (FCV-19):

FCV-19 scale, a seven item scale, has robust psychometric properties.⁹ It is a five item Likert type of scale, scores ranging from 5 to 35. Higher the score, greater the fear of Covid-19.⁹

74.9% of participants were afraid of COVID-19 (Fig. 4, Table 3), while 61.7% felt uncomfortable thinking about the novel Corona virus (Fig. 5, Table 3). 5% of the candidates developed tremors or sweating in their hands when they thought about Corona virus. (Fig. 6, Table 3). 12% of the participants reported increased autonomic activity (like palpitations) whenever they thought about getting infected with Covid-19. (Fig. 7, Table 3)

39.6% candidates became nervous/anxious, restless on hearing about or watching news about COVID-19 on social media (Fig. 8, Table 3). 12.7% participants complained about sleep disturbances (Fig 9, Table 3). 23.8% were afraid of losing their life because of the disease. (Fig. 9, Table 3)

Overall mean score for this questionnaire was 14.27 ± 4.29 . The mean fear of COVID-19 (FCV-19) score in Males was 13.81 ± 3.91 (Table 4). Whereas, the mean FCV-19 score for Females was 14.78 ± 4.65 (Table 4, Graph 1). Student t test and ANNOVA were used to study the fear of COVID 19 between 2 or more than 2 groups respectively.

Using student-t test, it was ascertained that the mean fear of COVID-19 (FCV-19) score in Females (14.78 ± 4.65) was not significant higher than that of males. (13.81 ± 3.91), with p value 0.084 (Table 5).

For determining age wise distribution and fear of Covid-19 score, Analysis of Variance (ANOVA) was used. The mean FCV-19 score was highest in 71-80yr age group (79.00) and least in less than 20year age group (19.25 ± 0.96). There is no statistical significance observed between age distribution and mean FCV-19 scores. ($p=0.669$) (Table 6)

Discussion

Fear is an emotion induced by perceived danger or threat, which causes physiological changes and ultimately behavioural changes. Though fear is a common psychological outcome during pandemics, the COVID-19 pandemic is a continuously evolving disease outbreak and has unique risk factors.¹⁰ Therefore, fear related to COVID-19 might manifest in not only fear and anxiety related to disease contraction and dying, but also associated socio-occupational stress. This has had an impact on emotional wellbeing and mental state of individuals.¹³ The community has faced multiple challenges due to the Pandemic and the safety measures like lockdown.¹¹⁻¹³ Experience from epidemics like SARS-CoV in 2003, MERS in 2012, Ebola in 2017 has shown us that these outbreaks can result in fear, anger, anxiety and loneliness.¹⁴ In the COVID-19 pandemic, as in other pandemics,¹⁶ fear, anxiety, depression, worries and post-traumatic stress disorders have been the major psychological consequences among general public, health care workers¹⁷ and survivors.^{15,18,20} COVID-19 related fear, mortality rates, unemployment, protective strategies have become the most searched topics in Google search history.^{10,19}

COVID 19 had widespread impact on economy, mind-set, day to day life of most individuals.²⁰ Fear and anxiety related to epidemics and pandemics also influence the behaviour of people in the community.²⁰

Researchers have used the expressions “fear of COVID-19”⁹ and corona phobia²¹ to indicate the fear of contracting COVID-19.

Corona phobia^{10,21} is defined as an excessive triggered response of fear of contracting the virus causing COVID-19, leading to accompanied excessive concern over physiological symptoms, significant stress about personal

and occupational loss, increased reassurance and safety seeking behaviours, and avoidance of public places and situations, causing marked impairment in daily life functioning.¹⁰

Using Fear of Covid-19 scale (FCV-19S), we found out that, 74.9% (Fig. 4, Table 2) had fear of COVID 19 and more than 39% (Fig. 8, Table 2) felt stressful on watching or hearing news of COVID 19 in any form of media. Thus, portraying the importance of media, and their impact over mental health of society.

Table 1: Mean age of participants

Socio-Demographic Details		
S. No.	Items	% of responses (N=235)
1	Gender	
	Male	52.8% (N=124)
	Female	47.2% (N=111)
2	Education	
	Intermediate	6% (N=14)
	Graduation	40% (N=94)
	Post- graduation	54% (N=127)
3	Occupation	
	Health care	31.6% (N=74)
	Employee (private/government sector)	35% (N=82)
	Business	5% (N=13)
	Student	10% (N=26)
	Homemaker	5% (N=10)
	Others	13.4% (N=30)
4	Marital status	
	Married	51.1% (N=120)
	Unmarried	47.2% (N=111)
	Widow/Widower/Divorcee	1.7% (N=4)

Table 2:

Mean	N	Standard Deviation
31.46	235	9.82

Table 3:

Fear of Covid-19 scale (FCV-19)		
S. No.	Items	% of responses who had fear of Covid-19 (N=235)
1	Afraid of corona virus	74.9%
2	Uncomfortable to think about corona virus	61.7%
3	Tremors or sweating in hands when thinking about corona	5%
4	Palpitations when thinking about getting infected with Corona	11.5%
5	Nervous/anxious on watching news and stories about corona virus	39.6%
6	Disturbance in sleep	12.7%
7	Afraid of losing life because of Corona	23.8%

Table 4: Mean FCV-19 score Gender wise distribution

Gender	Frequency	Mean
Males	124	13.81 ± 3.91
Females	111	14.78 ± 4.65

Table 5: Gender co-relation and mean FCV-19 scores

Parameter	Males	Females	P value
Mean FCV-19 scores	13.81 ± 3.91	14.78 ± 4.65	0.084

(FCV-19: Fear of Covid-19)

Table 6: Age distribution and mean FCV-19 score

Age distribution	N	Mean FCV-19 Score	Standard Deviation	P value
< 20 Years	12	19.25	0.96	0.669 NS
21-30	139	26.50	2.32	
31-40	45	33.73	2.75	
41-50	27	46.11	2.84	
51-60	8	55.75	3.10	
61-70	3	63.00	1.00	
71-80	1	79.00	0	

(FCV-19: Fear of Covid-19; NS: Not significant)

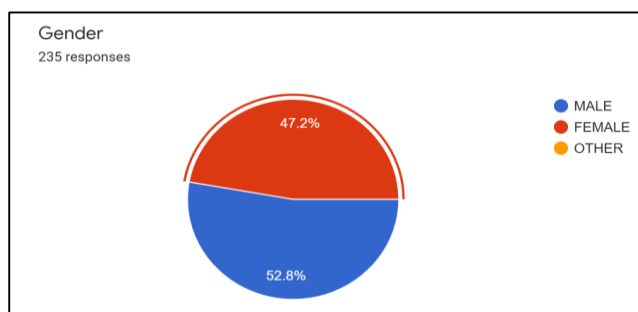


Fig. 1:

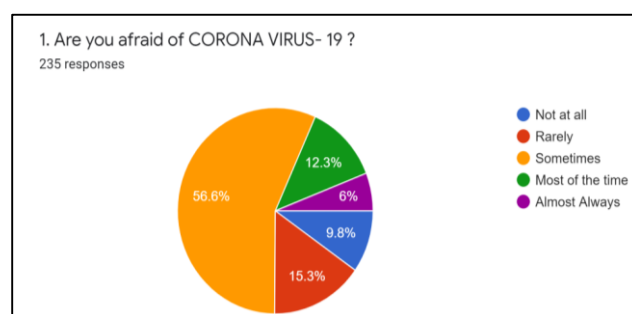


Fig. 4:

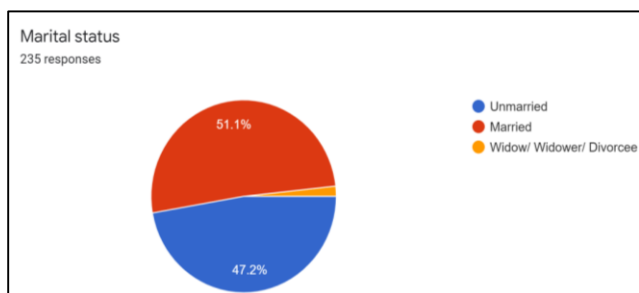


Fig. 2:

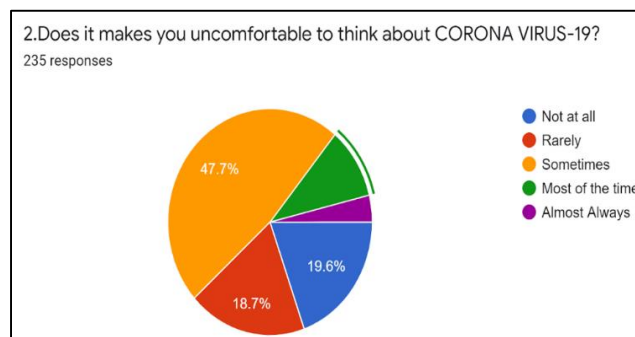


Fig. 5:

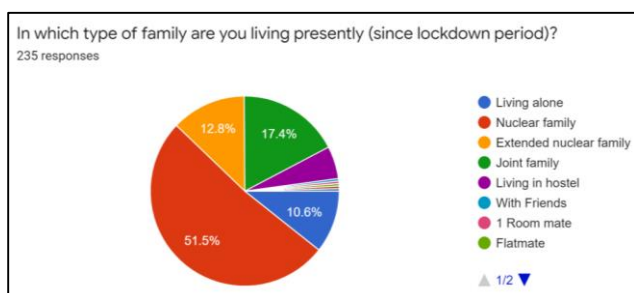


Fig. 3:

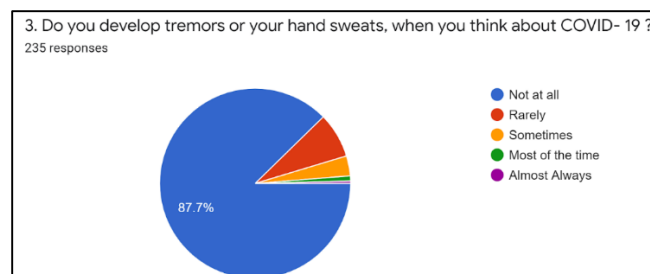


Fig. 6:

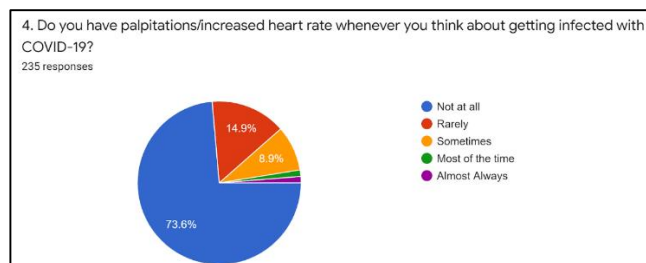


Fig. 7:

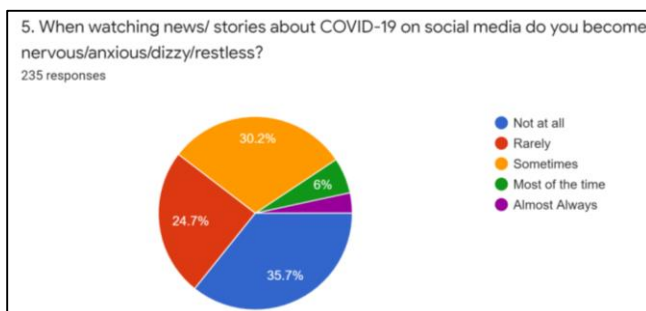


Fig. 8:

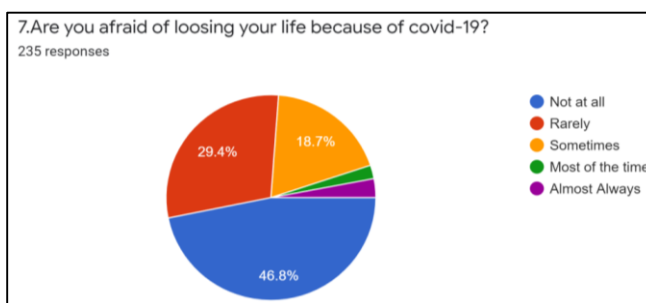


Fig. 9:

Limitations

1. This study was limited to people who used smart phones, mobile applications, computers and other relevant electronic gadgets.
2. Participants who knew English language could only participate.
3. Participants were restricted to the state of Telangana.
4. Participants were not required to specify area of residence. Hence association between fear of COVID-19 in urban vs rural population could not be assessed.
5. The survey was conducted over a short period of time.

Conclusion

The present survey suggests that there was fear of the novel Corona virus among general population of Telangana. Maladaptive levels of fear about Covid-19, has a huge impact on various aspects of daily life and can cause an emotional toll. Getting help from mental health care experts when needed, can ensure the psychological well-being of individual and society. The results would also help the policy makers in designing appropriate campaigns. It would also help if our medical colleagues could spread awareness

about the disease so as to allay the fears, remove stigma and promote preventive measures.

Conflict of Interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and /or publication of this article.

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