# Anxiety among COVID-19 Physicians during the Pandemic in the Health Care Center of the Rural Region

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#### Abstract

**Introduction:** The COVID-19 pandemic is likely to put healthcare professionals in critical circumstances globally, having to make intolerable assessments and work under extreme pressures. It is very difficult to provide care for all severely sick patients with reserved resources. This may affect a physician's mental health. Healthcare professionals are at greater risk of mental health concerns because they are allocating with tasks of the COVID-19 pandemic situation especially in rural areas where it is difficult to deal with uneducated attendants and patients. This study aims to assess the work pattern of doctors who are performing duties with COVID -19 patients. **Results:** A total of 33 doctors participated in this survey out of which the majority of the age group was found to be 27. In this survey 23 males (70%) and 10 females (30%) participated. 7 doctors (21.2%) were normal and they were not having anxiety, 12 of doctors (36.4%) were mild anxious, 8 doctors (24.2%) were moderate anxious, 6 doctors (18.2%) were having severe anxiety. Five males were normal, 6 males were mild anxious, 1 female was moderate anxious and 1 female was severely anxious. **Conclusion:** In this study, we found that those doctors who performed duty with COVID 19 patients were more worried when assessed with the GAD-7 scale.

Keywords: Anxiety, COVID-19, Physicians, Surveys and Questionnaires

#### INTRODUCTION

The COVID-19 pandemic is likely to put healthcare professionals in critical circumstances globally, having to make intolerable assessments and work under extreme pressures. It is very difficult to provide care for all severely sick patients with reserved resources. This may affect a physician's mental health <sup>[1]</sup>.In a survey it is found that physicians and nurses in hospitals have greater depression, anxiety caring health care workers is an important component of public health [2]. COVID-19 pandemic signifies a foremost challenge to our health systems around the world. Clinicians should have proper care wit PPE for the prevention of virus spread and ensure the best protection and mental health care to reserve their psychological and physical integrity<sup>[3]</sup>. In another study, it is important to develop some intervention programs and support approaches for the period of the COVID-19 pandemic to protect mental health and increase psychological resilience <sup>[4]</sup>.Recent studies in China establish that the anxiety and depression present in both the general public and front-line nurses <sup>[5]</sup>. Last up to April 2020, not only patients but also 100 Physicians and 26 nursing staff died of COVID-19 in Italy. Health care professionals are more exposed to the risk of infection with diseased patients and it is due to the stressful work with unlimited time and the possible unavailability of PPE <sup>[6]</sup>.Anxiety disorders are the most prevalent psychiatric disorders and are associated with a high burden of illness <sup>[7]</sup>.Healthcare professionals are at greater risk of mental health concerns because they are allocating with tasks of the COVID-19 pandemic situation especially in rural areas where it is difficult to deal with uneducated attendants and patients. This study aims to assess the work pattern of doctors who are performing duties with COVID -19

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#### patients.

## MATERIAL AND METHODS:

The study is a cross-sectional hospital-based survey conducted via an online questionnaire that was developed through Google forms. In that GAD-7 form, anxiety was assessed with the scale based on a score with a minimum of 0 to a maximum of 21 <sup>[8]</sup>. The questionnaire was formed with the consultation of the epidemiologist and later it was sent to the concerned duty doctors. A total of 33 doctors were included in this study who were performing their duties with COVID-19 positive patients.

### RESULTS:

A total of thirty-three (33) doctors participated in this survey out of which the majority of the age group was found to be 27 and it was about 30.3% as showed in Table No.1. In this survey, 70% (23) males and 30% (10) females participated as showed in figure No.1 (Gender). According to Table No.2 i.e. 21.2% (7) doctors were normal and they were not having anxiety, 36.4% (12) of doctors were mild anxious, 24.2% (8) were moderate anxious 18.2% (6) were having severe anxiety. According to table No.3 i.e. 5 males were normal, 6 males were mild anxious, 7 males were moderate anxious and 5 males were severely anxious, and 2 females were normal, 6 females were mild anxious, 1 female was moderate anxious and 1 female was severely anxious.

Table 1: Age Groups							
Age	Frequency	Percent					
24	1	3					
25	3	9.1					
26	4	12.1					
27	10	30.3					
28	4	12.1					
29	3	9.1					
30	2	6.1					
31	3	9.1					
32	1	3					
33	2	6.1					
Total	33	100					

### Gender



Figure 1, Genders of participated doctors.

Table 2: Scales of Anxiety							
		Frequency	Percentage				
	normal	7	21.2				
Anxiety	Mild	12	36.4				
	moderate	8	24.2				
	Severe	6	18.2				
	Total	33	100				

#### Table 3: GAD7ANX

		GAD7ANX					
		normal	mild	moderate	severe	Total	
Sex	Male	5	6	7	5	23	
	female	2	6	1	1	10	
To	al	7	12	8	6	33	

#### **DISCUSSION:**

In the past, research has shown that epidemics can have significant and variable psychological effects on individuals and can lead to the creation of new psychiatric symptoms or worsening of pre-existing diseases such as fear of becoming ill or dving, helplessness, the propensity to blame those who are ill, panic attacks and anxiety [9]. Therefore, it is common for everyone to experience elevated levels of anxiety or depression in a global crisis such as the COVID 19 pandemic. However, it puts more risk on the Physicians and other front-line health care workers who have to strike a balance between caring for the affected patients and protecting themselves, their family members, and their loved ones [10]. To this end, the American medical association has announced resources for the physicians to cope with the increased level of distress and anxiety [11]. A limited number of studies have been conducted worldwide to evaluate the anxiety level in physicians and health care professionals including countries like China, USA, Oman and Singapore <sup>[12-15]</sup>.Our study group included 33 physicians from interior Sindh. The age range was from 24 years old to 33 years old. The median age was 28.5 years. It is comparable to a study donein Singapore where the median age was 30 years. It is normal in our country to achieve a medical degree by the age of 22 to 23 years. The majority of our participants were 27 years old. This is somewhat comparable to a study done by Lai et al among 1830 health care workers in 34 hospitals from 9 different states of China. Their study showed the second-highest number of Physicians in this age group. Their largest group comprised of age group 31 to 40 years <sup>[16]</sup>.In our study majority of the physicians were males 70% as compared to females 30%. In a study by Lai, 45% were males and 55 % were females. In a study done by Abdullah et al in Oman, they had higher proportions of females in their group 60% as compared to males 40%. Similarly, a study conducted by Benjamin et al.<sup>[17]</sup> that reported Singapore had higher female gender participation and

involvement 68 % as compared to males 32 %. The reason for these contradictory results can be due to multiple factors prevalent in our society and one of them is our socioeconomic differences. In Pakistan especially in rural areas due to the veil system majority of the females are not allowed to go and do outdoor work. Men are the bread earners and hence one of the reasons for higher prevalence. Secondly, the majority of females are not highly educated. So, the majority of them do not attain professional degrees related to the health care system. Another big reason for this gender disparity in poverty levels in Pakistan as enlisted by Insiya Syed in her research topic "Shall I Feed My Daughter or Educate Her" [18]. In her article few other reasons mentioned are the Lack of investment in education by government, High cost of education, poor quality of education, No enforcement of compulsory education, social norms and insecurity, etc. In our study, the majority of the participants expressed mild anxiety as compared to no anxiety, moderate anxiety, or severe anxiety which had almost equal proportions. Jainbo Lai et al researched 1257 physicians and nurses from 34 different hospitals in multiple regions of China taking care of patients suffering from COVID 19. One of their assessment factors in mental health was anxiety besides other parameters like depression, sleep deprivation, etc. Their study also showed that among the anxiety group participants mostly had mild anxiety 29 % as compared to moderate and severe. This is comparable to our study. Our study is also comparable to another study where they included 1853 doctors from 348 hospitals of 31 different provinces of mainland China<sup>[19]</sup>. Their frequency of mild, moderate, and severe anxiety was 68.0%, 19.0%, and 13.6% respectively indicating the majority of the subjects lying in the mild anxious state. This is supported by other studies as well<sup>[20]</sup>.

#### **CONCLUSION:**

In our study, we found out that those doctors who have performed duty with COVID 19 patients tend me more anxious according to GAD 7 scale when compared to performing duty without COVID-19 patients.

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