

Post-COVID fatigue syndrome among doctors working in a Tertiary Care Hospital, Srikakulam

¹Dr. B. Vijaya, Final year Postgraduate, Community Medicine, GMC, Srikakulam.

²Dr. B. Appalanaidu, Final year Postgraduate, Community Medicine, GMC, Srikakulam.

³Dr. A. Krishna Veni, Professor & H.O.D, Community Medicine, GMC, Srikakulam.

Corresponding Author: Dr. A. Krishna Veni, Professor & H.O.D, Community Medicine, GMC, Srikakulam.

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Abstract

Background: The outbreak of COVID-19, caused by the SARS-CoV-2 virus was a public health emergency of international concern, which caused millions of fatalities globally. Many individuals experienced persistent symptoms after COVID-19 illness. Post-COVID fatigue syndrome was the most common health issue faced by individuals who recovered from COVID-19.

Aims & objectives: To determine the post-COVID symptoms experienced by the doctors working in a tertiary care hospital, Srikakulam.

Methodology: A Cross-sectional descriptive study was conducted among the doctors working at Government General Hospital, Srikakulam in April 2022. A semi-structured questionnaire was administered to the participants which include variables like age, gender, post-COVID symptoms, etc., Data collected was

analyzed using Microsoft excel software and relevant statistical tests were applied.

Results: Out of 222 participants, 64.41% were positive for COVID-19 infection in either of the three waves. The mean age of the study participants was 33.12 yrs ranging from 21 to 61 years with almost equal distribution in males and females i.e., 63.26% and 65.32% respectively. 32.9% were reinfected by COVID in successive waves.

A majority (83.9%) were symptomatic with the predominant being upper respiratory tract symptoms. 76.92% of the study participants experienced post-COVID symptoms of which the most common were tiredness or fatigue, followed by post-exertional malaise, cough, and joint or muscle pains.

Conclusion: A majority of the doctors who recovered from COVID-19 experienced post-COVID fatigue syndrome.

Keywords: COVID-19, Post COVID fatigue syndrome, Doctors.

Introduction

The disease caused by the novel coronavirus first identified in December 2019, in Wuhan, China, has been named coronavirus disease 2019 (COVID-19) – ‘CO’ stands for corona, ‘VI’ for the virus, and ‘D’ for disease. Formerly, this disease was referred to as the ‘2019 novel coronavirus’ or ‘2019-nCoV. The COVID-19 virus is a new virus linked to the same family of viruses (Coronaviridae) as severe acute respiratory syndrome (SARS) and some types of the common cold.¹ Most people infected with the virus will experience mild to moderate respiratory illness and recover without requiring special treatment. However, some will become seriously ill and require medical attention. Older people and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease, or cancer are more likely to develop serious illnesses.²

As acute viral pneumonia, COVID-19 has an estimated mortality of less than 1% but, the sheer scale of the pandemic converted that relatively small percentage to more than a million fatalities globally. The tens of millions of survivors of the disease may face the risk of other long-term health issues.

Post-viral fatigue is the most common long-term health issue facing survivors of the disease.³ Post-COVID syndrome includes signs and symptoms that develop during or after an infection consistent with COVID, continue for more than 12 weeks, and are not explained by an alternative diagnosis.⁴

Most common symptoms include extreme tiredness, shortness of breath, brain fog, changes to taste and smell, joint pains, etc.⁵ This study is conducted to determine the

post-COVID symptoms experienced by doctors working in a tertiary care hospital.

Methodology

Study design: Hospital-based Cross-sectional study

Study Setting: Government General Hospital, Srikakulam

Study Participants: Postgraduate students and Faculty working in Government General Hospital, in Srikakulam who were COVID positive

Study period: Month of April 2022.

Study variables: Collected data included socio-demographic characteristics like age and gender, COVID status, COVID symptoms, treatment taken during COVID, and Post COVID symptoms.

Data collection

A semi-structured questionnaire was created with google forms. The google forms were sent to the study participants and responses were recorded. Out of 222 Doctors, 143 were positive for COVID. Therefore, the study sample is 143. Approval from Institutional Ethics Committee was obtained.

Data Analysis

The data obtained was entered and analyzed using Microsoft Excel and appropriate statistical tests were applied.

Results

Out of 222 Doctors, 143 (64.41%) were positive for COVID-19 infection in either of the three waves and were included as study participants. The age of the study participants ranged from 21 to 61 years, with a mean of 33.12 years. The gender distribution was almost equal, with 63.26% males and 36.74% females.

Table1: Distribution of study participants based on the level of care during COVID.

Level of Care	No. of study participants, n (%)
Home Isolation	127 (88.82)
Hospitalization	16 (11.18)
Total	143 (100)

Out of 143 participants, 127(88.82%) were in home isolation and remaining 16(11.18%) were hospitalized, out of which, majority were admitted in ICU.

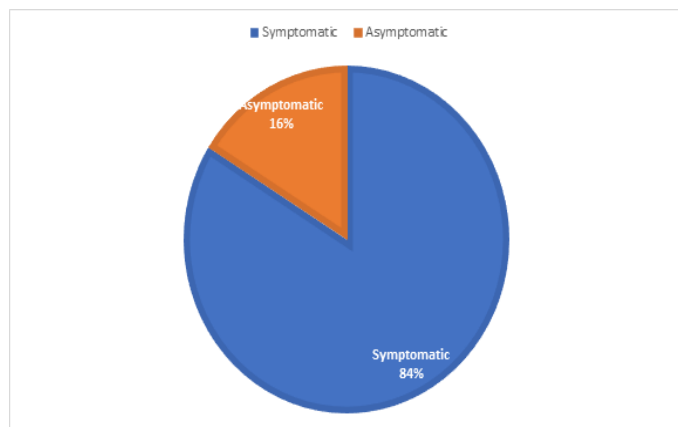


Figure 2: Distribution of Study participants based on Symptoms

Majority (84%) of the study participants were symptomatic, and the rest were asymptomatic.

Table 2: Distribution of study participants based on the presence of Post COVID symptoms

Post COVID symptoms	No. of study participants n (%)
Yes	110 (76.92)
No	33 (23.08)
Total	143 (100)

Majority (76.92%) of the study participants had Post COVID symptoms

Table 3: Distribution of COVID positive participants based on Post COVID symptoms (multiple responses)

Post COVID symptoms	No. of COVID positive participants, n (%)
One	23%
Two	18%
Three	15%
>Three	35%
None	9%

Tiredness or fatigue and post-exertional malaise	89 (62.24)
Cough	35 (24.5)
Joint or muscle pains	30 (21)
Loss of taste or smell	25 (17.5)
Weight loss or gain	25 (17.5)
Breathlessness	22 (15.4)
Brain fog	22 (15.4)
Sleep problems	21 (14.7)
Anxiety or Depression	21 (14.7)
Mood changes	18 (12.6)
Recurrent headache	15 (10.5)
Fever	15 (10.5)

Tiredness or Fatigue and Post exertional malaise (62.24%) was the most common Post COVID symptom. Cough (24.5%), Joint or muscle pains (21%) were the other common symptoms. The other symptoms seen in the study participants were breathlessness, brain fog (Difficulty Thinking or Concentrating), Sleep problems, Anxiety or Depression, Mood changes, Recurrent headache, Fever, Throat pain, Lightheadedness, heart palpitations, Chest pain, etc.,

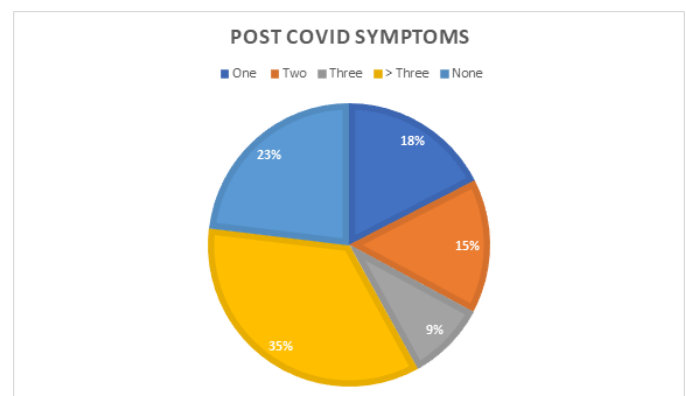


Figure 3: Distribution of study participants based on the number of Post COVID symptoms

About 35% of the study participants had more than three Post COVID symptoms

Table 4: Distribution of study participants based on treatment for Post COVID symptoms

Treatment	No. of study participants, n (%)
Rest	95 (66.43)
Multivitamins	15 (10.4)
Analgesics	12 (8.39)
Antibiotics	4 (2.79)
Others	17 (11.88)
Total	143 (100)

Post-COVID symptoms were relieved by rest in majority (66.43%) of the study participants, whereas the remaining, 33.57% received treatment.

Table 5: Distribution of study participants based on Post COVID Symptoms and Symptoms during COVID

		Post COVID symptoms			Chi-Square test(P-value)
		Yes	No	Total	
Symptomatic During COVID	Yes	99	21	120	13.07 (0.0003)
	No	11	12	23	
	Total	110	33	143	

Post-COVID symptoms were found to be present more in the study participants who were symptomatic during COVID than asymptomatic and this difference was found to be highly statistically significant (p value < 0.05).

Discussion

In the present study, it was found that 120 (84%) of the study participants were symptomatic and the rest were asymptomatic. 127(88.82%) were in home isolation and the remaining 16(11.18%) were hospitalized, out of which, the majority were admitted to ICU. These observations were in accordance with a study done by Jennifer K. Logue et al (2021) who reported that 11 (6.2%) were asymptomatic, 150 (84.7%) were

outpatients with mild illness, and 16 (9.0%) had moderate or severe disease requiring hospitalization.⁶In the present study, it was found that the majority, i.e., 76.92% of the study participants had Post COVID symptoms. Tiredness or Fatigue (62.24%) was the major Post COVID symptom and 35% of the study participants had more than three symptoms. These findings were consistent with other studies done by ALY and SABER et al (2021) which reported that 77.4% had Post COVID symptoms with fatigue(57.4%) as the major symptom,⁷KAYAASLAN et al (2021) who reported that almost half of the participants (47.5%) had persistent symptoms, and more than half of the patients having symptoms had three or more symptoms and fatigue or easy fatigability, myalgia, and loss of weight were the most frequent persistent symptoms.⁸

Conclusion

A majority of the doctors who recovered from COVID had experienced Post COVID fatigue syndrome, among which one-third received treatment.

References

1. UNICEF – India. All you need to know about Coronavirus in India [Last Accessed on October 19th, 2022].
2. World Health Organization. Coronavirus disease (COVID-19). [Last Accessed on October 16th, 2022]. Available from: <https://www.who.int/health-topics/coronavirus#tab=tab>
3. Tarek A-Z K Gaber, Marwa Eltemamy, Post-COVID-19 aphantasia, Progress in Neurology and Psychiatry, 10.1002/pnp.714, 25, 3, (16-17), (2021).
4. Bansal R, Gubbi S, Koch CA. COVID-19 and chronic fatigue syndrome: An endocrine perspective. J Clin Transl Endocrinol. 2022 Mar; 27:100284. doi:

10.1016/j.jcte.2021.100284. Epub 2021 Dec 3. PMID: 34877261; PMCID: PMC8641402.

5. National comprehensive guidelines for management of Post COVID sequelae. Ministry of Health and Family Welfare. Government of India. Available as: <https://www.mohfw.gov.in/pdf/NationalComprehensiveGuidelinesforManagementofPostCovidSequelae.pdf>. Last accessed on 10th Oct, 2022.

6. Logue JK, Franko NM, McCulloch DJ, McDonald D, Magedson A, Wolf CR, Chu HY. Sequelae in Adults at 6 Months After COVID-19 Infection. *JAMA Netw Open*. 2021 Feb 1;4(2): e210830. doi: 10.1001/Jamanetworkopen.2021.0830. Erratum in: *JAMA Netw Open*. 2021 Mar 1;4(3): e214572. PMID: 33606031; PMCID: PMC7896197.

7. Aly, Menna A E G, and Heba G Saber. "Long COVID and chronic fatigue syndrome: A survey of elderly female survivors in Egypt." *International journal of clinical practice* vol. 75,12 (2021): e14886. doi:10.1111/ijcp.14886

8. Kayaaslan B, Eser F, Kalem AK, Kaya G, Kaplan B, Kacar D, Hasanoglu I, Coskun B, Guner R. Post-COVID syndrome: A single-center questionnaire study on 1007 participants recovered from COVID-19. *J Med Virol*. 2021 Dec;93(12):6566-6574. doi: 10.1002/jmv.27198. Epub 2021 Jul 28. PMID: 34255355; PMCID: PMC8426910.