Original Research Article

Journal of College of Medical Sciences-Nepal, Vol-20, No.2, Apr-Jun 2024
ISSN: 2091-0657 (Print); 2091-0673 (Online) Open Access
DOI:10.3126/jcmsn.v20i2.55882

Consultation Liaison Psychiatry for Covid-19 Inpatients: A Hospital Based Study

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ABSTRACT

Background

The COVID-19 pandemic has had a significant impact on mental health worldwide. The effects of the pandemic on mental wellbeing have been multifaceted and varied from person to person. Neuropsychiatric symptoms have been described in the acute phase of the illness and as long-term consequences. The objective of this study is to describe the characteristics of COVID-19 patients referred to our liaison psychiatry service in College of Medical Sciences and Teaching Hospital, Chitwan, Nepal.

Methods

This is a hospital based cross-sectional descriptive study. This study was carried out within the Department of Psychiatry of College of Medical Sciences and Teaching Hospital, in Chitwan district of Nepal, over a period of 2 months from March 2021 to May 2021. Data from each psychiatric consultation within our consultation-liaison service were consecutively obtained during the study period. Psychiatric diagnosis was made as per the ICD-10/ DCR criteria. Data was analyzed using SPSS.

Results

Among 35 patients who received psychiatric consultation, the mean age of the patient was 48.91± 13.01. Majority, sixty two percent were male and from Chitwan District. The majority of the patients, around 37%, were diagnosed with anxiety disorder followed by 22.9% delirium, 11.4% acute stress reaction, 8.6% depressive illness and adjustment disorder.

Conclusions

This study concluded that there was a high prevalence of psychiatric illness among COVID-19 patients. Therefore, by conducting screening for psychiatric symptoms in COVID 19 patients' healthcare professionals can i entify individuals who may require additional mental health support and intervention. Early detection and intervention for psychiatric symptoms can help prevent worsening of mental health conditions, improve overall wellbeing and enhance the effectiveness of treatment.

Keywords: prevalence; consultation liaison psychiatry; ICD-10/DCR criteria.

INTRODUCTION

Coronavirus disease 2019 has made a devastating effect on the world's demographics resulting in more than 6.5 million deaths worldwide, as of September 19, 2022. The first case of this viral illness was reported in Wuhan area, China, in late December 2019, which gradually spread globally. The World Health Organization (WHO) has declared it as a global pandemic on March 11, 2020.[1] The pandemic has led to unprecedented hazards to mental well-being globally.[2] There are several factors which could increase the risk of mental disorders in the general population during this situation. These include fear of infection, strict social distancing, travel restrictions, temporary unemployment, home-schooling children, working from home, sudden financial crisis which could lead to the increased stress levels and the emergence of anxiety, depressive symptoms, insomnia, denial, an-

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ger and fear globally. [3] Similarly, in individuals who are infected with the virus, the concern about the outcome of their illness,[4] stigma,[5] and amnesia or traumatic memories of severe illness.[6] Evidence suggests that psychiatric illness is both a risk factor for and consequence of COVID-19. Research done by Bao et al.[7], Huang and Zhao,[8] and Wang et al.[9] have posited that COVID-19 has, indeed, led to the development of mental illness and extreme psychological distress in the general population. The incidence of any psychiatric diagnosis in the 14 to 90 days after COVID-19 diagnosis was 18·1% (95% CI 17·6–18·6), including 5·8% (5·2–6·4), that was the first diagnosis. Thus, studies report that patients are at increased risk for depression and anxiety during and following COVID-19 infection.[10] Delirium occurs in at least 30% of patients hospitalized with COVID-19[11, 12] and is substantially more common in those requiring ICU admission.[13] There have also been case reports mentioning acute psychotic disturbances in cases of COVID-19, one of whom had schizophrenia.[14,15]

METHODS

A hospital based descriptive cross-sectional study was conducted in the Department of Psychiatry of College of Medical Sciences and Teaching Hospital (COMSTH), in Chitwan district of Nepal, over a period of 2 months from March 2021 to May 2021. Data from each psychiatric consultation within our consultation-liaison service were consecutively obtained during the study period. A total of 35 hospitalizations of SARS-CoV-2 positive patients were enrolled after informed written consent. Ethical clearance was obtained from the ethical committee of the institutional review board of COMSTH (Ref No. COMSTH-IRC/2022-10.1). All COVID-19 inpatients that were consecutively referred to our psychiatry liaison service were selected for analysis. A semi structured proforma was used for the assessment of the socio-demographic and clinical variables of the patients. Psychiatric diagnosis was made using ICD-10/DCR criteria. Our team was equipped with protective clothing, surgical gloves, face shields, and FFP2 face masks during the consultation with the patient. In addition, we kept a minimum of 2 m between the staff and the patient and avoided all physical contact with patients and objects inside the room. The collected data were entered in Microsoft Excel, tabulated and analyzed using SPSS (18.0 Version). Statistical analysis was done using parametric and nonparametric statistical techniques for measuring central tendency and standard deviation.

RESULTS

We received consultations for 35 SARS-CoV-2-positive cases. Among them, 22(62.9%) were male while 13(37.1%) were female. The mean age of the patients was 48.91± 13.01. The majority of the patients (31.4%) were from Chitwan district. A complete list of clinical data is shown in (Table 1).

Table 1. Socioclinico characteristics of patients

Variable	Frequency (%)
Age (Mean ± SD)	48.91± 13.01
Sex	
Male	22 (62.9)
Female	13 (37.1)
Address	
Chitwan	11(31.4)
Nawalparasi	7 (20)
Butwal	5 (14.3)
Hetauda	3 (8.6)
Simara	2 (5.7)
Sarlahi	2 (5.7)
Gorkha	3 (8.6)
Gulmi	1 (2.9)
Lamjung	1 (2.9)
History of past psychiatric illness	
Yes	9 (25.7)
No	26 (74.3)
Comorbidities	
Yes	14 (40)
No	21(60)
Psychiatric diagnosis	
Anxiety NOS	13(37.1)
Depressive disorder	3(8.6)
Psychosis	2(5.7)
Delirium	8(22.9)
Acute stress reaction	4(11.4)
Adjustment disorder	3(8.6)
ISH with Emotionally unstable personality disorder, Borderline type	1(2.9)
ADS in uncomplicated withdrawal	1(2.9)

Around 25.7% of them had a history of past psychiatric illness. Similarly, around 40% had coexisting organic illness. Majority of the patients, around 37% were diagnosed as anxiety disorder followed by 22.9% delirium, 11.4% acute stress reaction, 8.6% depressive illness and adjustment disorder, 2.9% had ADS in uncomplicated withdrawal and ISH by hanging with emotionally unstable personality disorder, borderline type.

DISCUSSION

We analyzed the psychiatric consultation done in COVID patients during the second wave of pandemic. A total of 35 consultations were done in a study period of 2 months. The mean age of patients 48.91± 13.01 is comparable to various studies done in China.[16,17,18] In our study, we found a high percentage of patients had anxiety disorder. This finding was in concordance with the studies done in various parts of the world.[19,20,21] Similarly, we found a high proportion of stress related disorder and depression in the patients, in line with previous studies.[10,20,21] Reasons for increased anxiety, depression and stress related disorders in patients could be due to various factors. One possible factor is a lack of contact with families and loved ones during quarantine or hospitalization[22], fear relating to the disease due to poor knowledge [23] or misinformation[24] regarding to COVID-19, feeling of self-blame[25], and social stigma.[26,27] Similarly, delirium was present in around 23 % in our study. Studies have shown presence of delirium in around 25-33% of COVID-19 patients.[28,29] Studies show older adults, a viral infection like COVID-19, fever, polypharmacy and hypoxemia may trigger delirium. Furthermore, presence of comorbidities found during the viral infection and critically ill patients requiring ICU-level care are most at risk of developing delirium.[30] In our study, 25.7% had a history of past psychiatric illness. Worsening of the psychiatric symptoms among some patients with pre-existing psychiatric disorders has been reported in studies.[31] Overall, early recognition of mental illness in COVID-19 patients is crucial for ensuring timely and appropriate support, improving patient outcomes, reducing long-term consequences, and addressing the broader public health implications of the pandemic. It highlights the need for a comprehensive approach to healthcare that encompasses both physical and mental well-being.

CONCLUSIONS

There was a high prevalence of psychiatric illness among COVID-19 patients. Thus, screening of psychiatric symptoms in COVID 19 patients may be helpful in ensuring proper management of cases. Nevertheless, the collective mental health effects of the pandemic are substantial and addressing them will require a comprehensive and long-term approach involving healthcare systems, communities and individuals themselves.

ACKNOWLEDGEMENT

The authors would like to thank all patients in the study and the entire department of Psychiatry, COMSTH for their support in conducting this study.

Conflict of interest: None

REFERENCES

1. World Health Organization. WHO coronavirus disease (COVID-19) dashboard. https://covid19.who.int.
2. Cascella M, Rajnik M, Aleem A, Dulebohn SC, Di Napoli R. Features, Evaluation, and Treatment of Coronavirus (COVID-19). 2022 Oct 13. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan. PMID: 32150360.
3. Torales J, O'Higgins M, Castaldelli-Maia JM, Ventriglio A. The outbreak of COVID-19 coronavirus and its impact on global mental health. Int J Soc Psychiatry. 2020 Jun;66(4):317-320. doi: 10.1177/0020764020915212. Epub 2020 Mar 31. PMID: 32233719.
4. Xiang YT, Yang Y, Li W, Zhang L, Zhang Q, Cheung T, et al. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. Lancet Psychiatry. 2020 Mar;7(3):228-229. doi: 10.1016/S2215-0366(20)30046-8. Epub 2020 Feb 4. PMID: 32032543; PMCID:

PMC7128153.

5. Siu JY. The SARS-associated stigma of SARS victims in the post-SARS era of Hong Kong. Qual Health Res. 2008 Jun;18(6):729-38. doi: 10.1177/1049732308318372. PMID: 18503014.
6. Jones, C., Humphris, G. M., Griffiths, R. D. Psychological morbidity following critical illness-the rationale for care after intensive care. Clinical Intensive Care. 1998; 9(5), 199-205.
7. Bao Y, Sun Y, Meng S, Shi J, Lu L. 2019-nCoV epidemic: address mental health care to empower society. Lancet. 2020 Feb 22;395(10224): e37-e38. doi: 10.1016/S0140-6736(20)30309-3. Epub 2020 Feb 7. PMID: 32043982; PMCID: PMC7133594.
8. Huang Y, Zhao N. Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: a web-based cross-sectional survey. Psychiatry Res. 2020 Jun; 288:112954. doi: 10.1016/j.psychres.2020.112954. Epub 2020 Apr 12. Erratum in: Psychiatry Res. 2021 May; 299:113803. PMID: 32325383; PMCID: PMC7152913.
9. Wang D, Hu B, Hu C, Zhu F, Liu X, Zhang J, et al. Clinical Characteristics of 138 Hospitalized Patients With 2019 Novel Coronavirus-Infected Pneumonia in Wuhan, China. JAMA. 2020 Mar 17;323(11):1061-1069. doi: 10.1001/jama.2020.1585. Erratum in: JAMA. 2021 Mar 16;325(11):1113. PMID: 32031570; PMCID: PMC7042881.
10. Lakhan R, Agrawal A, Sharma M. Prevalence of Depression, Anxiety, and Stress during COVID-19 Pandemic. J Neurosci Rural Pract. 2020 Oct;11(4):519-525. doi: 10.1055/s-0040-1716442. Epub 2020 Sep 11. PMID: 33144785; PMCID: PMC7595780.
11. Liotta EM, Batra A, Clark JR, Shlobin NA, Hoffman SC, Orban ZS, et al. Frequent neurologic manifestations and encephalopathy-associated morbidity in Covid-19 patients. Ann Clin Transl Neurol. 2020 Nov;7(11):2221-2230. doi: 10.1002/acn3.51210. Epub 2020 Oct 5. PMID: 33016619; PMCID: PMC7664279.
12. Varatharaj A, Thomas N, Ellul MA, Davies NWS, Pollak TA, Tenorio EL, et al; CoroNerve Study Group. Neurological and neuropsychiatric complications of COVID-19 in 153 patients: a UK-wide surveillance study. Lancet Psychiatry. 2020 Oct;7(10):875-882. doi: 10.1016/S2215-0366(20)30287-X. Epub 2020 Jun 25. Erratum in: Lancet Psychiatry. 2020 Jul 14; PMID: 32593341; PMCID: PMC7316461.
13. Ely EW, Margolin R, Francis J, May L, Truman B, Dittus R, et al. Evaluation of delirium in critically ill patients: validation of the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU). Crit Care Med. 2001 Jul;29(7):1370-9. doi: 10.1097/00003246-200107000-00012. PMID: 11445689.
14. Fischer M, Coogan AN, Faltraco F, Thome J. COVID-19 paranoia in a patient suffering from schizophrenic psychosis - a case report. Psychiatry Res. 2020 Jun; 288:113001. doi: 10.1016/j.psychres.2020.113001. Epub 2020 Apr 17. PMID: 32315884; PMCID: PMC7162758.
15. Zulkifli N.A., Sivapatham S., Guan N.C. Brief psychotic disorder in relation to coronavirus, COVID-19 outbreaks: a case report. Malaysian J. Psychiatry. 2020;29(1).
16. Zhang J, Lu H, Zeng H, Zhang S, Du Q, Jiang T, et al. The differential psychological distress of populations affected by the COVID-19 pandemic. Brain Behav Immun. 2020 Jul; 87:49-50. doi: 10.1016/j.bbi.2020.04.031. Epub 2020 Apr 15. PMID: 32304883; PMCID: PMC7156946.
17. Liu D, Baumeister RF, Veilleux JC, Chen C, Liu W, Yue Y, et al. Risk factors associated with mental illness in hospital discharged patients infected with COVID-19 in Wuhan, China. Psychiatry Res. 2020 Oct; 292:113297. doi: 10.1016/j.psychres.2020.113297. Epub 2020 Jul 13. PMID: 32707218; PMCID: PMC7355324.
18. Dai LL, Wang X, Jiang TC, Li PF, Wang Y, Wu SJ, et al. Anxiety and depressive symptoms among COVID-19 patients in Jianghan Fangcang Shelter Hospital in Wuhan, China. PLoS One.

2020 Aug 28;15(8): e0238416. doi: 10.1371/journal.pone.0238416. PMID: 32857826; PMCID: PMC7454940.

19. López-Atanes M, González-Briceño JP, Abeal-Adham A, Fuertes-Soriano S, Cabezas-Garduño J, Peña-Rotella Á, et al. Liaison Psychiatry During the Peak of the Coronavirus Pandemic: A Description of Referrals and Interventions. Front Psychiatry. 2021 Dec 9; 12:555080. doi: 10.3389/fpsyt.2021.555080. PMID: 34955903; PMCID: PMC8698874.
20. Nagarajan R, Krishnamoorthy Y, Basavarachar V, Dakshinamoorthy R. Prevalence of post-traumatic stress disorder among survivors of severe COVID-19 infections: A systematic review and meta-analysis. J Affect Disord. 2022 Feb 15; 299:52-59. doi: 10.1016/j.jad.2021.11.040. Epub 2021 Nov 17. PMID: 34800571; PMCID: PMC8596764.
21. Deng J, Zhou F, Hou W, Silver Z, Wong CY, Chang O, et al. The prevalence of depression, anxiety, and sleep disturbances in COVID-19 patients: a meta-analysis. Ann N Y Acad Sci. 2021 Feb;1486(1):90-111. doi: 10.1111/nyas.14506. Epub 2020 Oct 2. PMID: 33009668; PMCID: PMC7675607.
22. Dubey S, Biswas P, Ghosh R, Chatterjee S, Dubey MJ, Chatterjee S, et al. Psychosocial impact of COVID-19. Diabetes Metab Syndr. 2020 Sep-Oct;14(5):779-788. doi: 10.1016/j.dsx.2020.05.035. Epub 2020 May 27. PMID: 32526627; PMCID: PMC7255207.
23. Paakkari L, Okan O. COVID-19: health literacy is an underestimated problem. Lancet Public Health. 2020 May;5(5): e249-e250. doi: 10.1016/S2468-2667(20)30086-4. Epub 2020 Apr 14. PMID: 32302535; PMCID: PMC7156243.
24. Mian A, Khan S. Coronavirus: the spread of misinformation. BMC Med. 2020 Mar 18;18(1):89. doi: 10.1186/s12916-020-01556-3. PMID: 32188445; PMCID: PMC7081539.
25. Belen H. Fear of COVID-19 and Mental Health: The Role of Mindfulness in During Times of Crisis. Int J Ment Health Addict. 2022;20(1):607-618. doi: 10.1007/s11469-020-00470-2. Epub 2021 Apr 26. PMID: 33935608; PMCID: PMC8075278.
26. Sotgiu G, Dobler CC. Social stigma in the time of coronavirus disease 2019. Eur Respir J. 2020 Aug 13;56(2):2002461. doi: 10.1183/13993003.02461-2020. PMID: 32631833; PMCID: PMC7338401.
27. Bagcchi S. Stigma during the COVID-19 pandemic. Lancet Infect Dis. 2020 Jul;20(7):782. doi: 10.1016/S1473-3099(20)30498-9. PMID: 32592670; PMCID: PMC7314449.
28. Kennedy M, Helfand BKI, Gou RY, Gartaganis SL, Webb M, Moccia JM, et al. Delirium in Older Patients With COVID-19 Presenting to the Emergency Department. JAMA Netw Open. 2020 Nov 2;3(11): e2029540. doi: 10.1001/jamanetworkopen.2020.29540. PMID: 33211114; PMCID: PMC7677760.
29. Helms J, Kremer S, Merdji H, Clere-Jehl R, Schenck M, Kummerlen C, et al. Neurologic Features in Severe SARS-CoV-2 Infection. N Engl J Med. 2020 Jun 4;382(23):2268-2270. doi: 10.1056/NEJMc2008597. Epub 2020 Apr 15. PMID: 32294339; PMCID: PMC7179967.
30. Cipriani G, Danti S, Nuti A, Carlesi C, Lucetti C, Di Fiorino M. A complication of coronavirus disease 2019: delirium. Acta Neurol Belg. 2020 Aug;120(4):927-932. doi: 10.1007/s13760-020-01401-7. Epub 2020 Jun 10. PMID: 32524537; PMCID: PMC7286634.
31. Zhou J, Liu L, Xue P, Yang X, Tang X. Mental Health Response to the COVID-19 Outbreak in China. Am J Psychiatry. 2020 Jul 1;177(7):574-575. doi: 10.1176/appi.ajp.2020.20030304. Epub 2020 May 7. PMID: 32375540.

Citation: Thapa A, Shah RP, Bhusal A, Poudel B. Consultation Liaison Psychiatry for Covid-19 Inpatients: A Hospital Based Study. JCMS Nepal. 2024; 20(2): 119-23.