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Continuity and Rupture in Crisis: from Ebola to COVID-19 in Sierra Leone and the eastern Democratic Republic of the Congo

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ABSTRACT

This article examines the experience of healthcare professionals working in primary healthcare provision during the first wave of the COVID-19 pandemic in North Kivu, the Democratic Republic of the Congo, and in Kambia District, Sierra Leone. Drawing on ethnographic observation, interviews and focus groups, we explore everyday narratives of ‘crisis’ in these two regions which had recently seen Ebola epidemics. In describing the impact of COVID-19 on their life, work, and relationships with patients, healthcare workers made sense of the pandemic in relation to broader experiences of structural economic and political crisis, as well as differing experiences of recent Ebola epidemics. There were contradictory experiences of rupture and continuity: whilst COVID-19 disrupted routine health provision and exacerbated tensions with patients, the pandemic was also described as continuity, interacting with broader structural problems and longer-term experiences of ‘crisis’. In effect, healthcare workers experienced the COVID-19 pandemic at the crossroads between the exceptional and the everyday, where states of exception brought by emergency measures shed new light on long-standing tensions and structural crisis.

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Introduction

‘Here, we say: COVID is empty [*COVID est vide*]', the head nurse (*infirmière titulaire*) of a primary healthcare centre explained as we sat in her office in Goma, the capital of North Kivu, in the eastern Democratic Republic of the Congo (DRC). It was early 2021, and we were preparing for a focus group discussion with healthcare professionals to discuss their experiences of working through the first wave of the COVID-19 pandemic. Moving piles of papers off her desk, the head nurse explained that the rhyme ‘COVID = vide’ was an idiom among healthcare workers in the city to refer to their bewildering experience during the initial stages of the pandemic. COVID was ‘empty’, the head nurse explained, because at first, there appeared to be ‘nothing to it’. A tsunami of cases did not overwhelm the city as expected – the virus seemed to initially circulate undetected. However, the rhyme was also a commentary on the political economy of epidemic response in DRC.

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It referred to the fact that the coffers of the COVID-19 response were empty: healthcare workers described insufficient government investment in the COVID-19 pandemic response, especially in comparison to the recent Ebola epidemic. Instead, healthcare workers felt that they had been left to continue routine primary healthcare provision, all whilst adapting to the pandemic and integrating surveillance and distancing measures. *COVID = vide*, then, referred the initial invisibility of the virus, but also acted as a critique of the state health system by those working within it.

This article examines the experience of healthcare workers who continued to deliver routine primary healthcare services in the provincial capital of North Kivu, the Democratic Republic of the Congo, and Kambia, Sierra Leone, during the first wave of the COVID-19 pandemic. Drawing on ethnographic fieldwork, we explore their everyday narratives of ‘crisis’ in two regions that had recently experienced Ebola epidemics to situate the pandemic in a particular history of encounter with other epidemics and their consequent responses. In recounting the impact of COVID-19 on everyday life, work, and relationships with patients, healthcare workers made sense of the pandemic in relation to broader structural economic and political challenges, as well as differing recent experiences of Ebola epidemics. Ultimately, the pandemic was experienced as simultaneous rupture and continuity. Whilst COVID-19 disrupted routine service provision and generated tensions with patients, the pandemic also marked a sense of continuity, as it interacted with broader structural problems and longer-term experiences of ‘crisis’. Talking about the impact of COVID-19, therefore, became a means for health professionals to engage in broader political conversations about, and beyond, health governance and epidemic response in specific contexts.

Recent studies have examined experiences of healthcare personnel working in epidemic response, and the historical and political roots of distrust in medical services during times of epidemics. Research has focused on the experience of healthcare workers during the West African Ebola outbreak (Andertun et al., 2017; Bell et al., 2017; Erland & Dahl, 2017; James et al., 2020). These studies examine issues such as stigma whilst working in the Ebola response (Wester & Giesecke, 2019), the experience of healthcare workers who were infected with Ebola (Okello Wonyima et al., 2022); as well as the everyday coping strategies on the frontline (Raven et al., 2018). However, fewer studies have examined the experience of healthcare personnel delivering routine services during an epidemic (Jones et al., 2017). McMahon et al. (2016) describe the social and emotional impact of running health services during the Ebola epidemic in Sierra Leone, whereby routine healthcare providers became *de facto* frontline responders. These healthcare workers described feeling lonely and fearful, in the face of rising distrust in health facilities. In an overview of healthcare workers’ emotional engagement with the Ebola epidemic in Kambia District, Enria and Tengbeh (2022:, p. 46) highlight how the Ebola crisis acted as a ‘breaching experiment ... highlighting longer-standing fractures in Sierra Leonean society and giving voice to older narratives of social suffering’. Nurses described both fear and anger during the outbreak, as they perceived themselves to be both exposed and neglected whilst attempting to continue delivering services. These nurses, however, also emphasised how the crisis had laid bare pre-existing problems in the health sector – a slowly simmering crisis in their ordinary work.

In this article, we focus on the experience of healthcare personnel who have worked through multiple (overlapping or consecutive) epidemics – first Ebola, and then COVID-19. This provides an insight into how epidemics interact with existing structural constraints in particular health systems and political contexts, and illustrates how varying experiences of different Ebola epidemics shape distinctive understandings of risk in the early stages of the COVID-19 pandemic. Rather than understanding crisis as an exceptional and unpredictable break from normality, we draw on anthropological approaches that approach crisis *as context*: a chronic condition, or a ‘terrain of action and meaning’ (Vigh, 2008, p. 5; Redfield, 2005). This shifts the focus to how people ‘navigate’ through volatile environments, where social positions and relations are ‘reconfigured and reshaped in relation to stable instability and chronic crisis’ (Vigh, 2008, p. 13). Here, people continually assess their social environment as well as how they ‘position themselves in relation to others’ in tactical ways (Vigh, 2008, p. 20; Utas, 2005). In Sierra Leone and the DRC, the

COVID-19 pandemic was not experienced in isolation, but instead exposed and exacerbated existing structural challenges – becoming part of the ‘crisis as context’ that needed to be navigated on a daily basis (Vigh, 2008).

Methodology

The article is based on ethnographic research conducted between January and May 2021 in Goma, North Kivu, in the Democratic Republic of the Congo, and Kambia, in Sierra Leone. Our research was part of a broader multi-disciplinary study examining the impact of COVID-19 on primary health care service provision and utilisation in Sierra Leone, DRC, and Uganda, led by the London School of Hygiene and Tropical Medicine, in collaboration with *Institut National de Recherche Biomédicale* in DRC and the College of Medicine and Allied Health Services in Sierra Leone. The study was approved by the London School of Hygiene and Tropical Medicine Ethics Committee, the Sierra Leone Ethics and Scientific Review Committee, and the *Comité National d’Ethique de la Santé* in DRC. The article is based on discussions with healthcare workers, citizens seeking healthcare, as well as political authorities, community members and civil society actors. Healthcare workers and people seeking healthcare were recruited at 12 primary healthcare centres in Goma, and 15 primary healthcare centres in Kambia. We conducted ethnographic observations, semi-structured in-depth interviews (12 in Goma, 15 in Kambia) and focus groups (1 in Goma, 1 in Kambia) with healthcare personnel working in outpatient care, immunisation, family planning, antenatal care, and HIV treatment services at different healthcare centres. The article also draws on interviews conducted with people seeking healthcare at primary healthcare centres (15 in Kambia, 12 in Goma), as well as focus groups (2 in Goma, 1 in Kambia) with people living locally, political authorities, and civil society organisations.¹

To begin, we outline the social and political context of Ebola and COVID-19 in DRC and Sierra Leone. The second section examines healthcare worker experiences of COVID-19, and the pandemic’s impact on their personal life; routine health provision; and relationships with patients; as well as a comparison between working during the COVID-19 pandemic and recent Ebola epidemics. Drawing on these accounts, the third section argues that the pandemic was a point of rupture and tension, but also continuity and opportunity. Ultimately, healthcare worker descriptions of the impact of COVID-19 were broader political commentaries about how epidemics intersected with existing structural challenges, and how COVID-19 interacted with, and exacerbated, broader experiences of crisis.

From Ebola to COVID

Goma, DRC

Goma is the capital of North Kivu province, which has been at the epicentre of prolonged conflict in the Great Lakes region for the last twenty-five years. Between August 2018 and June 2020, DRC’s tenth Ebola epidemic unfolded in the region. Whilst the previous nine epidemics were relatively contained, the tenth epidemic became the world’s second largest Ebola epidemic. Despite the investment of approximately \$1.2 billion, it took 22 months to contain the epidemic, which resulted in 2,287 deaths. The outbreak began in the Grand Nord territories, an area with a long history of violent rebellion from the central state. Since 2013, the Allied Democratic Forces rebel group has increased attacks against the population, resulting in growing anger at the inability of both the national army and the UN’s largest peacekeeping mission to provide security (Bisoka et al., 2021; Villa, 2023). To respond to the Ebola outbreak, a coalition of Congolese government officials, humanitarian organisations, and UN agencies created a parallel structure, known as *la Riposte* (GEC, 2020). The introduction of this response into an area where basic services remain underfunded and people felt abandoned by elites gave the impression among the population that the

response aimed to benefit intervenors rather than local citizens (Crawford & Holloway, 2021, p. 41). Additionally, the salary differences between staff brought into the region for the Ebola response compared with locally employed people, as well as instances of corruption, led to a widespread belief that responders had incentives to prolong the outbreak, or even invent Ebola altogether as a ‘business’ (Bisoka et al., 2021; Crawford & Holloway, 2021; GEC, 2020). This mistrust was increased when the Riposte adopted a militarised approach, collaborating with government security forces (GEC, 2021). Then, in November 2018, the electoral process began, after being postponed by President Kabila for several years. In December 2018, however, Ebola and insecurity were used as a pretext to cancel elections in Ebola-affected regions. Many in the Grand Nord concluded that Ebola was a political invention to suppress the opposition stronghold and eliminate the population (Bisoka et al., 2021). In this context, the epidemic response was met with distrust, and attacks on treatment centres and healthcare workers became a means of expressing political discontent (Villa, 2023).

Whilst the Ebola epidemic unfolded in the northern territories of the province, the Petit Nord territories in the south of the province saw relatively few cases and there were only three confirmed cases in Goma. On 10 March 2020, the DRC registered its first COVID-19 case. By the end of the month, President Tshisekedi had announced a national lockdown. During the first wave of COVID-19 in the country, travel to and from the capital was banned, borders were closed, and international flights were suspended. The border closure with Rwanda meant that many people lost their livelihoods. In Goma, people lamented that COVID-19 restrictions enabled the police to extend their power over the population, all whilst the restrictions worsened the economic conditions of the local population (Bashizi et al., 2021, p. 11). Watching the European news, *Gomatraciens* described the fear of a catastrophe on its way. However, when a tsunami of cases did not ‘hit’ as predicted, many concluded that COVID-19 was a problem ‘in Europe’, but not ‘in Africa’. They discussed theories that Africans had natural immunity, highlighting differences in demographics, climate, food, travel, and traditional medicines (Lees et al., 2022). When the Ebola epidemic ended in June 2020, others concluded that COVID-19 did not exist at all but was simply another business invented to replace Ebola business (James et al., 2021; James & Lees, 2022). In 2020, there were a total of 768 confirmed COVID-19 cases in North Kivu, of which 518 were in Goma.²

Kambia, Sierra Leone

Kambia district is situated on the Guinean border, approximately 120 miles from the capital, Freetown. The district is a trading route and is often identified as a potential entry point for epidemics (Enria, 2018). The 2014 West African Ebola outbreak was unparalleled in its scope and effect, resulting in 11,310 deaths (Bell et al., 2017). In Liberia, Guinea, and Sierra Leone, there were reports of healthcare workers being unprepared for an outbreak and health facilities being understaffed and undersupplied to manage the outbreak. Analyses of the outbreak have since highlighted long-term structural factors, from sustained under-investment in the health sector since the 1980s structural adjustment programmes and the depletion of physical infrastructure during the 11-year civil war (Benton & Dionne, 2015). Histories of colonial extraction and outward looking post-colonial institutions, further eroded by over a decade of conflict, are crucial to understanding mistrust in external and government-led responses to the disease (Wilkinson & Leach, 2015). The international response was slow, with additional questions about the preparedness of the health system to respond to further outbreaks. The Sierra Leone Service Availability and Readiness Assessment (SARA) in 2017 illustrated significant gaps in healthcare service delivery ranging from availability of services; availability of inputs needed for the delivery of the basic package of health services; and the readiness of facilities to provide those services (SARA 2017).

Sierra Leone reported its first COVID-19 case on the 31st March 2020. A year later, the country had recorded 3980 cases. Kambia accounted for 32 of these cases, and 3 deaths. Although Kambia was not significantly hit by the first wave of the pandemic, some of the stringent government

regulations – including border closure, three-day lockdowns, bans on inter-district travel and restrictions on trading – had significant socioeconomic effects. Livelihoods such as farming, fishing, commercial transport, local and cross border trading activities, were disturbed by government restrictions.

COVID-19 narratives

Everyday life in Goma

During the first wave of the pandemic, people in Goma described COVID-19 as ‘*Facebook Gratuit*’: the version of Facebook which is available free of charge, where the user can access text, but the photos are hidden. This referred to the invisibility of COVID-19, and the sense that something was being hidden. There was distrust surrounding the official numbers of COVID-19 cases, as many in Goma concluded that the virus was another means to make money after the Ebola epidemic had come to an end (Lees et al., 2022). A young man from Majengo neighbourhood summarised: ‘COVID is a COP [*business*], it exists in Europe, but not here. It’s a business, just like Ebola. The government inflates numbers (of cases) to attract funding’.³ Instead, there was widespread concern about the economic impact of public health restrictions. With the Rwandan border closed, prices of food, petrol and medicine began to soar, and transport costs increased because of public distancing requirements. Patients could no longer pay for travel to health facilities or for prescribed medicine, and some had become reluctant to be referred for treatment in hospital because of the costs.⁴

As a result, healthcare workers saw a reduction in numbers at their clinics. In Ndosho neighbourhood, community health workers were sent to find pregnant women who had missed their appointments: ‘They say they no longer have money, I will just come when I’m due. There are now even those who give birth at home’.⁵ In Mugunga, on the city’s periphery, nurses described how ‘poverty was increasing’ because traders could not cross the border.⁶ Healthcare workers stressed how the economic impact of the COVID-19 pandemic interacted with existing structural problems such as poor roads, insecurity, and the lack of ambulances, to increase the difficulty of accessing healthcare in the city.⁷ In early 2021, tensions grew in the city as schools remained shut, whilst bars and restaurants were reopened. Many *Gomatraciens* explained this inconsistency by the fact that the President had promised free primary school education, but he had ‘eaten all the money’. Healthcare workers were concerned: ‘the life of our children is in danger if they just stay at home’, one nurse commented,⁸ whilst another ended an interview with, ‘Why are they refusing to restart school? That is my question for you, give me an answer’.⁹

Everyday life in Kambia

There were similar concerns in Kambia. In the absence of visible cases, many concluded that ‘corona was a lie, and that COVID-19 is not in Sierra Leone’.¹⁰ Instead, COVID-19 was described as a ‘White man’ disease¹¹: dangerous in Europe, but not in Africa.¹² Others argued that COVID-19 was a product of installations of 5G technology. As one healthcare worker described, in remote areas of Kambia, citizens asked for mobile phones to be switched off to prevent potential COVID-19 transmission:

This rumour circulated through the remote parts of the district ... even the nurses in the community, most of them switched off their phones in fear. A Community Health Officer came to my house asking me to turn off my phone judging from what he had seen on the internet. But I refused, and till date, I am still alive.¹³

Kambia was a stronghold of the previous government (All People’s Congress), and in 2018, Kambia voted predominantly for the newly formed National Grand Coalition. COVID-19 was seen by many as a political tool used by the government to suppress the population in

this opposition stronghold.¹⁴ Like in Goma, Kambia is a centre for cross border trade – public health restrictions led to scarcity in basic commodities and a loss of livelihoods.¹⁵ A State Community Health Nurse (SCHN) Nurse from Kambia Government Hospital remarked: ‘There are challenges, people were not happy, especially about the 10 o’clock curfew ... the market women were running at a loss’.¹⁶

Work in Goma

When the pandemic began, healthcare workers in Goma felt that they had been left to ‘*se débrouiller*’, or muddle through, without sufficient support or resources from the government or foreign donors. A nurse summarised her experience during the COVID-19 pandemic: ‘You are exposed, but you have nothing’.¹⁷ Whilst the Ebola response had created a parallel health system, the COVID-19 response was integrated into the existing health system, with health centres left to cover costs of prevention and treatment measures from their own budgets. A nurse from Mugunga explained:

The COVID-19 system is free. We give and we sacrifice, but we get nothing back! If COVID is not paid, then they [the government] must really at least provide the necessary equipment, and give it for free, instead of saying that the structures must get by (*se débrouiller*) using their own resources!¹⁸

The poorly financed pandemic response, healthcare workers argued, interacted with existing structural constraints. For instance, the lack of resources such as water, soap, gloves, masks, and sanitiser gel made implementing new preventative measures particularly challenging.¹⁹ Putting in place new measures for isolation, triage, and surveillance of COVID-19 cases was additional work, ‘*un fardeau*’, in an already stretched health system. ‘COVID-19 has added so much additional work’, a nurse in Karisimbi concluded.²⁰

As a result, healthcare workers felt *délaissés*, or abandoned, by the Congolese state. They described a lack of ‘motivation’, in terms of morale and financial reward, to work during the pandemic in such difficult conditions, and an absence of risk pay to work whilst exposed. ‘With COVID there is no money, there is no money! It’s also difficult, I don’t think you should have to expose yourself, just to leave your family on the streets’, a nurse concluded.²¹ This critique was situated in discussions about long-standing structural problems in the state health system, in particular, late and poor pay: ‘Healthcare workers, we are *délaissés*, we are not considered or cared for’, another nurse added.²²

Healthcare workers from across the city argued that the pandemic had reduced trust in state health structures, as people shifted to ‘auto-medication’ at home. This was out of fear of the ‘alert system’: patients were concerned that they would be quarantined if they had a fever.²³ Indeed, citizens in Goma explained that they preferred to go to pharmacies or ‘traditional practitioners’ where the COVID-19 response surveillance was not enforced, whilst others were concerned about the transmission of COVID-19 in health structures, or that routine vaccinations would administer an experimental COVID-19 vaccine.²⁴ The reduction in numbers at clinics was a vicious cycle, healthcare workers explained, because it reduced their income: ‘There was a decrease in the frequency of our patients, that is to say also in our income, we no longer receive many patients who can lead us to increase our revenues for the operation of our centre, so COVID-19 has created a lot of stress for us’, a nurse concluded.²⁵ In addition, the number of staff working in clinics was reduced to avoid potential transmission. This increased the intensity of the work and reduced their income: ‘This has a big impact on the life of our families’, one nurse summarised.²⁶ To respect the public health regulations, healthcare workers changed the scheduling for other services, reducing the number of people in the clinic at one time. As a result, clinics struggled to avoid delays in delivering routine care.

Despite this disruption, for some healthcare workers, the pandemic created opportunities, as well as difficulties. For instance, some health centres received materials such as disinfectants,

masks, and bins.²⁷ There were new trainings, supervision increased, and some argued that general hygiene improved, leading to reduction in cases of diarrhoea.²⁸ Other healthcare workers stressed *continuity*, arguing that COVID had not had a significant impact on their work. Instead, the only real change was one in ‘behaviour’: the establishing of social distancing and new routines to prevent transmission.²⁹ By stressing continuity, rather than disruption, Congolese healthcare workers also challenged the international and national focus on COVID-19, rather than other health priorities. When asked about the priorities for their area, nurses listed malnutrition, cholera, and malaria: ‘The problem is that all eyes are focused on one thing, ignoring the others’, a nurse in Buhimba told us.³⁰

Work in Kambia

In Kambia, healthcare workers also described a reduction in attendance at health clinics. Rumours circulated that people would be infected with coronavirus at health clinics, so patients began to visit herbalists instead.³¹ Another rumour circulated that an experimental COVID-19 vaccine was being clandestinely tested during routine immunisation services for under-five children. A Maternal and Child Health Aide summarised: ‘Now the mothers will ask, is it this the COVID-19 vaccine?’³² Other healthcare workers pointed to inter-district lockdowns as responsible for the reduction in attendance, as well as the increase in transport costs.³³ There was a clear impact on routine services: ‘For delivery, pregnant women are not coming to the hospital to give birth. Even for antenatal and family planning, the appointment date you will give them, they won’t come’.³⁴ Reduced attendance at clinics reduced nurses’ salaries, whilst also affecting their private pharmacy businesses: ‘Prices of drugs have increased due to COVID-19 and transport is also high. Patients do not have the money to come and if they do, they cannot afford drugs because things are hard. The pharmacy business is what I do apart from my government job, this is my only source of living, so it is difficult’.³⁵ Like in the DRC, the COVID-19 response in Sierra Leone used existing resources within the healthcare system. Many healthcare professionals were dissatisfied with the lack of ‘hazard pay’ during COVID-19: whilst working in the frontline during Ebola, healthcare workers received incentives that were tenfold higher than monthly wages.

Yet, healthcare workers in Kambia also highlighted continuity: the pandemic, they argued, had intensified *existing* supply-side challenges in health service delivery. At Kambia Government Hospital, for instance, COVID-19 exacerbated existing staffing shortages. Medical students no longer came to the hospital to support underfunded government staff. The pandemic also revealed the lack of materials, such as Personal Protective Equipment (PPE) and Infection and Prevention Control (IPC) equipment. As one nurse summarised:

As I am talking, we don’t have soap and even the rubbers (veronica buckets) are not enough ... IPC materials are limited, gloves are finished too ... there are no facemasks, hand sanitisers, and the rest. It is difficult to enforce IPC procedures at the facility if we don’t have all these things.³⁶

Whilst some healthcare workers were concerned about their potential exposure, many did not wear a facemask, or wore it on their chin: ‘most are not particularly concerned about their exposure to COVID-19, but ensuring that patients return to the facilities’,³⁷ one nurse summarised.

Despite this, many healthcare professionals felt ‘prepared’ to respond to COVID-19 because of their recent experience during the Ebola epidemic, as well as more recent training on COVID-19 prevention measures. They highlighted recent adaptations, such as working closely with traditional healers (*herbalists*) to improve disease surveillance, and increased collaboration with Community Health Workers (CHWs) to encourage people to return to health facilities.³⁸

We were told to team up with traditional healers in our community. We encourage them to refer patients to the hospital as a first step, and if we are unable to make them well, we will send the patients back to them. By doing this we will be able to identify cases in the community easily.³⁹

one Maternal and Child Health Aide at Fodaya health facility explained.

In fact, some healthcare workers described hopeful prospects brought about by the pandemic. Compliance with COVID-19 prevention measures had increased hygiene practices among the population and within the facility, and the pandemic had led to a welcome increase in monitoring and supervision visits by officials from the district and national level. For example, a healthcare worker working in surveillance in a remote town described how during the pandemic,

officials come to supervise us here ... like the IPC and surveillance officers, they come and alert us and inform us about any case definition of disease and if we suspect any case, we need to inform them and then they can carry it to the national level.⁴⁰

There was hope that this increased visitation by officials could help improve disease surveillance more broadly.

Relationship with patients in Goma

The most significant impact of the COVID-19 pandemic, according to healthcare workers in Goma, was a deterioration in their relationship with patients. As the Ebola epidemic came to an end, and the COVID-19 pandemic began, many *Gomatraciens* concluded that it was another ‘COP’ or business, invented to enrich government elites and healthcare staff. During a lively focus group, citizens from Goma argued that the invisibility of COVID-19, the contentious Ebola epidemic response and the timing of the arrival of COVID-19 just after the end of the Ebola epidemic all reinforced the impression that COVID-19 was simply an ‘invention’. A young man from Kyeshero neighbourhood, for example, summarised the mood in a heated discussion:

If you analyse it [COVID], and take a good look, you’ll find it is a COP. Because, well, look at this city, Goma, you’ve never heard of a person who has died from COVID-19, but you only hear the numbers of infected people and dead people, but you’ll never see them with your own eyes!⁴¹

The public health measures were perceived to be inconsistent, increasing the suffering of the poor but enabling the rich to continue as before: ‘They close the schools, but then we find that bars are open, why?’ Instead, many concluded that COVID-19 was ‘first and foremost in the interests of health authorities’ who ‘received money’ for COVID-19 cases and shared it with elites.⁴²

Healthcare workers were concerned about widespread critiques of ‘COVID-19 business’, and their alleged role within it.⁴³ Citizens avoided state health facilities out of fear that they would be forcefully quarantined as a suspected case, and nurses described how they ‘became the enemy’ if they alerted a suspected COVID-19 case:

The first time we alerted a case here, we had a problem ... ultimately, the community no longer trusts us ... With the appearance of COVID-19, everything turned upside down, everything was disrupted, we were afraid to consult, they are afraid to come in case they are mistaken for a person who has COVID-19.⁴⁴

As a result, patients were often already severely unwell when they arrived at health centres: ‘Before COVID-19, they came to the health clinic straight away, but with COVID-19, they arrive already very unwell, they are scared to come’.⁴⁵ In Karisimbi, nurses described a tension: they were required to identify and follow up on potential COVID-19 cases, however this discouraged people from coming to the health centre in the first place.⁴⁶

There were also tensions at home. Friends, family, and neighbours increasingly associated healthcare workers with the virus, or ‘as central nodes of risk’ (Storer et al., 2022). ‘When we see a healthcare worker, we say oh look its COVID-19 coming’, a nurse explained.⁴⁷ Rumours circulated that shadowy elite networks and former colonial powers were clandestinely testing experimental COVID-19 vaccines, with the complicity of healthcare workers. ‘Since COVID-19 began, there are parents who no longer want their children to be vaccinated to prevent us giving them a COVID vaccine instead’, a nurse working in immunisation explained.⁴⁸ Another rumour circulated that healthcare workers were, in fact, injecting people with COVID-19 to increase the case load, and

therefore their own income.⁴⁹ This loss of trust was described as the real ‘crisis’: ‘we have become the enemy of the people we treat’, a nurse reflected.⁵⁰ Healthcare workers from across the city saw this distrust on the part of the population as a logical conclusion, given the broader structural problems in the health system:

It is crucial that healthcare workers have a good quality of life, because if the population sees that healthcare workers suffer, they will quickly think that it is easy for health personnel to be corrupted, assuming ‘them, if you just give them even 1000\$, then they will sacrifice the population’.⁵¹

Rumours about their role in ‘COVID-19 business’, Congolese healthcare workers concluded, were particularly persuasive because the population knew that healthcare personnel struggled financially, and were therefore looking for other ways to supplement their salary.

Relationship with patients in Kambia

In Kambia, healthcare workers similarly described widespread suspicions amongst the population that they were co-conspirators in a government plan to infect people with COVID-19. One nurse explained, ‘they accused us of receiving money as payment from the Government to infect them with the Corona’.⁵² Rumours about COVID-19 both reflected, and exacerbated, existing state-society tensions, as healthcare workers became positioned as representatives or embodiments of government policy at a local level. As one nurse from Kambia Government Hospital summarised:

In terms of the trust, the ordinary man has their perspectives about healthcare workers in general. Therefore, in times of crisis, they have no trust in us the nurses ... they see us as the ones bringing the virus to their communities, so our relationship becomes sour.

A healthcare worker from Kambia described patients’ ‘non-compliance’ with COVID-19 protective measures as a politically symbolic act of defiance: ‘People are unhappy with the government restrictions ... for them, we are responsible for what is happening ... and the only way they can show that is to openly disregard what we tell them’.⁵³

Physical distancing also increased social distance with patients. One nurse, for instance, described how social distancing practices created an uneasy situation even for community members with whom they ‘*tie maggie*’, an expression used to describe close social interactive ties. She explained: ‘As a health worker, you too must work enforce this social distancing practice. Even when your friend comes to ‘*tie maggie*’ there should be a cut-off line between you and them because these are not normal times. Some are not happy with this, so our relationship is not good’.⁵⁴ Another healthcare worker described the breakdown in social relationships at their clinic:

Since the start of COVID-19, the community has stopped using the water well that is in the health facility compound. Before now this entire community used to come here to fetch water. When we go out for outreach, they refuse to bring out their children for the ‘marklate’ (vaccine); we will spend the entire day at the community centre, and they will not come.⁵⁵

Healthcare personnel in Kambia also experienced stigma, perceived by their neighbours as ‘COVID-19 agents’ who intend to infect people’.⁵⁶ A nurse from Kambia government Hospital explained, ‘they point fingers at us telling people not to come closer to us because we are working at the hospital, and therefore we have the virus, and we want to spread it in the community’.⁵⁷ To improve relationships with patients, healthcare workers began to organise mass ‘sensitisation activities’ about COVID-19 preventive measures, with the help of local chiefs who implemented ‘by-laws’⁵⁸: ‘Most people do not want to follow government regulations but they respect their chiefs, so when the Paramount Chief put these by-laws in place, they comply’, a nurse explained.⁵⁹

Afterlives of Ebola in Goma

The COVID-19 pandemic overlapped for four months with the end of the 10th Ebola epidemic. During the first wave of the pandemic, healthcare workers in Goma highlighted the similarities

between their experience working during Ebola and COVID-19: both epidemics required incorporating public health measures in the daily routine.⁶⁰ The trainings they had received in prevention of infection were applicable to the new COVID-19 context. ‘The same habits and routines we had during Ebola, we restarted for COVID-19’, one nurse commented.⁶¹ Although the rate of mortality was different, some Congolese nurses described how Ebola and COVID-19 were easily confused locally because both had thus far remained largely invisible in Goma.

Instead, it was the way that the epidemic response had been organised which was understood to be the most significant difference between the Ebola epidemic and the COVID-19 pandemic. Whereas the Ebola response had been ‘well-funded’, during COVID-19, healthcare personnel felt that they had been left to continue routine service and to introduce prevention and surveillance with little funding or support.⁶² A nurse explained,

during the Ebola period, there were resources, but at the moment, for COVID-19, we can investigate and find a suspected case, we call a team, and then four hours can go past, and we see no one ... but during the Ebola era, there were vehicles for these activities. Even health structures were well supported, but in the COVID-19 era, there is nothing.⁶³

Across the city, healthcare workers argued that the government had supplied insufficient personal protection equipment, and that there was a rupture in medicine supplies because of border closures and rising prices. This was exacerbated by dropping revenue for health centres because of a drop in attendance. A nurse described how health clinics were expected to pay for prevention and control measures out of their own dwindling budgets, ‘but we are structures with very low revenues, it is very hard for us!’⁶⁴

This was viewed as a ‘*relâchement*’: the COVID-19 response lacked the necessary funding and infrastructure to support surveillance, testing, and treatment. A nurse explained:

During the Ebola epidemic, people were mobilised, you could notify that there was a case, teams would arrive, whereas with COVID-19, you notify a possible case, and you call the laboratory, and they will reply that they don’t have any vehicles!⁶⁵

Instead, only the rich and mobile seemed to be able to get test results in good time – a ‘travel-driven COVID response, not community-based COVID response’.⁶⁶ Another nurse argued that the COVID-19 response had been delegated to a local level and that nobody had taken responsibility: ‘With COVID, the response exists theoretically, but not in practice, because we have people who are given functions, but they are not given the resources to do it’.⁶⁷ A nurse working in family planning agreed; ‘It is not like Ebola where the *prise en charge* was adequate. With COVID-19, it is a *laissez faire* attitude’.⁶⁸

The perception among healthcare workers was that the Ebola response was well-funded because the epidemic was isolated to eastern DRC and supported by ‘partners’ in the North, whereas COVID-19 was global, so donors did not have the capacity to support the response financially.⁶⁹ The perceived weakness of the COVID-19 response was described as another example of the failure of the central state:

During the Ebola era, people had a lot of money. But COVID-19, there is nothing. So, the biggest challenge in our region, I think, is that health workers are abandoned, we are not considered, we work, and we have taken an oath, but we work in a country that is not like other countries.⁷⁰

Afterlives of Ebola in Kambia

The 2014 Ebola outbreak in West Africa claimed the lives of 3,589 people in Sierra Leone, 221 of which were healthcare workers. Kambia was one of the districts most affected by the outbreak. Even though the Ebola epidemic ended six years previously, healthcare workers’ experience of COVID-19 pandemic was shaped by their memories of Ebola. At the initial stages of COVID-19, many were concerned:

We are at the frontline for every outbreak. When we think about the calamity that befell us during Ebola, we feel worried and nervous. But we do not have an option. It is our job; we just have to serve our people.

These concerns intensified in early 2021 when another Ebola outbreak began in south-eastern Guinea, the same location where the 2014–2016 epidemic started. ‘They are our neighbours, and we are worried that it might spill over to us. We know that Ebola finished in our country years ago, but we are still worried about it’⁷¹, one healthcare worker summarised.

In contrast to Goma, healthcare workers in Kambia described Ebola and COVID-19 as incomparable: like trying to compare ‘death and sleep’. Many healthcare workers had worked during the outbreak and seen Ebola cases, and highlighted that Ebola was deadlier and more transmissible than COVID-19. A nurse in Kychom explained: ‘Both diseases are deadly, but we all saw first-hand ... Ebola claimed more lives, entire households, neighbourhoods, and villages were wiped out by Ebola. For COVID, we have not yet seen it with our eyes’.⁷² Instead, healthcare workers raised concerns about the lack of clarity about the mode of COVID-19 transmission: ‘They told us at first that it was transmitted through droplets ... but now they say it is an airborne disease. We don’t know what to believe’.⁷³

Nonetheless, healthcare workers were unanimous in feeling ‘better prepared’ to work during COVID-19 than they had during Ebola. As one Maternal and Child Health Aide explained:

The government has done well so far. We don’t have many cases in the country, but if they had not put in place all those restrictions and stringent measures, the story would have been different. All we are asking them to do for us now is to provide the necessary materials and supplies needed for us to work in times like this.⁷⁴

Continuity and rupture in crisis

The experiences of healthcare workers in Goma and Kambia reveal how global crises, such as the COVID-19 pandemic, inscribe themselves into people’s everyday lives, as well as in histories of disease and chronic structural challenges in the delivery of routine healthcare. Whilst both North Kivu and Kambia experienced Ebola outbreaks, Kambians in rural Sierra Leone saw the devastation of Ebola first hand, whilst the virus did not reach the city of Goma to the same extent. Despite these stark contextual differences, narratives among healthcare workers in both Kambia and Goma demonstrate how COVID-19 was experienced as simultaneous rupture and continuity.

On the one hand, COVID-19 was an exceptional moment that ushered in significant changes and challenges. The pandemic generated social tensions for healthcare workers: heightening uncertainty and anxiety about what the future might hold, and giving rise to rumours and concerns, some of which centred on health personnel benefiting from the emergency. These rumours are not simple ‘misinformation’: they shed light on the fragile foundations of trust in the formal health system and the central state (Enria et al., 2016; White, 2000). After the Ebola epidemic in Sierra Leone, healthcare workers attempted to rebuild trust in their communities. Relationships with patients had become strained, as the epidemic response violently irrupted in people’s lives, requiring changes in the management of life and death that made people afraid and mistrusting (Fairhead, 2014; Lipton, 2017). When COVID arrived, in both countries, remarkably similar scripts were used to express mistrust: questioning the veracity of the disease or critiquing the political economy of crisis which often sees a minority benefiting from the suffering of the majority (James et al., 2021; Lees et al., 2022).

The pandemic was experienced as a crisis even where COVID-19 was not widely visible. This was because of the tensions that it created, and the changes that it brought about: disrupting routine healthcare provision and requiring healthcare workers to integrate new public health measures in their everyday work. At the same time, healthcare personnel in both countries had historical repertoires that they could draw from to make sense of what kind of crisis this was. Past experiences of Ebola offered both practical expertise that could be adapted, but also coloured different understandings of COVID-19. For Congolese healthcare professionals in Goma, many of whom had

never seen an Ebola case, there was more of a sense of fear surrounding potential infection of COVID, as well as anxieties about an uncertain future. In contrast, in Kambia, health personnel had been on the frontlines of Ebola during the 2014–2016 outbreak and were more concerned with maintaining their relationships with community members. In both countries, however, the structures of epidemic response were judged similarly, as Congolese and Sierra Leonean healthcare workers were struck by the significant underfunding of the COVID-19 response in contrast to efforts to bring Ebola to an end. This was felt to reflect global priorities as international donors' attention was elsewhere, but also as a sign of continued and chronic government neglect.

On the other hand, the integration of the COVID-19 response in everyday work also brought with it a sense of continuity, and it is in those reflections that we most starkly see how 'the moral, political and economic underpinnings of the 'normal' [are] questioned and made more urgent' in moments of crisis (Enria & Tengbeh, 2022, p. 59). In contrast to claims to the exceptional that often underpin narratives of crisis, the ruptures brought about by COVID were also an insight into the chronic challenges facing the everyday efforts of healthcare workers. From this perspective, it becomes clear how long-term underfunding of health services, challenges in procuring drugs and availability of materials in 'peacetime' were exposed by the pandemic, or rather, offered healthcare workers a new opportunity to draw attention to them. The global attention on COVID provided a means to critique chronic neglect, as healthcare workers could situate the virus in a more complex set of threats that made their communities' lives precarious, even when the world was not watching. Questioning the prioritisation of COVID over other diseases such as malaria, then, was not only a reflection of lower COVID-19 mortality in both countries, but also constitutes an astute political questioning of which lives and deaths matter, and when.

A focus on mistrust similarly illustrates the risk of being overtly focused on the exceptional. Experiences of crisis are historically shaped, layered onto existing long-standing tensions. The notion of COVID as just an invention, another way for the powerful to benefit from the suffering of the poor, was so widely plausible because it fed into much longer-standing trajectories of mistrust of the central state, and the particular afterlives of the Ebola responses. In this sense, as healthcare workers in both countries were acutely aware, COVID-19 was much more than a health crisis: it was also a reflection of longer-standing political crises and of deep-rooted structural problems that, over the years, contributed to the steady erosion of citizens' trust in their state institutions and health services.

Conclusion

Healthcare worker experiences of epidemics offer unique insights into both the effects of health emergencies on everyday service provision, but also on the way that epidemics influence the social relations between health personnel and their patients. The comparison between Sierra Leone and DRC illustrates how long and short histories, from colonial extraction, conflict, and state decline to recent outbreaks of Ebola, shape local interpretations of events that might seem like temporary moments of rupture: extraordinary moments like the COVID-19 pandemic. Although expressed in context-specific ways, healthcare workers in both Kambia and Goma highlight the complex interactions between emergencies and chronic crisis. Their experiences highlight how the COVID-19 pandemic could be experienced at the crossroads between the exceptional and the everyday, where 'states of exception' brought by emergency measures shed new light on long-standing political tensions and structural problems.

Notes

1. All participants provided written informed consent. Interviews were recorded and transcribed, and subsequently thematically analysed.
2. Data from Division Provinciale de la Santé du Nord-Kivu, Goma.

3. Community Focus Group, Goma, 23.10.2020.
4. DR-CS1-KII-HCW-04, Goma, 02.02.2021.
5. DR-C13-KII-HCW-07, Goma, 04.02.2021.
6. DR-CS11-KII-HCW-01, Goma, 02.02.2021.
7. Healthcare workers Focus Group, Goma, 15.02.2021.
8. DR-C13-KII-HCW-07, Goma, 04.02.2021.
9. DR-CS15-KII-HCW-02, Goma, 02.02.2021.
10. HCWINT_HF4_Kambia 17.02.2021.
11. HCWINT_HF21_Kambia 22.02.2021.
12. HCWINT_HF24_Kambia 24.02.2021.
13. HCWINT_HF19_Kambia 19.02.2021.
14. FGD_HCW_HCW02 Kambia, 30.04.2021.
15. HCWINT_HF1_Kambia 12.03.2021.
16. HCWINT_HF29_Kambia 24.03.2021.
17. DR-CS10-KII-HCW-03, Goma, 02.02.2021
18. DR-CS11-KII-HCW-01, Goma, 02.02.2021.
19. DR-CS14-KII-HCW-10, Goma, 02.02.21.
20. DR-CS4-KII-HCW-08, Goma, 05.02.21.
21. DR-CS11-KII-HCW-01, Goma, 02.02.2021.
22. DR-CS4-KII-HCW-08, Goma, 05.02.21.
23. Healthcare workers Focus Group, Goma, 15.02.2021.
24. Community Focus Group, Goma, 01.04.2021.
25. DR-CS16-KII-HCW-11, Goma, 09.02.2021.
26. DR-CS16-KII-HCW-11, Goma, 09.02.2021.
27. DR-CS15-KII-HCW-02, Goma, 02.02.2021.
28. DR-CS3-KII-HCW-12, Goma, 10.02.2021; DR-CS14-KII-HCW-10, Goma, 02.02.2021.
29. DR-CS2-KII-HCW-09, Goma, 08.02.2021; DR-CS15-KII-HCW-02, Goma, 02.02.2021.
30. DR-CS12-KII-HCW-06, Goma, 04.02.2021.
31. HCWINT_HF8_Kambia 11.04.2021.
32. HCWINT_HF12_Kambia 03.03.2021
33. HCWINT_HF21_Kambia 22.02.2021.
34. HCWINT_HF28_Kambia 15.04.2021.
35. HCWINT_HF22_Kambia 12.04.2021.
36. HCWINT_HF12_Kambia 03.03.2021.
37. FGD_HCW_HCW05 Kambia, 30.04.2021.
38. FGD_HCW_HCW01 Kambia, 30.04.2021.
39. HCWINT_HF22_Kambia 12.04.2021.
40. HCWINT_HF22_Kambia 12.04.2021.
41. Community Focus Group, Goma, 01.04.2021.
42. Community Focus Group, Goma, 01.04.2021.
43. DR-C13-KII-HCW-07, Goma, 04.02.2021.
44. DR-CS12-KII-HCW-06, Goma, 04.02.2021.
45. Healthcare workers Focus Group, Goma, 15.02.2021.
46. DR-CS4-KII-HCW-08, Goma, 05.02.21.
47. DR-CS16-KII-HCW-11, Goma, 09.02.2021
48. DR-C13-KII-HCW-07, Goma, 04.02.2021.
49. Community Focus Group, Goma, 01.04.2021.
50. DR-CS10-KII-HCW-03, Goma, 02.02.2021
51. Healthcare workers Focus Group, Goma, 15.02.2021.
52. HCWINT_HF21_Kambia 22.02.2021.
53. HCWINT_HF22_Kambia 12.04.2021.
54. FGD_HCW_HCW07 Kambia, 30.04.2021.
55. FGD_HCW_HCW05 Kambia, 30.04.2021.
56. HCWINT_HF6_Kambia 14.04.2021.
57. HCWINT_HF29_Kambia 24.03.2021.
58. HCWINT_HF6_Kambia 14.04.2021.
59. HCWINT_HF29_Kambia 24.03.2021.
60. DR-CS3-KII-HCW-12, Goma, 10.02.2021; DR-C13-KII-HCW-07, Goma, 04.02.2021.
61. DR-CS10-KII-HCW-03, Goma, 02.02.2021
62. DR-CS10-KII-HCW-03, Goma, 02.02.2021
63. Healthcare workers Focus Group, Goma, 15.02.2021.

64. DR-CS11-KII-HCW-01, Goma, 02.02.2021.
65. DR-CS1-KII-HCW-04, Goma, 02.02.2021.
66. DR-CS14-KII-HCW-10, Goma, 02.02.21.
67. DR-CS1-KII-HCW-04, Goma, 02.02.2021.
68. DR-CS14-KII-HCW-10, Goma, 02.02.21.
69. Healthcare workers Focus Group, Goma, 15.02.2021.
70. DR-CS10-KII-HCW-03, Goma, 02.02.2021
71. HCWINT_HF1_Kambia 12.03.2021.
72. HCWINT_HF28_Kambia 11.04.2021.
73. HCWINT_HF13_Kambia 10.04.2021.
74. HCWINT_HF12_Kambia 03.03.2021.

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References

- Andertun, S., Hörnsten, Å, & Hajdarevic, S. (2017). Ebola virus disease: Caring for patients in Sierra Leone – A qualitative study. *Journal of Advanced Nursing*, 73(3), 643–652. <https://doi.org/10.1111/jan.13167>
- Bashizi, A., Ansoms, A., Ndayikenguritse, G., Amani, R. A., Akilimali, J. B., Chiza, C., & Piccoli, E. (2021). Real governance of the COVID-19 crisis in the Great Lakes region of Africa. *Journal of Eastern African Studies*, 15(2), 190–213. <https://doi.org/10.1080/17531055.2021.1913704>
- Bell, S. A., Munro-Kramer, M. L., Eisenberg, M. C., Williams, G., Amarah, P., & Lori, J. R. (2017). “Ebola kills generations”: Qualitative discussions with Liberian healthcare providers. *Midwifery*, 45, 44–49. <https://doi.org/10.1016/j.midw.2016.12.005>
- Benton, A., & Dionne, K. Y. (2015). International political economy and the 2014 West African Ebola outbreak. *African Studies Review*, 58(1), 223–236. <https://doi.org/10.1017/asr.2015.11>
- Bisoka, N. A., Vlassenroot, K., & Ramazani, L. (2021). From biolegitimacy to antihumanitarianism: Understanding people’s resistance to ebola responses in the Democratic Republic of the Congo. *SSRC Congo Research Briefs*. www.ssrc.org/publications/view/from-biolegitimacy-to-antihumanitarianism/.
- Crawford, N., & Holloway, K. (2021). *La 10e réponse à Ebola en République démocratique du Congo*. London: ODI. https://cdn.odi.org/media/documents/La_10e_r%C3%A9ponse_%C3%A0_Ebola_en_R%C3%A9publique_d%C3%A9mocratique_du_Congo_le%C3%A7ons_sur_le_lead_nEx8UGD.pdf.
- Enria, L. (2018). *The politics of work in a post-conflict state: Youth, labour & violence in Sierra Leone*. James Currey.
- Enria, L., Lees, S., Smout, E., Mooney, T., Tengbeh, A. F., Leigh, B., & Larson, H. (2016). Power, fairness and trust: Understanding and engaging with vaccine trial participants and communities in the setting up the EBOVAC-Salome vaccine trial in Sierra Leone. *BMC Public Health*, 16(1), 1–10. <https://doi.org/10.1186/s12889-016-3799-x>
- Enria, L., & Tengbeh, A. F. (2022). Ebola Wahala: Breaching experiments in a Sierra Leonean Border Town. In R. Boddice, & B. Hitzer (Eds.), *Feeling Dis-Ease: Experiencing medicine and illness in modern history* (pp. 43–61). Bloomsbury Publishing.
- Erland, E., & Dahl, B. (2017). Midwives’ experiences of caring for pregnant women admitted to Ebola centres in Sierra Leone. *Midwifery*, 55, 23–28. <https://doi.org/10.1016/j.midw.2017.08.005>
- Fairhead, J. (2014). The significance of death, funerals and the after-life in Ebola-hit Sierra Leone, Guinea and Liberia: Anthropological insights into infection and social resistance.
- Groupe d’étude sur le Congo. (2020). *Ebola en RDC: Système de santé parallèle, effet pervers de la Réponse*. <https://congoresearchgroup.org/rapport-ebola-en-rdc-systeme-de-sante-parallele-effet-pervers-de-la-reponse/?lang=fr>.
- Groupe d’étude sur le Congo. (2021). *Rebelles, médecins et marchands de violence: Comment la lutte contre Ebola est devenue une partie du conflit dans l’est de la RDC*. https://reliefweb.int/sites/reliefweb.int/files/resources/vir_ebol_a_report_02082021_fr.pdf.
- James, M., Kasereka, J. G., & Lees, S. (2021). The politics of the second vaccine: Debates surrounding Ebola vaccine trials in eastern Democratic Republic of the Congo. *Journal of Humanitarian Affairs*, 3(3), 4–13. <https://doi.org/10.7227/JHA.069>
- James, M., & Lees, S. (2022). Are you sure it’s not the Corona vaccine? An Ebola vaccine trial during COVID-19 in DRC. *Medical Anthropology*, 41(5), 503–517. <https://doi.org/10.1080/01459740.2022.2097908>

- James, P. B., Wardle, J., Steel, A., Adams, J., Bah, A. J., & Sevalie, S. (2020). Providing healthcare to Ebola survivors: A qualitative exploratory investigation of healthcare providers' views and experiences in Sierra Leone. *Global Public Health*, 15(9), 1380–1395. <https://doi.org/10.1080/17441692.2020.1762105>
- Jones, S., Sam, B., Bull, F., Pieh, S. B., Lambert, J., Mgawadere, F., & van den Broek, N. (2017). 'Even when you are afraid, you stay': Provision of maternity care during the Ebola virus epidemic: A qualitative study. *Midwifery*, 52, 19–26. <https://doi.org/10.1016/j.midw.2017.05.009>
- Lees, S., Enria, L., & James, M. (2022). Contesting the crisis narrative: Epidemic accounts in Sierra Leone, Tanzania and Democratic Republic of Congo. *Disasters*, 41(7), 78–98.
- Lipton, J. (2017). 'Black' and 'white' death: Burials in a time of Ebola in Freetown, Sierra Leone. *Journal of the Royal Anthropological Institute*, 23(4), 801–819. <https://doi.org/10.1111/1467-9655.12696>
- McMahon, S. A., Ho, L. S., Brown, H., Miller, L., Ansumana, R., & Kennedy, C. E. (2016). Healthcare providers on the frontlines: A qualitative investigation of the social and emotional impact of delivering health services during Sierra Leone's Ebola epidemic. *Health Policy and Planning*, 31(9), 1232–1239. <https://doi.org/10.1093/heapol/czw055>
- Okello Wonyima, I., Fowler-Kerry, S., Nambozi, G., Barry, C., Wills, J., Palmer-Clarke, Y., & Locsin, R. C. (2022). Hidden tales of Ebola: Airing the forgotten voices of Ugandan "ebola nurses". *Journal of Transcultural Nursing*, 33(1), 72–78. <https://doi.org/10.1177/10436596211017968>
- Raven, J., Wurie, H., & Witter, S. (2018). Health workers' experiences of coping with the Ebola epidemic in Sierra Leone's health system: A qualitative study. *BMC Health Services Research*, 18(1), 1–9. <https://doi.org/10.1186/s12913-018-3072-3>
- Redfield, P. (2005). Doctors, borders, and life in crisis. *Cultural Anthropology*, 20(3), 328–361. <https://doi.org/10.1525/can.2005.20.3.328>
- Service Availability and Readiness Assessment (SARA). 2017. *Government of Sierra Leone Ministry of Health and Sanitation*. https://mohs2017.files.wordpress.com/2018/05/mohssierra-leone_sara-report_final.pdf.
- Storer, E., Dawson, K., & Fergus, C. A. (2022). Covid-19 riskscapes: Viral risk perceptions in the African Great Lakes. *Medical Anthropology*, 41(4), 387–403. <https://doi.org/10.1080/01459740.2022.2047675>
- Utas, M. (2005). West-African warzones: Victimcy, girlfriending, soldiering: Tactic agency in a young woman's social navigation of the Liberian war zone. *Anthropological Quarterly*, 78(2), 403–430. <https://doi.org/10.1353/anq.2005.0032>.
- Vigh, H. (2008). Crisis and chronicity: Anthropological perspectives on continuous conflict and decline. *Ethnos*, 73(1), 5–24. <https://doi.org/10.1080/00141840801927509>
- Villa, J. (2023). Professionnels du désordre et violences organisées durant l'épidémie d'Ebola du Kivu (2018-2020). *Les Cahiers d'Outre-Mer*, 286, 489–521.
- Wester, M., & Giesecke, J. (2019). Ebola and healthcare worker stigma. *Scandinavian Journal of Public Health*, 47(2), 99–104. <https://doi.org/10.1177/1403494817753450>
- White, L. (2000). *Speaking with Vampires: Rumor and History in Colonial Africa*. University of California Press.
- Wilkinson, A., & Leach, M. (2015). Briefing: Ebola—myths, realities, and structural violence. *African Affairs*, 114(454), 136–148. <https://doi.org/10.1093/afraf/adu080>