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Case Report

A case of suicide during the 2017 monkeypox outbreak in Nigeria

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ABSTRACT

We report a case of suicide in a 34-year-old businessman who was admitted to an isolation facility in a tertiary hospital during the 2017/2018 monkeypox outbreak in Nigeria. We describe the possible psychosocial factors associated with suicide and highlight the challenges faced and lessons learnt in the management of the case. To our knowledge, this is the first reported case of suicide linked to human monkeypox.

Introduction

Beginning in September 2017, Nigeria reported a re-emergence of a large outbreak of the West African clade of human monkeypox, with a total of 122 confirmed or probable cases recorded in 17 of the 36 states in Nigeria (Yinka-Ogunleye et al., 2019). The outbreak was accompanied by widespread fear and panic, and concerns about stigmatization and social exclusion of affected patients, survivors, and family members (Ogoina et al., 2019a; Yinka-Ogunleye et al., 2019). Prior outbreaks of emerging infectious diseases (EIDs), including the current COVID-19 pandemic, have shown that these factors drive emergence of various mental health disorders in infected patients and affected populations (Ganesan et al., 2021; Mohammed et al., 2015; Zürcher et al., 2020). Suicide and suicidal ideation have been previously reported during outbreaks of various EIDs (Leaune et al., 2020). However, we are not aware of any previous report of suicide in patients with human monkeypox.

In this article, we describe a case of suicide in one of the human monkeypox patients hospitalized during the 2017/2018 human monkeypox outbreak in Nigeria. We also outline the impact of suicide on the outbreak preparedness and response.

Case report

A 34-year-old businessman was admitted in a tertiary hospital in Nigeria as a suspected case of human monkeypox based on a 5-day history of fever, headache, and malaise, accompanied a day later by progressive appearance of vesiculopustular rashes on his face, limbs, trunk, and genitalia. There were no associated systemic symptoms or signs. He

was married with three children, and had no prior history of suicide attempt, mental illness, deviant behavior, misuse of alcohol, or substance abuse.

Samples (skin and blood) were sent for definitive diagnosis outside Nigeria because there were no facilities for monkeypox confirmation in Nigeria at that time. HIV-1 and HIV-2 antibodies were not detected.

While on admission, he expressed some worry over how he could have contracted the infection and the implication of the disease to his overall health and family life. He seemed a bit reserved compared with other cases on admission, but did not exhibit any suicidal ideation. Although attending physicians offered reassurance and allayed his anxieties, he did not receive further psychological evaluation and counselling by trained personnel.

On the 4th day of admission, at about 6.00 am, the nurse on duty observed that the patient was not on his bed and was not found anywhere within the isolation facility. Thereafter, he was found dead behind the isolation facility having hanged himself with a rope on a pole. Two days after his death, laboratory diagnosis of human monkeypox was confirmed by polymerase chain reaction.

Challenges observed after death of patient

Two major challenges were faced by the managing team after the death of the patient by suicide.

The first challenge was related to movement of the corpse to the mortuary and ensuring preservation and safe burial. Due to local beliefs regarding suicide as an abomination associated with curses, nobody, including the family members, was initially willing to untie the corpse

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from the pole. Most of those present were afraid of being afflicted with curses if they participated in the recovery of the corpse of a suicide case. Even after untying the corpse, mortuary attendants were reluctant to carry the corpse to the mortuary due to fear of being infected. After emergency training on the use of personal protective equipment (PPE), reassurance that infection was unlikely if PPE were used appropriately, and provision of monetary incentives, the corpse was eventually moved to the hospital mortuary.

The second challenge was related to addressing the concerns of family members about his death. His family members initially rejected the diagnosis of monkeypox and questioned the need for isolation due to the lack of confirmatory diagnosis at the time of suicide. Concerns were raised about the suicide leading to stigmatization of family members by the larger society and the need to ensure dignified burial. Series of meetings were held with family members, psychological counselling and support were offered, and misinformation and misconception about patient's death were dispelled. On day 12 after patient's death, the corpse was safely buried.

Discussion

Suicidal ideation, suicidal attempts, and suicide have been reported during various EID outbreaks, such as Ebola, severe acute respiratory syndrome coronavirus (SARS-COV), influenza, and COVID-19 (Leaune et al., 2020). To the best of our knowledge, this is the first report of suicide during a monkeypox outbreak.

We have previously reported psychosocial features among patients hospitalized with human monkeypox (Ogoina et al., 2019b). Suicide and suicide attempts have been attributed to the psychosocial disturbances, social isolation, and economic downturn that accompany outbreaks (Leaune et al., 2020; Reger et al., 2020). Many of those prone to suicide have preexisting mental illness, but other factors, such as fear of infection, loneliness, disconnectedness, and feelings of depression or stigmatization, are contributory (Leaune et al., 2020; Reger et al., 2020). Infodemics, defined as the excessive flow of (often incorrect and misleading) information during epidemics, have also been shown to drive fear, panic, and misconceptions.

It is probable that delay in confirmatory diagnosis fueled uncertainty and fear in our patient. Furthermore, fear of the disease and anxiety over its outcomes and impact on his personal and family life could have played a role in the patient's decision to commit suicide. Our patient did not report any prior mental illness, but it is not unusual for background mental illness to be undiagnosed at the time of hospitalization for non-psychiatric illness (Downey et al., 2012). Even if mental illness is excluded, suicides may occur impulsively in moments of crisis due to a breakdown of the person's ability or support system to deal with life stresses (Kleiman and Liu, 2013).

The challenges faced in the management of this case of suicide provide lessons for epidemic response teams and isolation facilities during ID outbreaks. Firstly, these challenges emphasize the need for comprehensive and routine psychological assessment of all suspected and confirmed cases of EID, especially those admitted to isolation wards, to enable early identification of background mental illness and the provision of psychological support services as needed. The World Health Organization recently called for greater attention to mental health problems and suicide prevention during epidemics (World Health Organization, 2020), and included psychosocial support as a key component of case management during the Ebola virus disease outbreak in West Africa (World Health Organization, 2014). Secondly, our observations call for strengthening of the suicide preparation and response efforts during epidemics in Nigeria. Such efforts should include fully integrating mental health and psychological support services into epidemic response efforts, and building infection prevention and control (IPC)-related knowl-

edge and skills among all healthcare workers, including those who offer support services, such as mortuary and other health attendants. Furthermore, health systems managing epidemics should address the flow of misinformation and misconceptions that distort risk perceptions and drive fear and panic among the public. Moreover, they should dispel cultural taboos and misconceptions regarding suicide, and improve system-related challenges, such as unfriendly and uncomfortable environments within isolation facilities, that promote despondency and loneliness and serve as harbingers for suicide ideation and suicide (Leaune et al., 2020).

In conclusion, we have described a case of suicide in a young adult admitted to an isolation facility in Nigeria on account of monkeypox. This case illustrates the potential impact of psychological and mental health challenges on a health system's preparedness and response to epidemics, and calls for greater attention and effort toward psychological and mental support among patients in confinement during ID outbreaks.

Conflicts of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Ethical approval

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