



ORIGINAL RESEARCH PAPER

Psychology

PREVALENCE OF POST TRAUMATIC STRESS DISORDER IN PATIENTS OF POST-COVID-19 INFECTION

KEY WORDS: COVID, PTSD, Traumatic, Symptoms etc.

Dr. Vaibhav Chaturvedi

Assistant professor, Index Medical College, Indore.

Dr. Surya Pratap Singh Chauhan*

PG Resident, Index Medical College, Indore. *Corresponding Author

Dr Ram Ghulam Razdan

Professor & Head of Department at Index medical college, Indore.

ABSTRACT

Background and aim: Post-traumatic stress disorder (PTSD) is a severe but treatable mental disorder that develops after a life-threatening traumatic event. Coronavirus disease 19 (COVID-19) hospitalization is a potentially traumatic experience, especially in severe cases. Furthermore, the unprecedented context of the COVID-19 pandemic, with daily media bombardment about COVID-19 mortality, may have amplified life-threatening perception also in patients with moderate infection. The aim of this study was to assess the prevalence of PTSD at 6-month follow-up in patients of Post-COVID-19 infection.

Method : This study was done at Tertiary Health Care Centre, Indore for duration of 6 months (October 2020 to March 2021). Study population was 200 consecutive patients who presented to the emergency department with SARS-CoV-2 and recovered from COVID-19 infection were referred for a post-recovery health check to a psychiatry OPD. PTSD checklist for DSM-V (PCL-5) & symptom check list 95 (KSCL 95) is applied. To meet PTSD criteria, in addition to traumatic event exposure (criterion A), patients must have had at least 1 DSM-5 criterion B and C symptom and at least 2 criterion D and E symptoms. Criteria F and G must have been met as well. Participants provided written informed consent.

Results: In this study, 200 patients included the 6-month follow-up, 15% of the sample received a PCL-5-based diagnosis of PTSD. The other 40% patients fulfilled 3 out of 4 of the DSM-5 criteria (B C D E) at the PCL-5 and were considered as having a sub-threshold diagnosis of PTSD.

Conclusions and discussion: PTSD is a serious but treatable condition. Clinicians treating COVID-19 in hospitals should be aware of PTSD risk. When feasible, screening and intervention might reduce the impact of PTSD in COVID-19 survivors.

INTRODUCTION :

Post-traumatic stress disorder (PTSD) may occur in individuals who have experienced a traumatic event. Previous coronavirus epidemics were associated with PTSD diagnoses in post illness stages. COVID-19 has quickly become a global health emergency resulting in not only physical health concerns but also psychological concerns as people are exposed to unexpected deaths or threats of death. However, information after severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is piecemeal. We aimed at filling this gap by studying a group of patients with coronavirus disease 2019 (COVID-19) who sought treatment at the emergency department, most of whom required hospitalisation, eventually recovered, and were subsequently referred to a psychiatric OPD.

AIM & OBJECTIVES:

Assess the incidence of PTSD in Post-COVID-19 patients.

MATERIAL & METHODS:

This study was done at Tertiary Health Care Centre, Indore for duration of 6 months (October 2020 to March 2021). Study population was 200 consecutive patients who presented to the emergency department with SARS-CoV-2 and recovered from COVID-19 infection were referred for a post-recovery health check to a psychiatry OPD. PTSD checklist for DSM-V (PCL-5) & symptom check list 95 (KSCL 95) is applied. To meet PTSD criteria, in addition to traumatic event exposure (criterion A), patients must have had at least 1 DSM-5 criterion B and C symptom and at least 2 criterion D and E symptoms. Criteria F and G must have been met as well. Participants provided written informed consent.

Inclusion Criteria

The following criteria were included in the study:

1. Post-COVID-19 patients aged between 18-60 yrs

2. Who can speak and understand Hindi
3. Patients fulfil the criteria of Post Traumatic Stress Disorder according to DSM-V

Exclusion Criteria

The following criteria were excluded from the study:

1. Who are not willing to participate in the study
2. Clinically evident cognitive impairment, active mental disorder & other chronic disorder.

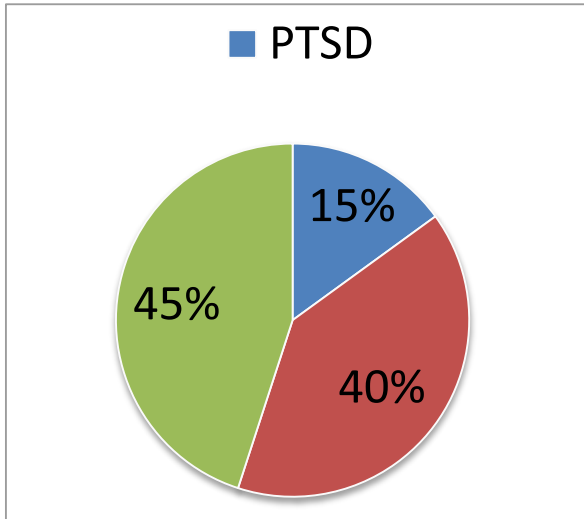
Statistical Analysis - The statistical package for the social sciences (SPSS) 22 versions were used for statistical analysis. Descriptive statistics such as frequency, percentage, mean and standard deviation (SD) were used.

RESULTS :-

In this study, 200 patients included the 6-month follow-up, 15% of the sample received a PCL-5-based diagnosis of PTSD. The other 40% patients fulfilled 3 out of 4 of the DSM-5 criteria (B C D E) at the PCL-5 and were considered as having a sub-threshold diagnosis of PTSD.

DISCUSSION :-

In this 6-month observational follow-up study on COVID-19 survivors discharged to home care from a large academic COVID-19 hospital, we found a provisional diagnosis of PTSD in 30 out of 200 patients. Reports of PTSD symptoms during hospitalization for COVID-19 or at discharge are hardly comparable with our results because they may reflect transitory acute stress reactions. After the outbreak of SARS in Hong Kong in 2003, Wu et al. reported a 5% prevalence of PTSD at 3-month follow-up after discharge from the hospital, while in a 30-month follow-up study, it was found as high as 25.6%. The SARS epidemic may have led to a fear of death in infected subjects, similarly or more than the COVID-19 pandemic, due to its rapid spread and high mortality rate.



outbreak on the emergency care system of a large tertiary-care teaching hospital in Italy: A retrospective analysis. *Eur J Pub Health* 2019;29(5):966-971. doi:<https://doi.org/10.1093/eurpub/ckz056>

CONCLUSION :-

PTSD is a serious but treatable condition. Clinicians treating COVID-19 in hospitals should be aware of PTSD risk. When feasible, screening and intervention might reduce the impact of PTSD in COVID-19 survivors.

REFERENCES:-

1. American Psychiatric Association. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders Fifth Edition.,2013.
2. McFarlane AC. The long-term costs of traumatic stress: Intertwined physical and psychological consequences. *World Psychiatry* 2010;9(1):3-10. doi: <https://doi.org/10.1002/j.2051-5545.2010.tb00254.x>
3. Pacella ML, Hruska B, Delahanty DL. The physical health consequences of PTSD and PTSD symptoms: A meta-analytic review. *J Anxiety Disord* 2013;27(1):33-46. doi:<https://doi.org/10.1016/j.janxdis.2012.08.004>
4. Bergman HE, Kline AC, Feeny NC, Zoellner LA. Examining PTSD Treatment Choice Among Individuals with Subthreshold PTSD. *Behav Res Ther* 2015;73:33. doi:<https://doi.org/10.1016/j.brat.2015.07.010>
5. Bryant RA. Post-traumatic stress disorder: a state-of-the-art review of evidence and challenges. *World Psychiatry* 2019;18(3):259-269. doi:<https://doi.org/10.1002/wps.20656>
6. Righy C, Rosa RG, Da Silva RTA, et al. Prevalence of post-traumatic stress disorder symptoms in adult critical care survivors: A systematic review and meta-analysis. *Crit Care* 2019;23(1):1-13. doi:<https://doi.org/10.1186/s13054-019-2489-3>
7. Davydov DS, Gifford JM, Desai SV, Needham DM, Bienvenu OJ. Posttraumatic stress disorder in general intensive care unit survivors: a systematic review. *Gen Hosp Psychiatry* 2008;30(5):421-434. doi:<https://doi.org/10.1016/j.genhosppsych.2008.05.006>
8. Edmondson D, Kronish IM, Shaffer JA, Falzon L, Burg MM. Posttraumatic stress disorder and risk for coronary heart disease: A meta-analytic review. *Am Heart J* 2013;166(5):806-814. doi:<https://doi.org/10.1016/j.ahj.2013.07.031>
9. Kronish IM, Edmondson D, Moise N, et al. Posttraumatic stress disorder in patients who rule out versus rule in for acute coronary syndrome. *Gen Hosp Psychiatry* 2018;53:101-107. doi:<https://doi.org/10.1016/j.genhosppsych.2018.02.007>
10. Meli L, Birk J, Edmondson D, Bonanno GA. Trajectories of posttraumatic stress in patients with confirmed and rule-out acute coronary syndrome. *Gen Hosp Psychiatry* 2020;62:37-42. doi:<https://doi.org/10.1016/j.genhosppsych.2019.11.006>
11. Heir T, Blix I, Knatten CK. Thinking that one's life was in danger: Perceived life threat in individuals directly or indirectly exposed to terror. *Br J Psychiatry* 2016;209(4):306-310. doi:<https://doi.org/10.1192/bjp.bp.115.170167>
12. Zhu N, Zhang D, Wang W, et al. A novel coronavirus from patients with pneumonia in China, 2019. *N Engl J Med* 2020;382(8):727-733. doi: <https://doi.org/10.1056/NEJMoa2001017>
13. Remuzzi A, Remuzzi G. COVID-19 and Italy: what next? *Lancet*. 2020;395(10231):1225-1228. doi:[https://doi.org/10.1016/S0140-6736\(20\)30627-9](https://doi.org/10.1016/S0140-6736(20)30627-9)
14. Qi R, Chen W, Liu S, et al. Psychological morbidities and fatigue in patients with confirmed COVID-19 during disease outbreak: prevalence and associated biopsychosocial risk factors. *medRxiv Prepr Serv Heal Sci*. Published online 2020. doi:<https://doi.org/10.1101/2020.05.08.20031666>
15. Wesemann U, Hadjamu N, Willmund G, et al. Influence of COVID-19 on general stress and posttraumatic stress symptoms among hospitalized high-risk patients. *Psychol Med* 2020;2:1-2. doi:<https://doi.org/10.1017/s0033291720003165>
16. Bo HX, Li W, Yang Y, et al. Posttraumatic stress symptoms and attitude toward crisis mental health services among clinically stable patients with COVID-19 in China. *Psychol Med*. 2020:1. doi:<https://doi.org/10.1017/S0033291720000999>
17. APA - Diagnostic and Statistical Manual of Mental Disorders DSM-5 Fifth Edition. Accessed September 25, 2020. https://www.appi.org/Diagnostic_and_Statistical_Manual_of_Mental_Disorders_DSM-5_Fifth_Edition
18. Kaseda ET, Levine AJ. Post-traumatic stress disorder: a differential diagnostic consideration for COVID-19 survivors. Published online 2020. doi: <https://doi.org/10.1080/13854046.2020.1811894>
19. Ceccarelli G, Spagnolello O, Borrazzo C, et al. Impact of the 2017 measles