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## WEST AFRICAN JOURNAL OF MEDICINE



### **CASE REPORT**

# Depression and Suicidality in a COVID-19 Patient: A Case Report from Calabar, Nigeria

Dépression et Suicidalité Chez Un Patient Atteint de COVID-19: Un Rapport de Cas de Calabar, au Nigéria

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#### **ABSTRACT**

**BACKGROUND:** The coronavirus pandemic is associated with significant morbidity and mortality. While physical recovery has been made a priority, the psychological wellbeing of recovered patients is not receiving the attention it deserves. **CASE PRESENTATION:** We present the case of a 27-year-old male who developed severe depression associated with anxiety and suicidal ideations two weeks after full recovery from COVID-19 infection. Significant somatization was also present at the onset which he misattributed to a recurrence of the infection. He was admitted for in-patient psychiatric care and fully recovered after six weeks of medication and psychotherapy. **CONCLUSION:** Infection with the virus is a psychologically distressing experience that can trigger mental disorders in vulnerable individuals. Our report highlights the mental health needs of all COVID-19 patients and the need for psychological evaluation in the post-recovery period. WAJM 2022; 39(5): 548-551.

Keywords: Anxiety, Depression, Suicidal, COVID-19, Nigeria.

#### RÉSUMÉ

**CONTEXTE:** La pandémie de coronavirus est associée àmorbidité et mortalité importantes. Pendant la récupération physiquea été fait une priorité, le bien-être psychologique deles patients rétablis ne reçoivent pas l'attention qu'ils méritent.

PRÉSENTATION DU CAS: Nous présentons le cas d'un jeune homme de 27 anshomme qui a développé une dépression sévère associée à l'anxiétéet les idées suicidaires deux semaines après le rétablissement complet de la COVID-19 infection. Une somatisation importante était également présente à l'apparition qu'il a attribuée à tort à une récurrence de l'infection.Il a été admis pour des soins psychiatriques hospitaliers et completsrécupéré après six semaines de médicaments et de psychothérapie.

CONCLUSION: L'infection par le virus est une atteinte psychologiqueexpérience pénible qui peut déclencher des troubles mentaux dansles personnes vulnérables. Notre rapport met en lumière la santé mentaleles besoins de tous les patients atteints de la COVID-19 et le besoin dévaluation dans la période post-rétablissement. WAJM 2022; 39(5): 548–551.

Mots-clés: Anxiété, Dépression, Suicidaire, COVID-19, Nigéria.

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#### INTRODUCTION

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) threatens global public health, causing a pandemic affecting over 200 countries worldwide. By late September 2021, over 230 million cases were reported, with at least 4.7 million deaths. The impact of the pandemic has been far-reaching as it has been devastating. Health systems collapsed, social life was disrupted, and the full scale of the aftereffects will probably outlast the disease itself. Farst a suppose the service of the ser

Apart from physical morbidity, its effects on mental health have been reported, and this is unsurprising.<sup>3</sup> In previous pandemics, the risk for mental illness increased as well, as seen in the Spanish flu of 1918–1919 and severe acute respiratory syndrome in Hong Kong in 2003.<sup>4</sup>

Mental disorders among COVID-19 patients, whether actively ill or recovered, can lead to poorer general health outcomes, lower quality of life and, in some cases, loss of life. In this paper, we report a case of a mental disorder occurring in a patient who fully recovered from the viral infection to highlight the importance of mental health considerations in COVID-19 healthcare.

#### CASE REPORT

The patient is a 27-year-old unmarried male, a tailor by profession who lives in Calabar, Nigeria. He was first seen in the Adiabo COVID-19 Isolation Center in Cross River State after a oneweek history of persistent cough and high-grade fever unresponsive to antibiotic therapy. In the centre, a polymerase chain reaction test confirmed a diagnosis of COVID-19. He was then admitted for a month and made a full recovery.

Two weeks after discharge, he started experiencing upper abdominal pain, general malaise and cold sensation in his feet. He returned to the isolation centre where he was assessed, given a clean bill of physical health, reassured and allowed home. However, within a week, he had developed intense fear that he was having a recurrence of COVID-19 and believed he would die. He also had chest tightness, difficult breathing, tremors and palpitations, and his

symptoms were aggravated by information about the viral infection sourced online.

He revisited the Adiabo isolation centre and was again assured. However, he was not satisfied with the feedback and resisted the suggestion that his symptoms could be psychological. Nonetheless, a psychiatrist (one of the paper authors) was invited to the isolation centre to review him. On assessment, prolonged and undue sadness, loss of interest in previously pleasurable activities, and reduced energy levels were found. Night sleep was less than three hours as he spent most of the time worrying about how the infection would affect his life. Eventually, he had little or no sleep for about one week. He was perturbed about his insomnia and thought he was 'going crazy'. His appetite for food reduced which made him even more worried. Feelings of helplessness set in, and he believed there was no hope for his recovery. Somatization was also prominent in his symptom profile. In his words, "It is hot in my chest. It feels like there is a fire that starts from my chest, spreads to my head and my legs". He considered taking his life by hanging but hesitated because he feared how his death would affect his mother. His family was worried about the risk of contagion. They isolated him for fear that he would infect his mother despite a negative test result.

After the session with the psychiatrist, he stopped insisting that he was reinfected. However, he still denied that his symptoms were psychological in origin. His disbelief made his disposition unfavourable to psychiatric treatment as he declined psychiatric admission or medication prescribed by the assessing psychiatrist. Instead, his family took him to a church for prayers. There his condition worsened, and he somehow obtained a bottle of pesticide which he intended to ingest in a final suicidal act. Before he could take the poison, he was found and brought to the psychiatric hospital.

Hallucinations, delusions or psychoactive substance use were absent. He had been in good physical health prior to COVID-19 infection and had no prior

history of mental illness, neither was there a family history of psychiatric disorder.

Mental state examination revealed a very agitated man, crying and begging for help, sad and anxious with severe suicidal ideation, poor concentration and poor judgment.

Physical examination findings were essentially normal. Basic investigations like complete blood count, urinalysis and urine toxicology screen did not show significant findings.

Using the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), he met the criteria for a diagnosis of Major Depressive Disorder with severe anxious distress and was managed as such. This diagnosis was made based on findings from unstructured clinical interviews and agreed upon by all authors.

He was admitted into the ward and commenced oral amitriptyline, starting from a daily dose of 75mg, increasing to 100 mg over two weeks. While on admission, he also received supportive psychotherapy. Symptoms resolved in six weeks.

He showed good recovery and resumed work nine weeks after discharge. None of the presenting symptoms was present at an assessment 12 weeks after discharge. He has since been reunited with his family. He is currently off medications and doing well.

#### DISCUSSION

This case describes the development of depression and suicidality in a patient following recovery from COVID-19 infection.

COVID-19 has been linked with an increased rate of suicide and depression. 5,6 Apart from the psychosocial stress of isolation and job loss, fear of death and illness-related stigma increase depression risk. 6 Stigmatization was noted in our patient whose family kept him isolated after full recovery and a negative test result. A high level of inflammatory markers has been found post-infection and might increase depression risk. 6

Suicidality and completed suicides have markedly increased due to COVID-19 —An association that has been called a 'dual pandemic'. 5 Self-harm can

complicate any psychiatric disorder, especially depression. Psychological, emotional or socioeconomic hardships can in themselves trigger suicidal ideation.<sup>7</sup>

The etiological framework of suicide by Émile Durkheim can be useful in examining how the pandemic's impact can cause suicide.8 According to his theory, insufficient group integration could lead to egoistic suicide; a lack of social regulation and unexpected stress could cause anomic suicide; extreme social regulations and expectations could trigger fatalistic suicide, and high social enmeshment explains altruistic suicide. 8,9 The COVID-19 pandemic has been associated with all types of suicide as described by Durkheim.8,10 Factors contributing to suicide in the pandemic include isolation, quarantine and confinement (egoistic), job loss and financial difficulties (anomic), stringent lockdowns and compulsory screening (fatalistic), and killing oneself to avoid infecting loved ones(altruistic).<sup>5,8</sup>

Our patient reported feeling hotness in the chest which moved from one body part to another, a presentation that is not unusual in the local cultural context.11 "Internal heat" is one among several common, well-recognized somatization symptoms that occur in cultures of sub-Saharan Africa. 12 Other examples include heaviness of the head, poorly localized pain, and crawling, peppery or pulsating sensations which could occur in any part of the body. 11,13,14 They are considered non-specific expressions of psychological distress, present in any psychiatric disorder but commonly depression or anxiety. 15 When present, these symptoms tend to be treatment-resistant, run a chronic course and can be a source of diagnostic confusion. 14,16,17 One study, however, found that these symptoms, though common in depression, have less diagnostic weight than the core symptoms outlined in the diagnostic criteria. 18 In our patient, somatization symptoms were likely an expression of his mental distress and resolved fully with the treatment of the underlying psychiatric disorder.

Immoderate media consumption is associated with increased depression risk during the pandemic.<sup>19</sup> In a German

population-based survey, the effect of media consumption depends on the frequency, duration and type of media used. <sup>19</sup> A critical threshold media use of about seven times or 2.5 hours per day was the difference between mild and moderate severities of non-specific anxiety and depression. <sup>19</sup> Increased use of online media as a source of COVID-19 information was a definite stressor in our patient.

Many patients visit traditional or faith-based healers for mental health care in Nigeria.<sup>20-22</sup> In one study, 95% had visited these alternative sources of care at the onset of mental illness.<sup>22</sup> Our patient was taken to church for succour, reflecting the African's disease attribution to both physical and spiritual causes.<sup>23</sup> Persons who attribute mental illness to spiritual causes significantly patronize traditional or religious care, causing delays in the pathway to care and complications such as symptom worsening or human rights abuse. <sup>22,24</sup> On the bright side, a collaboration between orthodox and unorthodox care is possible. It can yield benefits in case referral, reduce harmful practices, and improve access to quality care.25

Finally, anxious patients who are "worried-well" or have anxiety symptoms could misattribute difficult breathing to COVID-19. A thorough history, chest examination and relevant laboratory investigations would readily distinguish breathlessness due to organic disorder from those that are psychogenic in origin.<sup>26</sup> In the latter, symptoms are also worse at rest but improve at night and lack environmental triggers. Furthermore, psychological distress due to a recent traumatic event is also present.26 In psychogenic dyspnea, identifying the underlying psychological distress and offering appropriate therapies would lead to symptom resolution.26

#### CONCLUSION

The presented case illustrates the emergence of a mental disorder in the post-acute phase of recovery from COVID-19. Infection with the virus can be psychologically traumatic, triggering severe mental disorders. Attention to the mental health of all COVID-19 patients will foster holistic care and wellbeing after discharge from treatment.

#### **Informed Consent**

Complete details regarding the presentation of this case report were discussed with the patient. He provided informed consent for this publication.

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