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Level of Anxiety Among Healthcare Professionals During COVID-19 Pandemic in Ahmedabad: A Cross-Sectional Study

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ABSTRACT

Introduction: COVID-19, was first identified in Wuhan, China, in late 2019. It is a highly contagious disease with a rapidly rising incidence globally. Due to its extensive transmission, the World Health Organization (WHO) designated it as a pandemic. This has put healthcare professionals (HCPs) under tremendous pressure as they deal with many variables some of which are long working hours, lack of personal protective equipment, lack of specific drugs and protocols, and being away from family. Therefore, it is extremely important to find out the level of anxiety among healthcare professionals who have done covid duty.

Method: An online questionnaire-based cross-sectional study was conducted at Civil Hospital Ahmadabad. Using a Convenient sampling method Selection of 108 subjects was according to the inclusion and exclusion criteria and an Online questionnaire was designed on Google form and then circulated on social media application to selected Healthcare professionals after taken electrical consent from the subject. Statistical analysis was done. Subjective results were established.

Results: All data analysis was performed using SPSS 16 and MS Excel 2021. A total of 108 participants were recruited, results of GAD-7 showed that 37.04%, 37.96%, 18.52%, and 6.48% of healthcare providers in Ahmedabad experienced minimal, mild, moderate, and severe anxiety, respectively, during the COVID-19 pandemic.

Conclusion: The present study concluded that the level of anxiety among healthcare professionals in Ahmedabad is classified as mild in healthcare professionals after the second wave of the COVID-19 pandemic.

Keywords: Anxiety, Healthcare professionals, COVID-19, Pandemic, Ahmedabad.

INTRODUCTION

Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) is a newly identified virus that differs from severe acute respiratory syndrome coronavirus (SARS-CoV) and Middle East respiratory syndrome coronavirus (MERS-CoV) but can cause similar symptomology associated with pneumonia. This viral disease was named "COVID-19" by the World Health Organization (WHO). The coronavirus disease of 2019 (COVID-19), was first identified in Wuhan, China, in late 2019. It is a highly contagious disease with a rapidly rising incidence globally. Due to its extensive transmission, the World Health Organization (WHO) designated it as a pandemic. [1, 5] The COVID-19 infection causes a variety of symptoms that can affect the different systems such as respiratory (cough, Dyspnea, sore throat, rhinorrhea),

musculoskeletal (myalgias), gastrointestinal (diarrhoea, vomiting), and neurological (headaches, myopathy, ageusia, anosmia). [6]
Generalized Anxiety Disorder is characterized by excessive worry and anxiety, which are difficult to control, cause significant distress and impairment and occur on more days than not for at least six months. Patients have persistent, excessive and/or unrealistic worry associated with other features including muscle tension, impaired concentration, autonomic arousal, restlessness and insomnia. Complaints of tachycardia, dyspnoea and palpitations are rare. [7]
The Generalized Anxiety Disorder (GAD-7) questionnaire was designed by Spitzer *et al.* and published in 2006. it is a seven-item, self-report anxiety questionnaire designed to assess the patient's psychological health status. The items enquire about the degree to which the patient has been bothered by feeling nervous, anxious or on edge, not being able to stop or control worrying, worrying too much about different things, having trouble relaxing, being so restless that it is hard to sit still, becoming easily annoyed or irritable and feeling afraid as if something might happen. [9]
Health professionals maintain health in humans through the application of the principles and procedures of evidence-based medicine and caring. Health professionals' study, diagnose, treat and prevent human illness, injury and other physical and mental impairments in accordance with the needs of the populations they serve. [10]
In times of COVID-19, healthcare professionals may be vulnerable to anxiety due to the large number of cases, long working hours, frequently with little resources, shaky infrastructure, uncertainty regarding infectious disease, fear of contracting and transferring the virus to loved ones, isolate themselves from their families, higher mortality associated with the virus and uncertainty about when the virus would be controlled are the major factors found to be highly responsible in increasing anxiety.[1, 2, 3]
According to studies, the mental health consequences for healthcare personnel involved in epidemics and pandemics are long-lasting. During the 2003 SARS (severe acute respiratory syndrome) outbreak, 18-57% of HCPs reported experiencing significant psychological symptoms both during and after the outbreak. In 2015, Medical workers who handled MERS-related duties displayed the highest risk of developing signs of post-traumatic stress disorder. [1, 4]
As a result, identifying HCPs who are at high risk of burnout and are more likely to suffer from anxiety during this pandemic is crucial, so that help can be offered where and when it is required.

MATERIALS & METHODS

- **Study area:** General Hospital Ahmedabad
- **Study duration:** 10 days
- **Study design:** a cross-sectional study
- **Sample size:** 108 number of HCPs (male-64, female-44).
- **Study population:** HCPs who worked in covid-19 pandemic
- **Sampling technique:** convenient sampling method

❖ **Data collection tool:**[9]

- Generalized Anxiety Disorder **(GAD-7)** questionnaire
- **Reliability:** 0.79 - 0.91
- **Sensitivity:** 89%
- **Specificity:** 82%
- **Interpretation of GAD-7:**
- GAD-7 total score for the seven items ranges from 0 to 21.

✓ 0–4: minimal anxiety
✓ 5–9: mild anxiety
✓ 10–14: moderate anxiety
✓ 15–21: severe anxiety

- **Selection Criteria: -**

❖ **Inclusion criteria:**

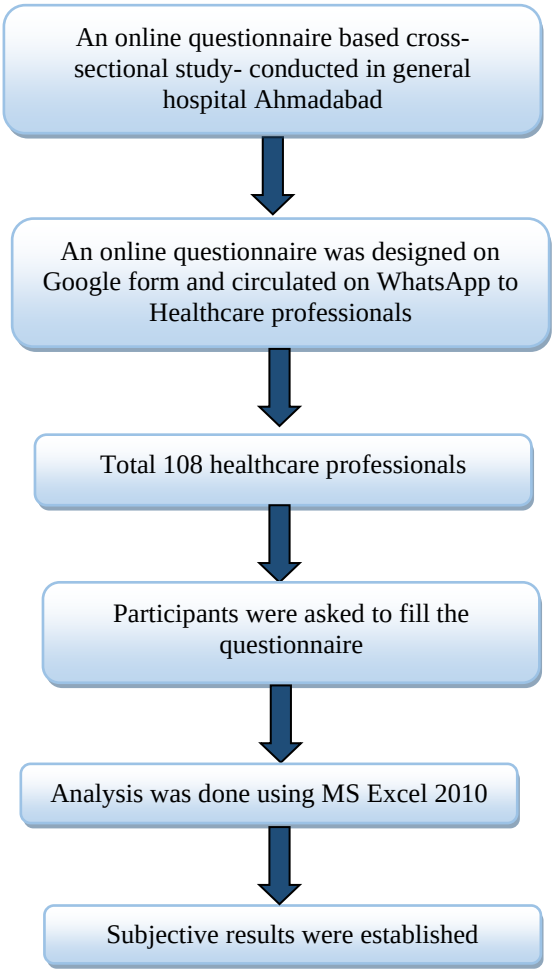
✓ Willingness to participate.
✓ Age is 18 above years.
✓ both males and females.

- ✓ HCPs who worked in covid-19 pandemic for at least 6 months.

❖ **Exclusion criteria:**

- ✓ Not Willing to participate
- ✓ HCPs who have major psychiatric illness.
- ✓ Person unable to understand.

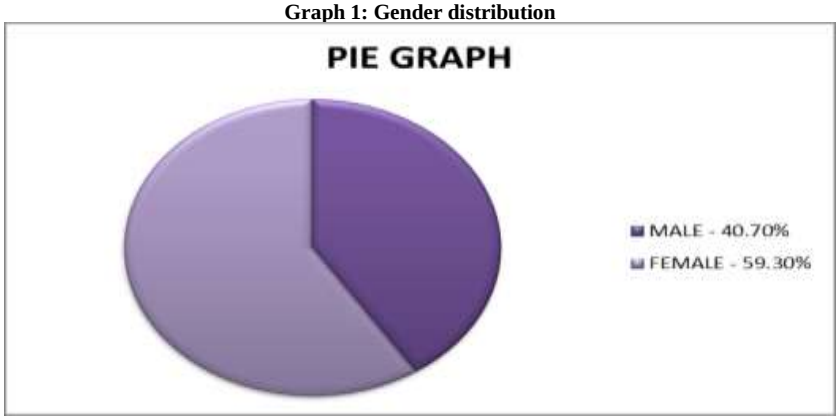
Flow chart of a procedure



RESULT

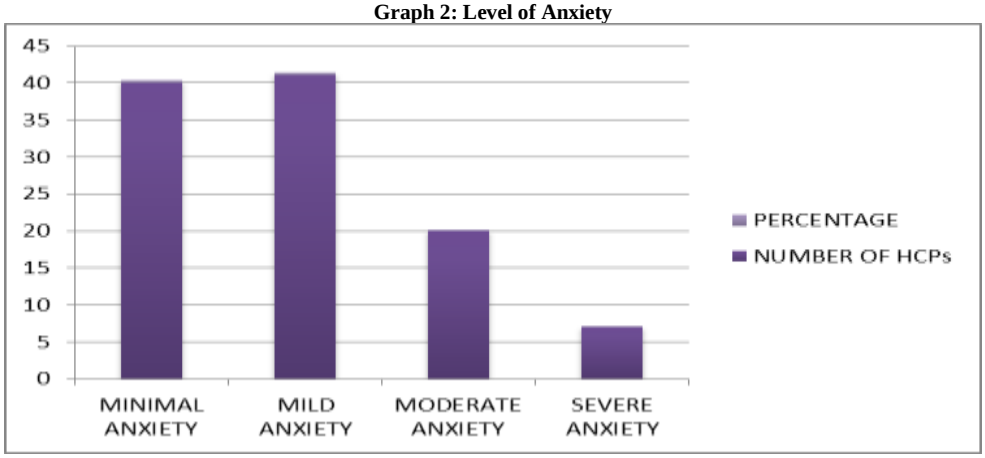
The present study included 108 healthcare professionals and aimed to find the level of anxiety in HCPs in covid-19. All data analysis was performed using spss16 & MsExcel2010.

Graph 1: Gender distribution



Inference: In the study, 40.70% (44 out of 108) of the sample population were males and 59.30% (64 out of 108) were females.

Graph 2: Level of Anxiety



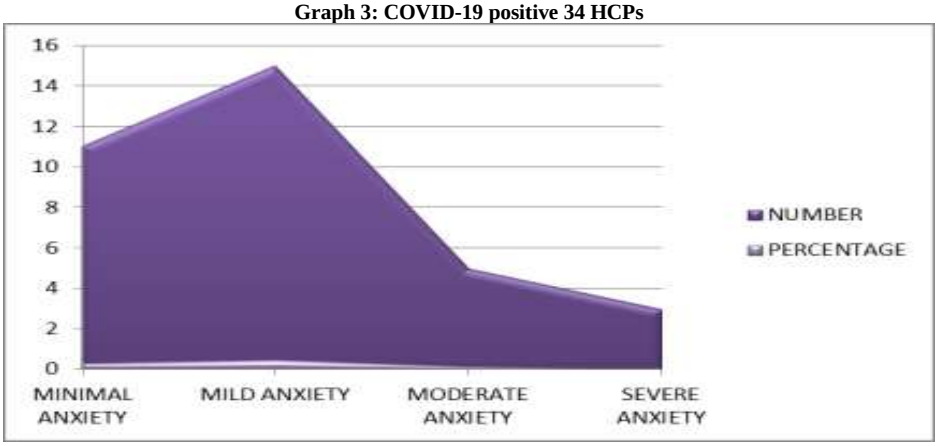
Inference: In this study, from 108 subjects 37.04% (n=40) minimal anxiety, 37.96%(n=41) mild anxiety,18.52% (n=20) moderate anxiety and 6.48% (n=7) severe anxiety.

Table 1: - Covid positive and other distribution In this study, it is also included HCPs who got covid positive in their duty.

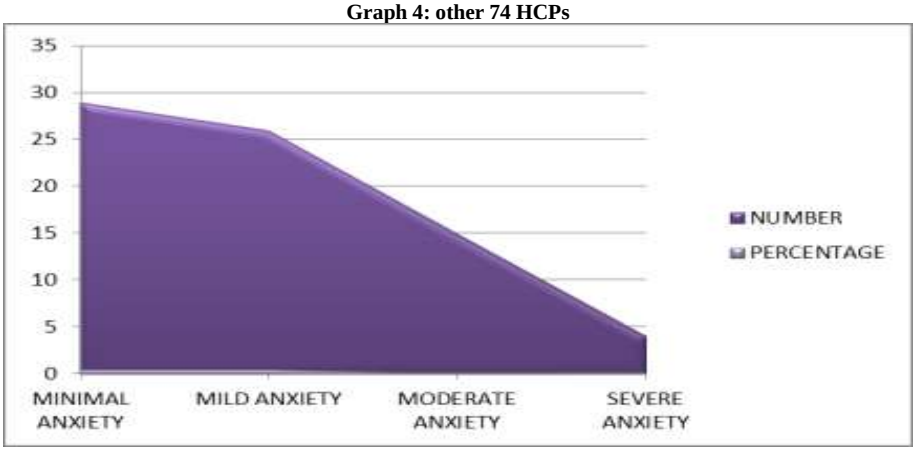
HCPs	Number	Percentage
HCPs who got COVID-19	34	31.50%
Others	74	68.50%
-	Total = 108	100%

Inference: In this study,31.50%(n=34) HCPs got covid positive during their duty and 68.50%(n=74) Other HCPs

Graph 3: COVID-19 positive 34 HCPs



Graph 4: other 74 HCPs



DISCUSSION

During the COVID-19 phase, healthcare providers are putting their lives in danger and continuing to work tirelessly to meet their ethical and professional commitments. As a result, identifying HCPs who are at high risk of burnout and are more likely to suffer from anxiety during this pandemic is crucial, so that help can be offered where and when it is required.

The present study finds out the level of anxiety among healthcare professionals during the COVID-19 pandemic in Ahmedabad. In this study, from 108 subjects 37.04%, 37.96%, 18.52% and 6.48% of healthcare professionals in Ahmedabad experienced minimal, mild, moderate, and severe anxiety, respectively, during the COVID-19 pandemic.

A study conducted in the pre-pandemic period by Grover et al. among doctors in Chandigarh found that the prevalence of moderate or severe depression was 13.2%. [11] Swapnil et al. have reported that the prevalence rates of anxiety & depression were 64.60% and 14.18% respectively. [12] This shows that the pandemic has had little effect on the psychological well-being of India's HCPs. A possible reason could be a decrease in the number of covid cases after the second wave. Another element could be the resilience that Indian doctors have built throughout the course of their careers. Medical post-graduate training in India is highly competitive, with long working hours, related burnout, and routine exposure to a wide range of infectious diseases. Furthermore, even in the absence of a pandemic, India's public sector hospitals always see a large number of cases, while having relatively little staff and infrastructure. When exposed to such pressures, HCPs reactions to the current crisis may be paradoxically less panic-stricken. [13]

CONCLUSION

The present study concluded that the level of anxiety among healthcare professionals in Ahmedabad is classified as mild in healthcare professionals after the second wave of the COVID-19 pandemic.

List of Abbreviations

COVID-19: Coronavirus Disease 2019
SARS-CoV-2: severe acute respiratory syndrome coronavirus 2
GAD: Generalized anxiety disorder
WHO: World Health Organization
HCPs: Healthcare professionals
GAD-7: Generalized anxiety disorder -7 questionnaire
SPSS: Statistical Package for the Social Sciences

Declaration by Authors

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