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Support for families of isolated or deceased COVID-19 patients in sub-Saharan Africa

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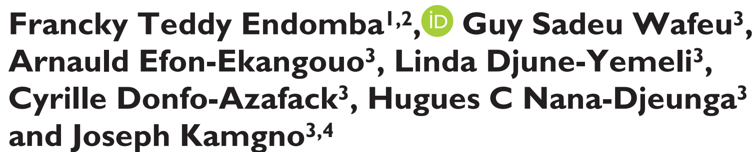

Abstract

Aside the direct effect of the COVID-19 on infected patients, this infectious disease outbreak has various psychological consequences. These mental health repercussions pertain to the general population of uninfected individuals, and particularly families of isolated or deceased COVID-19 patients. This aspect is of substantial interest amid sub-Saharan African communities, considering the key place and cultural significance of mourning and funerals in these settings. In this commentary, we discuss on the issue of psychological and social support of COVID-19 patients' families, by taking into account some sub-Saharan African cultural considerations.

Keywords

COVID-19, family, psychosocial support, sub-Saharan Africa

Introduction

Since December 30, 2019, when the first cases of a novel betacoronavirus SARS-CoV-2 infection were reported in Wuhan in China, the world is facing a pandemic named coronavirus Disease 19 (COVID-19) (Cevik et al., 2020). The World Health Organization (WHO) declared COVID-19 a public health emergency of international concern, then a pandemic respectively on January 30 and March 11, 2020 (Balkhair, 2020). As of September 8, 2020, 27,246,686 cases have been reported worldwide, with a global mortality rate of 3.3% (Johns Hopkins Coronavirus Resource Center, 2020). In Africa, at the date of September 7, 2020, all the 47 countries of the WHO Afro region were affected with a total of 1,862,609 cumulative cases and 23,053 reported deaths (Coronavirus | WHO | Regional Office for Africa, 2020). It is estimated that if containment measures fail during the first year of the pandemic in WHO Afro region, 83,000–190,000 deaths and 23,000,000–44,000,000 confirmed cases will be reported (Coronavirus | WHO | Regional Office for Africa, 2020 [New WHO estimates: Up to 190 000 people could die of COVID-19 in Africa if not controlled and WHO and Regional Office for Africa [WWW Document], 2020]).

In addition to known health consequences (especially respiratory ones) of this infectious illness on concerned patients (Cevik et al., 2020), the psychological aspect on families has to be considered (especially in sub-Saharan Africa), due to both isolation and measures linked to corpses' management. Indeed, the fear to loss one family member and/or coping difficulties of grieved families can lead to detrimental psychological effects and have harmful social impact with the potential triggering of violence acts (Breen, 2020; Zhai and Du, 2020). It's in this wake that in this commentary article we propose some support pathways to these COVID-19 patients' entourage especially in sub-Saharan African settings.

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Methods

In order to conceive this article, we made a concise research on PubMed, Google Scholar, and African Journal Online. We used three groups of key-words notably a first group pertaining to the term "COVID-19" or its synonyms/derivatives, a second one related to the term "Families" or its synonyms/derivatives, and a third one linked to the term "Grief" or its synonyms/derivatives.

Current knowledge on post-mortem infectiousness of COVID-19

The COVID-19 spread mainly from person-to-person, through respiratory droplets produced through coughs, sneezes or talks. SARS-CoV-2 can survive on surfaces up to 9 days depending on the inoculum shed and type of surfaces (Kampf et al., 2020). Therefore, contamination by coming into contact with an infected surface and then touching the mouth, nose or eyes is a possible way of virus spreading (CDC, 2020). Post-mortem examination of patients with COVID-19 has reported the presence of the virus in various samples, including respiratory track samples. In a series of 10 autopsy performed on deaths from COVID-19, SARS-CoV-2 was detectable in the respiratory tracts of all patients. Polymerase chain reaction testing was positive in pleural effusion (Schaller et al., 2020). Post-mortem nasopharyngeal swab was also positive for SARS-CoV-2 in two patients who died in Oklahoma (United States) (Barton et al., 2020). Similarly, the Middle East respiratory syndrome coronavirus (MERS-CoV), a virus close to SARS-CoV-2, have been detected in nasal secretions of human corpses (Mahallawi, 2018). The possibility of surface contact transmission and the presence of SARS-CoV-2 in post-mortem samples suggest a possible post-mortem infectiousness of COVID-19. This infection risk may concern all the aspect of corpse or sample manipulation including reconnaissance of the body, transportation, autopsy, sanitization of the autopsy rooms, dressing, exposure, burial/cremation, custody and analysis of the samples. This infectious risk from contact with dead people has been shown for other viral infections like Ebola. Indeed touching the corpse of deceased patients double the risk of infection (risk ratio, 2.1; 95% CI, 1.1–4.2) among household members (Vetter et al., 2016). However, dead bodies are generally not infectious, apart from hemorrhagic fevers and cholera cases. When handled improperly during an autopsy, lungs of patients with pandemic influenza are also infectious. Data on the transmission of SARS-CoV-2 from dead bodies of confirmed or suspected cases are scarce, and to date there is no evidence of SARS-CoV-2 contamination from exposure to bodies of persons who died from COVID-19 (WHO, 2020).

Current recommendations on the post-mortem management of COVID-19 death patients

Multiple international guidelines and recommendations have been issued regarding the safe management of dead bodies with suspected or confirmed COVID-19. A recent systematic review identified 23 guidance documents providing practical advice on handling suspected or confirmed cases of COVID-19 corpses throughout the different phases (Yaacoub et al., 2020). Furthermore, some African governments have produced local recommendation for safe handling of bodies of deceased persons with suspected or confirmed COVID-19. For example, on 23 April 2020, the Cameroonian prime minister has instructed the minister of territorial administration to make sure that deceased patients from COVID-19 are buried in the city were the death occurs. Following the safety recommendations, corpses are therefore collected from hospitals immediately after death by local council staff and are handled and buried in a specified area in the presence of few or no family member.

Psychological and social outcomes of COVID-19 around grief

The COVID-19 pandemic has a huge burden on patients' families in several ways, either when these patients are alive or after death (Breen, 2020; Zhai and Du, 2020). These consequences on patients' entourage are mainly psychological and social (Goveas and Shear, 2020; Mortazavi et al., 2020), and are partly linked to cultural habits, especially among sub-Saharan African populations (Ekore and Lanre-Abass, 2016; Gysels et al., 2011).

Patients diagnosed with COVID-19, and especially hospitalized ones, experience poor quality deaths (also named "bad deaths") (Carr et al., 2020; Morris et al., 2020). Poor quality deaths are characterized by physical discomfort, respiratory difficulties, social isolation, and psychological distress, treatments without respect or dignity, and even unwanted medical interventions (Krikorian et al., 2020; Meier et al., 2016). All these detrimental events occurring before death have a negative impact on bereaved families which might lead to harmful social consequences (McKay et al., 2020; Morris et al., 2020). Since the SARS-CoV-2 is highly contagious, the international recommendations proscribe any contact of COVID-19 hospitalized (and isolated) patients with their friends, relatives, and families (Yaacoub et al., 2020). This is negatively undergone by patients but also by their loved ones who are unable to assist their isolated relatives and more painfully say one's farewells to them (Carr et al., 2020; Morris et al., 2020; Wallace et al., 2020). These situations can generate negative psychological

outcomes among families such as stress, anxiety, and depression (Goveas and Shear, 2020; Mortazavi et al., 2020), but also anger especially in context where families (particularly low-literacy ones) do not understand or accept all the measures related to virus spread's prevention (Eisma et al., 2020; Manguvo and Mafuvadze, 2015). The psychological consequences of COVID-19 on patients' families are worsened at the time of the death of these patients.

The management of COVID-19 deceased patients tends to accentuate the families' detrimental psychological outcomes which started when their infected relatives were living and hospitalized/isolated. Indeed, according to guidelines, access to COVID-19 dead bodies is not possible for relatives, which thereby render the grief more stressing and difficult, and contribute to complicated grief (CG) (Carr et al., 2020; Eisma et al., 2020). In this context, bereaved individuals might face sorrow, anxious ruminations, intrusive thoughts of the deceased person and depressive mood (Breen, 2020; Morris et al., 2020). This is all the more important considering the importance of funerals in African (and specifically sub-Saharan African) cultures, and the fact that in these cultures, in part due to stigma, individuals are less likely to express their psychological distress (Ekore and Lanre-Abass, 2016; Manguvo and Mafuvadze, 2015). The poor quality death of COVID-19 patients associated to the unfeasibility for their families to make traditional procedures of funerals and interments worsen the negative impact on mental health but also favor harmful social consequences (Ekore and Lanre-Abass, 2016; Gysels et al., 2011; Manguvo and Mafuvadze, 2015). For instance, in some sub-Saharan African countries, the overall incomprehension of the management procedures of dead COVID-19 infected bodies associated to the difficulty to cope the loss of their relatives, lead to violence acts towards healthcare workers. Consequently, this could be highly deleterious for health systems since the COVID-19 pandemic (as previous outbreak) also have negative psychological consequences on health professionals in the first line, especially in areas where these systems are overwhelmed by the patient flux (Cai et al., 2020; Rosenbaum, 2020; Wallace et al., 2020). All this could possibly decrease the effective response of healthcare systems facing this pandemic.

Proposals of psychological support around grief in the context of COVID-19 outbreak

To alleviate the issue of psychological impact of COVID-19 on concerned families, some care interventions might be helpful especially in sub-Saharan African settings. For instance, while COVID-19 patients are alive and isolated, regular and regulated audio/video calls can give the opportunity to families to assist and/or say "good bye" to their loved ones (Morris et al., 2020; Wallace et al., 2020). The connection with the entourage could also be maintained by the daily exchange of pictures with the help of the health care teams and the respect of confidentiality rules. One other measure before death can be the preparation (through communication-based tools) of patients/families for a likely death (especially concerning patients in critical care units) in order to ensure an anticipatory grief work (Breen, 2020; Wallace et al., 2020). When it seems that relatives of a COVID-19 dead patient do not accept the loss and that this loss appears ambiguous for them, healthcare workers can respectfully share pictures of the patients in order to confirm death (National Cancer Institute, 2002 [PDQ Supportive and Palliative Care Editorial Board, 2002]; Wang et al., 2017).

As aforementioned, the current context of pandemic can be faced with difficulties for families since they can't optimally assist their relative, before and after death. The ways to mitigate the grief's difficulties are virtual memorial services and celebrations. Indeed, families can be accompanied by professionals and/or volunteers in order to learn the use of streaming services and thus try to give memorial celebrations according to their cultures, their religions and the wishes of their deceased loved ones (Morris et al., 2020; Wallace et al., 2020). The establishment of specialized and trained teams regarding the management of bodies during inhumation ceremonies in villages (with the respect of preventive measures) can be another proposal to improve mourning conditions. These specialized teams could work together with families in order to ensure as much as possible the memorials' conditions aimed by bereaved families. In addition to all that, it appears necessary to provide systematic and tailored psychological support to bereaved persons. Assistance to grieved individuals could be provided by mental health professionals (individual and collective psychological support) but also previously bereaved persons (Carr et al., 2020; Eisma et al., 2020; Morris et al., 2020). Accredited people supporting bereaved families could help by boosting grieving individuals to communicate on their psychological pain, through social communication tools when face-to-face interviews are not practicable (Morris et al., 2020). While talking of grief in remote sub-Saharan African rural areas, in a context where families didn't say goodbye to their dead COVID-19 relatives, another issue to consider is the unearthing of cadavers. To prevent it, it might be helpful to ask for a written commitment from families and to collaborate with local traditional authorities. Indeed, these authorities could contribute to optimal interment conditions by population sensitization. The proposals we stated here for the assistance and accompaniment of COVID-19 patients' families before and after death are summarized in Table 1.

For healthcare actors directly facing the current pandemic and possibly called to make death announcement, security measures seem needed to lessen any social vindictive violence. For these health professionals frequently coping death, specific psychological supports could also be of interest in order to allow them to effectively continue to help in the control of the COVID-19 pandemic.

Table 1. Proposals of support for families to COVID-19 patients.

Before the patient's death	Regular and regulated audio/video calls to maintain the social link and allow families to assist and/or say good bye to their loved ones
	Systematic and tailored psychological support to families
	Clear communication (by health care workers) on the prognosis and preparation to a likely dead for patients in critical care units (anticipatory grief work)
After the patient's death	Accompaniment with streaming services during memorials, for distant family members
	Specialized and trained teams regarding the management of bodies during inhumation ceremonies
	Systematic and tailored psychological support (individual or collective) to bereaved persons to prevent complex grief reactions
	Collaboration with families and local traditional authorities to prevent cadaver unearthing

These psychological interventions could be individual or collective (through group discussions) (Cai et al., 2020; Morris et al., 2020; Wallace et al., 2020).

Conclusion

Psychological outcomes of COVID-19 deaths are issues to consider especially in sub-Saharan African settings. Tailored assistance to these patients, their families and healthcare workers implicated in their management, before and after death, could participate in the prevention of complicated grief and also social violence in reaction to grief. In this paper we tried to contribute to the establishment of such assistance, by providing proposals notably including transparent and adapted communication on disease prognosis, psychological intervention(s) and synergistic work with local authorities.

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