

# COVID-19 Fear and Generalized Anxiety among the Doctors Working in West Bengal, India

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## ABSTRACT

*Introduction: Anxiety is rampant among people from all walks of life as a result of the current pandemic.*

*Aim: The purpose of this study was to assess the generalized anxiety and fear caused by COVID-19 among doctors practicing in the West Bengal Province of India.*

*Material and Methods: This was a cross-sectional descriptive study. Data were collected as per the snowball sampling technique. We utilized the previously validated Generalized Anxiety Disorder -7 (GAD-7) scale and fear of coronavirus (FCV-19S) scale in the current study. SPSS 21 was used for data analysis. Independent sample T-test and ANOVA and Pearson's correlation test were executed for data analysis.*

*Results: Data of 204 doctors were analyzed. Mild, moderate, or severe level of anxiety was reported in 36.28% of the doctors. Mean anxiety among males and females was calculated  $3.72 \pm 4.615$  and  $3.97 \pm 4.01$ , respectively. The mean score of FCV-19S among the doctors was reported  $18.11 \pm 5.09$ . According to the Independent T-test there was no significant difference in GAD-7 and FCV-19S scores between males and females ( $P>0.05$ ). Doctors with 11-15 years of experience reported significantly higher fear. A significant and positive correlation between generalized anxiety and fear has been recorded.*

*Conclusion: Because of the present pandemic, generalized anxiety and fear are present in some doctors practicing in the West Bengal province of India.*

**Key words:** COVID-19, Generalized Anxiety, Fear, Doctors

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## INTRODUCTION

The current COVID-19 pandemic has resulted in a concerning global fatality rate, with one out of every thousand health-care workers infected [1]. The multi-responses of this novel virus are expected to have had a significant impact on health-care workers' mental and physical health, particularly those on the front lines. Furthermore, the rate and extent of COVID-19 transmission among health-care and non-healthcare workers are alarming, with health-care workers facing unprecedented challenges. From both a psychological and a professional standpoint, most of them may not have been adequately prepared to deal with it. Because of the high risk of infection, the fear of spreading COVID-19 to their family members, and the stress of more work, health-care workers are particularly vulnerable to COVID-19 [2].

The daily increase in COVID-19 cases reported around the world has necessitated the hiring of more health-care

workers. As a result, because health care workers are at the forefront of COVID-19 management, this pandemic poses a significant occupational risk [3]. The rapid rise in COVID-19 cases among health-care patients has been linked to environmental contamination, health-care facility overcrowding, a lack of isolated room facilities, and a scarcity of personal protective equipment [4]. Similarly, the pandemic has had a physical and psychological impact on health-care workers. Studies reported that health-care workers treating and managing COVID-19 patients reported depression, stress, and anxiety [5].

In China, Que et al. investigated the psychological effects of COVID-19 on HCWs. Psychological issues plagued 56.59 percent of HCWs [6]. A study performed in Italy reported that anxiety, depression, and insomnia were prevalent in 46.04 percent, 44.37 percent, and 28.75 percent of the health-care workers, respectively [7]. Because of their current health-care system challenges, HCWs in developing countries are at a higher risk. Concerns about their level of preparedness, insufficient supplies of Personal Protective Equipment (PPE), quality assurance of such products, insufficient testing kits, and doubts about

the kits' accuracy all have psychological effects on them [8].

Nonetheless, fears of COVID-19 infection, increased workload, epidemic stress, and socio-cultural detriment have all been linked to the psychological impact of COVID-19 on health care workers, especially medical doctors. Even after the outbreak, dangerous consequences such as anxiety, burnout, traumatic stress, and depressive syndromes have been linked to health-care workers, indicating long-term significance

To ensure adequate health care and implement psychological stability strategies, it is critical to understand the psychological impact of the COVID-19 pandemic among doctors. In the current study, the psychological impact of COVID-19 on doctors working in West Bengal is assessed.

### METHODOLOGY

This cross-sectional study was conducted in the middle of 2021, following vaccination completion among medical professionals.

The current study included doctors practicing in West Bengal, India, who hold the degrees of Bachelor in Medicine and Bachelor in Surgery (MBBS). House officers, Homeopathic Doctors, and Hakeem's were not allowed to participate.

The researchers collected data using an online Google form and contacted participants through professional and personnel contacts using the convenience snowball technique and a messaging app (WHATSAPP).

After conducting a thorough literature review, the current study's survey instrument was created. Age,

gender, experience, and Coronavirus infection status were all included in the demographic variables. Two previously validated, standardized, self-reported scales were used in this study: the Generalised Anxiety Disorder (GAD-7) [9] and the Fear of Corona Virus Scale (FCV-19S) [10]. The GAD-7 is a seven-item scale with a score range of 0 to 21. It's used to figure out how anxious, worried, restless, irritable, and afraid of the unknown a patient is. FCV-19S has a cut-off value of 16.5, and scores greater than this value have a substantial predictive power on anxiety disorders, health-related anxiety disorders, and post-traumatic stress disorder [11].

The sample size was calculated using RaoSoft. The current study's minimum sample size was calculated at 200 based on a 50% response rate, a 95% confidence interval, and a 6% margin of error, with a total number of MBBS doctors 20000. (www.raosoft.com).

SPPP 21 was used to analyze the data. We used the independent sample T-test, ANOVA, and Pearson's correlation. P-values of less than 0.05 were considered significant.

### RESULTS

In the analyzed data of 204 doctors from West Bengal Province, we found that 66.7% (n=136) were males and 33.3 % (n=68) were females. In this study, 54.9% (n=112) of doctors had an experience of 21 or more years.

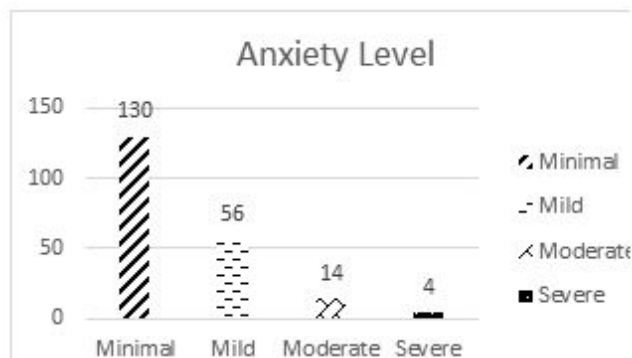
Doctors with experience of 15-20 years were 42, 13.7% of the doctors had 11-15 years of experience, and 10.8% of the doctors had experience of up to 5 years. In the current study, 48.8% of the participants said that they were tested positive for SARS-Cov-2 (Table 1).

**Table 1: Demographic characteristics.**

Variable	Frequency	Percentage
Gender		
	N	%
Male	136	66.7
Female	68	33.3
Total	204	100
Experience (In Years)		
1-5	22	10.8
11-15	28	13.7
15-20	42	20.6
21+	112	54.9
Infected With SARS-CoV-2		
Yes	98	48
No	80	39.2
Maybe	26	12.7

As per GAD-7, we found that 130 (63.72 %) doctors were in a state of minimal anxiety, and 74 (36.28%) of the

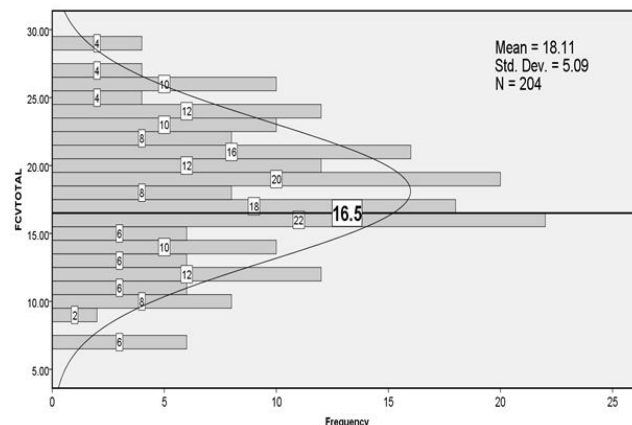
doctors were either in a mild, moderate, or severe state of anxiety (Figure 1).



**Figure 1: Generalised Anxiety levels among the study participants.**

The cut-off score of FCV-19 is 16.5. We have observed that 61.76 % (n=126) of the doctors are above the cut-off score. The mean score of FCV-19S is reported as 18.11 ± 5.09 (Figure 2).

This fear score is higher than the cut off value that is 16.5 in both groups (Table 2).



**Figure 2: Frequency of individuals at different scores of FCV-19S.**

As per FCV-19s, we found no significant difference between male and female doctors [t = -1.247, P=0.214].

The mean fear score of male and female doctors was reported 17.79 ± 4.827 and 18.73 ± 5.562, respectively.

**Table 2: Difference of fear and anxiety among males and females.**

	Male	Females
Fear of Covid-19		
Mean ± SD	17.79 ± 4.82	18.73 ± 5.56
T-Score	-1.247	
P Value	0.214	
General Anxiety Disorder		
Mean ± SD	3.72 ± 4.61	3.97 ± 4.01
T-Score	-0.38	
P Value	0.704	

As per ANOVA, we find a significant difference of fear in doctors with varied experience levels (F=2.825, P=0.040). The doctors with experience levels of 11 years to 15 years reported a mean FCV-19S score of 20.21 ± 4.886, and doctors with 1-10 years of experience showed a mean score of 17.00 ± 3.491. Furthermore, we

found no significant difference in GAD-7 scores among doctors with different experience levels (F=0.099, P=0.960) (Table3).

**Table 3: Difference of fear and anxiety among doctors of different experience levels.**

Experience	N	Fear Of Covid-19		Generalized Anxiety	
		Mean ± SD	F- Score , P value	Mean ± SD	F- Score , P value
1-10 Years	22	17.00 ± 3.491	2.825, 0.040	3.90 ± 3.963	0.099, 0.960
11-15 Years	28	20.21 ± 4.886		4.00 ± 4.586	
15-20 Years	42	18.85 ± 5.116		4.09 ± 3.518	
21 Years +	112	17.51 ± 5.260		3.69 ± 4.771	
Total	204	18.10 ± 5.090		3.84 ± 4.404	

No significant difference in fear and anxiety has been observed among the previously infected doctors ( $P > 0.05$ ). However, we found more fear among the SARS-CoV-2 infected doctors (Table 4).

**Table 4: Difference of fear and anxiety among the SARS-COV-2 Infected and non-infected doctors.**

	Infected with SARS-COV-2		Fear Of Covid-19		Generalized Anxiety	
	N	Mean	F- Score , P value	Mean	F- Score , P value	
Yes	98	18.53	1.710, 0.183	3.75	0.169, 0.845	
No	80	18.12		4.05		
May be	26	16.46		3.53		
Total	204	18.1		3.84		

Furthermore, by executing the Pearson Correlation test, we found a significant positive correlation between fear and anxiety ( $r=0.454$ ,  $P < 0.001$ ).

### DISCUSSION

In the current study, we have evaluated the anxiety and fear among the doctors practicing in West Bengal, India. During the COVID-19 pandemic, health-care professionals around the globe suffered from severe anxiety, stress, depression, and fear [12,13].

It is reported that during the SARS-CoV-2 outbreak, excessive workload, hostile conditions, and aggravated psychological pressure, even mental illness [14].

Doctors are always in close contact with the patient and are associated with infection prevention, infection control, disease management, isolation, take care, containment, and public health [15].

In such a situation, health-care professionals are the frontline, and they risk their as well the lives of their loved ones. Being isolated, working in high-risk positions, and having contact with infected people are common causes of stress and trauma [16].

In the current study, we found that majority of the doctors reported minimal anxiety. And only 2% of doctors reported severe anxiety. Previous studies reported higher levels of anxiety among health-care professionals [17,18].

This study is performed when the majority of the health-care professionals in India have been vaccinated. In our opinion, vaccination could be the cause of less anxiety among the doctors. A recent study also supports our observation [19].

According to the results of the current study, fear among doctors is still prevalent. We observed that more than 60% of the doctors are above the cut-off values of FCV-19s. Previous studies reported a much higher rate of fear among doctors [20,21]. Recent studies also reported

a reduction of fear among the health-care workers but still, this fear is affecting the lives of Healthcare professionals [22].

We found that Fear and Anxiety is more common among females. Other studies also reported higher fear and anxiety among females [23,24].

Furthermore, doctors with 11-15 years of experience reported more fear. In our opinion, these doctors are in their mid-thirties and have small children and old parents. Moreover, the workload on them is particularly higher as compared to fresh graduates and seniors.

In the current study, nearly 50% of the doctors mentioned that they were tested positive for coronavirus. Studies have also reported a high prevalence of infection among doctors and health-care professionals [9,25].

Doctors are always in close contact with the patient and are associated with infection prevention, infection control, disease management, isolation, take care, containment, and public health [15].

This study is only addressing the doctors of the West Bengal province of India. Studies on larger scales should be performed to find out the mental health of the doctors working in India.

### CONCLUSION

The doctors are the backbone of the health-care system. After vaccination, their anxiety and level of fear have been reduced but still considerable. Proper psychological sessions should be organized, and where required psychiatric help is provided.

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