International Journal of Research in Medical Sciences
Subramanian VH et al. Int J Res Med Sci. 2023 Mar;11(3):1019-1023
www.msjonline.org
pISSN 2320-6071 | eISSN 2320-6012

DOI: https://dx.doi.org/10.18203/2320-6012.ijrms20230592

Original Research Article

Prevalence of panic and agoraphobia in post COVID-19 patients

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Received: 25 January 2023
Revised: 14 February 2023
Accepted: 20 February 2023

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ABSTRACT

Background: COVID-19 pandemic and quarantine of people who were tested positive made more cautious and anxious when being out in public. This study concentrates on the prevalence of panic and agoraphobia using panic and agoraphobia scale.
Methods: Survey research study of 121 subjects using web-based data collection (Google form).
Results: The result were obtained using panic and agoraphobia scale. Statistical analysis did not show considerable panic attack and agoraphobia in people who were tested positive for COVID-19.
Conclusions: The study population did not show considerable panic attack and agoraphobia after being quarantined or hospitalised during 1st, 2nd and 3rd wave of COVID-19.

Keywords: Agoraphobia, Post COVID-19, Panic and agoraphobia scale

INTRODUCTION

The World Health Organization (WHO) director-general classified COVID-19 a public health emergency of worldwide concern on 30 December 2020. To prevent the spread of the virus, individuals testing positive for the disease should be placed. The coronavirus SARS CoV-2 was discovered in Wuhan December 2019, in patients who presented with severe viral pneumonia.[1] On 30 January in isolation, (separation of ill or infected persons from others).[2] People's occupations and lives are severely disrupted by quarantine or social isolation, which may have significant effects on their health and well-being.[3,4]

The COVID-19 pandemic has been the subject of numerous studies, particularly those examining the psychological impacts of quarantine. These studies have started to show adverse emotional effects such as increased stress, depression, anxiety, sleeping difficulties, post-traumatic stress, anger, boredom, stigma, substance use, fear of going out and loneliness.[5] Negative feelings before lockdown and during the COVID-19 epidemic were compared in some research. According to the findings, unpleasant feelings including anxiety and despair increased during lockdowns and life satisfaction decreased.[3,6] Anxiety disorders like panic disorder are characterised by recurrent, unexpected panic attacks with symptoms like palpitations, sweating, shortness of breath, discomfort in the chest and abdomen, nausea, and a dread of death.[7] Panic disorder impairs daily functioning and quality of life of the affected patients. An estimated 1.5-3.8% of people will experience panic disorder in their lifetime.[8]

When a panic attack or other comparable symptom arises, being in a situation where it is challenging to find aid or flee can cause fear and anxiety are the symptoms of agoraphobia.[7] There is no conclusive evidence linking panic disorder and agoraphobia. It has been proposed that panic disorder's subtype, agoraphobia, exists. Agoraphobia was once believed to be a side effect of recurring panic attacks, and agoraphobia was thought to be a severe complication of panic disorder.[9]

The objective of the study is to screen the subjects affected with COVID-19 and to find whether panic and agoraphobia persists in them.

METHODS

Study type

This study is a survey research study using web-based data collection that is Google form.

Study place

The study was conducted at Dr. B. R. Ambedkar Medical College and Hospital.

Study period

The study period was from March 2022 to November 2022.

Study sample

The study sample size was 121.

Inclusion criteria

The individuals tested positive with COVID-19 in 1st, 2nd, 3rd wave and individuals who had been hospitalised or quarantined for a minimum of 14 days were included in this study.

Exclusion criteria

The individuals who never tested positive for COVID-19 were excluded.

Procedure

The consent of the subjects was taken and the subjects were screened for inclusion and exclusion criteria and were assessed using Panic and Agoraphobia scale as an outcome measure.

The panic and agoraphobia scale (PAS) was created to recognize and score key aspects of panic disorder, whether or not agoraphobia is present. In most countries nowadays, it is the scale that is used the most frequently. It has five subscales, including those for panic episodes, agoraphobia, anticipatory anxiety, handicap, and health concerns.[10] A total of 121 subjects were collected using convenient sampling method and the response was recorded using PAS.

Statistical analysis

The data was analysed and statistical interference was made using Microsoft excel.

RESULTS

The aim of the study was to find out the prevalence of panic and agoraphobia in people who were tested positive. This study was conducted among 121 participants through web-based survey using Google forms using PAS.

The distribution of samples on the basis of gender were 51 males and 70 females.

The samples on the basis of age were 15 in the age group of 10-19 years, 85 samples in the age group of 20-29 years, 8 samples in the age group of 30-39 years, 6 samples in the age group of 40-49 years, 6 samples in the age group of 50-59 years and 1 in the age group of 60-69 years.

In plotting the frequency of panic attacks, how frequently 80 subjects had no panic attack in the week, 18 had 1 panic attack in the past week, 23 had 2-3 panic attacks in the past week, 0 had 4-6 panic attacks in the past week and 0 had more than 6 panic attacks in the past week.

Table 1: Table showing in the past week, did they avoid certain situations because they feared having a panic attack or a feeling of discomfort.

Classification	Number of samples answered in the respective class
No avoidance	72
Infrequent avoidance of feared situations	21
Occasional avoidance of feared situations	17
Frequent avoidance of feared situations	4
Very frequent avoidance of feared situations	7
Total	121

The asking the severity of the panic attacks in the last week, it was reported that 77 had no panic attacks, 23 had attacks were usually mild, 21 had attacks that were usually moderate, 0 had attacks were usually severe and 0 had attacks were usually extremely severe.

Amongst the subjects, on asking how long did the panic attacks last, 73 had no panic attacks, 31 had panic attacks for 1 to 10 minutes, 13 had panic attacks for 10 to 60 minutes, 2 had panic attacks for 1 to 2 hours and 2 had panic attacks for over 2 hours.

In the sample population, on asking the nature of the attacks whether as expected (occurring in feared situations) or unexpected (spontaneous) in which 73 were mostly unexpected (or no panic attacks), 19 were more unexpected than expected, 21 were some unexpected and some expected, 3 were more expected than unexpected and 5 were mostly expected.

Table 2: Table showing the situations they avoided or in which they developed panic attacks or a feeling of discomfort when they are not accompanied.

Classification	Number of samples answered in the respective class
Airplanes	15
Subways	3
Buses, trains	22
Ships	2
Theatres, cinemas	17
Supermarket	22
Standing in lines	9
Auditorium, stadium	5
Parties, social gathering	13
Crowds	44
Restaurants	17
Museums	3
Elevators	11
Enclosed spaces	9
Classrooms, lecture halls	14
Driving or driving a car	5
Large rooms	4
Walking on the street	7
Fluids, wide streets, courtyards	4
High places	6
Cross bridges	3
Travelling away from home	12
Staying home alone	9
Others	35

The data showed that, in the past week, the subjects did avoid certain situations because they feared having a panic attack or a feeling of discomfort in which 72 were no avoidance, 21 were infrequent avoidance of feared situations, 17 were occasional avoidance of feared situations, 4 were frequent avoidance of feared situations and 7 were very frequent avoidance of feared situations.

Table 3: Table showing how important were the avoided situation.

Classification	Number of samples answered in the respective class
Unimportant (or no agoraphobia)	40
Not very important	44
Moderately important	26
Very important	10
Extremely important	0
Total	121

The situations the subjects avoided or in which they developed panic attacks or a feeling of discomfort when they are not accompanied include, airplanes 15, subways (underground) 3, buses, trains 22, ships 2, theatres, cinemas 17, supermarket 22, standing in lines (queues) 9, auditoriums, stadiums 5, parties, social gatherings 13, crowds 44, restaurants 17, museums 3, elevators (lifts) 11, enclosed spaces (tunnels) 9, classrooms, lecture halls 14, driving or riding in a car 5, large rooms (lobbies) 4, walking on the street 7, fluids, wide streets, courtyards 4, high places 6, crossing bridges 3, traveling away from home 12, staying home alone 9 and other 35.

The distribution of subjects on the basis of the situations they avoided or in which they developed panic attacks or a feeling of discomfort when they are not accompanied in which 40 were unimportant (or no agoraphobia), 44 were not very important, 26 were moderately important, 10 were very important and 0 were extremely important.

According to the data, the subjects on asking whether in the past week did they suffer from the fear of having a panic attack (anticipatory anxiety or fear of being afraid) in which no anticipatory anxiety was in 79 subjects, infrequent fear of having a panic attack were in 14 subjects, sometimes fear having a panic attack were in 25 subjects, frequent fear of having a panic attack were in 2 subjects and fear having a panic attack all the time was in 1 subject.

Distribution of sample population on the basis of how strong was the fear of fear in which 50 had none, 38 had, 28 had moderate, 2 had marked and 2 had extreme fear.

Table 4: Table showing in the past week, did you suffer from the fear of having a panic attack (anticipatory anxiety or fear of being afraid).

Classification	Number of samples answered in the respective class
No anticipatory anxiety	79
Infrequent fear of having a panic attack	14
Sometimes fear having a panic attack	25
Frequent fear of having a panic attack	2
Fear having a panic attack all the time	1
Total	121

Distribution of sample population on the basis of whether the panic attacks or agoraphobia lead to an impairment in their family relationships (partner and children) in the past week showed that 78 had no impairment, 15 had mild impairment, 23 had moderate impairment, 3 had marked impairment and 2 had extreme impairment.

Out of the total subjects, 73 had no impairment, 26 had mild impairment, 20 had moderate impairment and 2 had

marked impairment in the past week when asked whether panic attacks or agoraphobia lead to an impairment of their social life and leisure activities.

Table 5: Table showing how strong was this "fear of fear".

Classification	Number of samples answered in the respective class
None	50
Mild	38
Moderate	28
Marked	2
Extreme	2
Total	121

Table 6: Table showing in the past week, did panic attacks or agoraphobia lead to an impairment in their family relationships (partner and children).

Classification	Number of samples answered in the respective class
No impairment	78
Mild impairment	15
Moderate impairment	23
Marked impairment	3
Extreme impairment	2
Total	121

Table 7: Table showing in the past week, did panic attacks or agoraphobia lead to an impairment of their social life and leisure activities (for example, you weren't able to go a film or party).

Classification	Number of samples answered in the respective class
No impairment	73
Mild impairment	26
Moderate impairment	20
Marked impairment	2
Extreme impairment	0
Total	121

77 had no impairment, 21 had mild impairment, 18 had moderate impairment, 5 had marked impairment and 0 had extreme impairment in the past week when asked whether panic attacks or agoraphobia lead to an impairment of their work or household responsibilities. Distribution of sample population on the basis of whether they worried about suffering harm from their panic attacks (for example, having a heart attack or fainting) in the past week, 93 showed not true, 10 showed hardly true, 13 showed party true, 5 showed mostly true and 0 showed definitely true.

Distribution of sample population on the basis of whether they sometimes believed that their doctor was wrong when he told them their symptoms (like rapid heart rate, tingling sensations, or shortness of breath) have a psychological cause, 43 showed not true, 18 showed hardly true, 15 showed partly true, 7 showed mostly true and 3 showed definitely true.

Table 8: Table showing in the past week, did panic attacks or agoraphobia lead to an impairment of their work or household responsibilities.

Classification	Number of samples answered in the respective class
No impairment	77
Mild impairment	21
Moderate impairment	18
Marked impairment	5
Extreme impairment	0
Total	121

Table 9: Table showing in the past week, did they worry about suffering harm from your panic attacks (for example, having a heart attack or fainting).

Classification	Number of samples answered in the respective class
Not true	93
Hardly true	10
Partly true	13
Mostly true	5
Definitely true	0
Total	121

Table 10: Table showing do they sometimes believe that their doctor was wrong when he told them their symptoms (like rapid heart rate, tingling sensations, or shortness of breath) have a psychological cause.

Classification	Number of samples answered in the respective class
Not true (rather psychic disease)	43
Hardly true	18
Partly true	15
Mostly true	7
Definitely true (rather organic disease)	3
Total	121

DISCUSSION

The number of recovered patients of COVID-19 were facing negative feelings commonly anxiety, depression, anxiety, post-traumatic stress, anger, stigma, fear of going

out and loneliness before lockdown and during the COVID-19 epidemic.[11]

A total of 121 subjects participated in the online survey conducted using Google form. Statistics were used to find out the frequency of response to the questionnaire and the data did not show considerable panic and agoraphobia after being quarantined or hospitalised during the positive period.

People now a days are socially well connected due to the advancement in technology and availability of smart phones with almost every individual. According to a study technology today permits people in quarantine to stay connected and maintain their social networks.[12]

Thus, the data shows that the COVID-19 pandemic developed a sense of discomfort among some of the quarantined or hospitalized subjects by causing panic and fear and most of them were near normal.

Limitations

The study had a limitation of a small sample. In addition, no control group was included.

CONCLUSION

The study population did not show considerable panic attack and agoraphobia after being quarantined or hospitalized during the positive period. The reason for the same could be improved medical services for COVID-19 post first wave and the awareness among the people due to the technology.

ACKNOWLEDGEMENTS

Authors would like to thank all subjects of the study without whom this task would have been impossible.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Chan JF, Yuan S, Kok KH, To KK, Chu H, Yang J, et al. A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: a study of a family cluster. Lancet. 2020;395(10223):514-23.
2. World Health Organization. Considerations for quarantine of individuals in the context of containment for coronavirus disease COVID-19. 2020. Available at: https://apps.who.int/iris/handle/10665/331497. Accessed on 12 December 2022.
3. Damir H. Psychiatry of Pandemics: A Mental Health Response to Infection Outbreak. Bern: Springer. 2019.
4. Taylor S. The Psychology of Pandemics: Preparing for the Next Global Outbreak of Infectious Disease 2019. Newcastle: Cambridge Scholars Publishing. 2019.
5. Huang Y, Zhao N. Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 epidemic in China: a web-based cross-sectional survey. Psychiatry Res. 2020;288:112954.
6. Lai J, Ma S, Wang Y, Cain Z, Hu J, Wei N, et al. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease. JAMA Netw Open. 2020;3(3):e203976.
7. Grant BF, Hasin DS, Stinson FS, Dawson DA, Goldstein RB, Smith S, et al. The epidemiology of DSM-IV panic disorder and agoraphobia in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions. J Clin Psychiatry. 2006;67(3):363-74.
8. Angst J. History and epidemiology of panic. Eur J Psychiatry. 1995;57-9.
9. Noyes R Jr, Crowe RR, Harris EL, Hamra BJ, McChesney CM, Chaudhry DR. Relationship between panic disorder and agoraphobia. A family study. Arch Gen Psychiatry. 1986;43(3):227-32.
10. Bandelow B. Assessing the efficacy of treatments for panic disorder and agoraphobia. II. The Panic and Agoraphobia Scale. Int Clin Psychopharmacol. 1995;10(2):73-81.
11. Rossi A, Panzeri A, Pietrabissa G, Manzoni GM, Castelnuovo G, Mannarini S. The anxiety-buffer hypothesis in the time of COVID-19: when self-esteem protects from the impact of loneliness and fear on anxiety and depression. Front Psychol. 2020;11:2177.
12. Chatterjee K, Chauhan VS. Epidemics, quarantine and mental health. Med J Armed Forces India. 2020;76(2):125.

Cite this article as: Subramanian VH, Viteja M, Kumar VK. Prevalence of panic and agoraphobia in post COVID-19 patients. Int J Res Med Sci 2023;11:1019-23.