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Deploying air wings in biosecurity: the Nigerian Air Force's crisis management response to the COVID-19 pandemic

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ABSTRACT

Across the world, governments attempted to mitigate the effects of the crisis posed by the COVID-19 global pandemic following its outbreak. In some instances, these efforts have involved deploying the military in the enforcement of containment measures. Previous research has explored the role of the Nigerian military in internal security and crisis management; however, a gap exists in by way of the absence of organised research that unpacks the use of air capabilities in mitigating a biosecurity threat such as COVID-19 within Nigeria's territory. This study attempts to fill this gap by interrogating the early crisis management response of the Nigerian Air Force to the COVID-19 pandemic within Nigeria, through an examination of its security-based approach. Drawing on secondary sources of data, this qualitative study, argues that the early crisis management response to the COVID-19 pandemic by the Air Force provided a much-needed intervention towards saving human lives, given the biosecurity threat and inherent weaknesses in Nigeria's healthcare system.

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Introduction

Since its discovery in Wuhan, China in December 2019, and its subsequent declaration as a global pandemic by the World Health Organization on 11 March 2020 (WHO 2020), the COVID-19 global pandemic has had a severe effect on lives and livelihoods across the world (Hu and Liu, 2021). In some instances, this has resulted in disruptions to the supply chains and by extension disruptions to global financial markets, as well as exacerbating poverty and inequalities across various countries (UNDP 2022). In other instances, the pandemic has taken a toll on health systems, mounting pressure on health facilities and health workers, and first responders who had to work multiple shifts to meet the wave of patients admitted to hospitals, especially in the early months of the spread of the virus. In addition to this, most governments struggled to contain the virus, despite putting in place various containment measures such as lockdowns, contact tracing, physical distancing, restrictions on public gatherings, isolation, as well as the quarantining of

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infected persons. Similarly, it has been argued that in West Africa, the pandemic has deepened nationalism, which in turn, has violated the Economic Community of West African States (ECOWAS's) free movement protocols as a result of uncoordinated and reprisal border closures (Aniche, Iwuoha, and Isike 2022).

Given the overwhelming challenges that accompanied the rapid spread of the virus, the military across several states were deployed as part of a broader crisis management response (Kalkman 2020; Wilén 2021). Nigeria is no exception to this (Ayemoba et al. 2022). In the case of Nigeria, it is pertinent to note that existing disconnects between the federal and state governments affected the prospects of a harmonised and coordinated containment response (Aniche, Iwuoha, and Obi 2021; Aniche et al. 2022). The Nigerian Air Force (NAF) played a particularly crucial role from the outbreak of the virus on 27 February 2020, following the confirmation of the first case of COVID-19 in Nigeria (NCDC 2022). This involved airlifting medical equipment and supplies, healthcare professionals, provision, and distribution of oxygen to isolation centres and hospitals across the country and as well as the timely provision other relief materials (NAF 2020a to 2020p). Other activities embarked upon by the Nigerian Air Force (NAF) as part of its crisis management response to COVID-19 in the country included preventive measures through the conduct of sensitization and training programmes (NAF 2020). These are all part of its constitutional role in providing Military Aid to Civilian Authority (MACA).

Much of the historical discourse on Nigeria's military primarily focuses on the Army (Omeni 2022). Furthermore, existing scholarship on the role of the Nigerian military in its non-traditional military operations such as conducting humanitarian operations have been well articulated, including the provision of relief materials and medical supplies in conflict affected settings (Aina 2023; Oyewole 2020). However, the use of air capabilities in mitigating biosecurity threats such as the COVID-19 pandemic within Nigerian territory has been understudied. This foregrounds the need for this study which specifically examines the NAF's contributions in this regard, its attendant challenges, and resulting consequences. While the NAF's crisis management response to the COVID-19 pandemic in Nigeria has contributed significantly to mitigating the effect of the virus, this paper argues that it has also had the unintended consequence of undermining the capacity of state institutions which are saddled with this constitutional responsibility. Despite the utility of armed forces in providing crucial aid during times of need, it is important that deployment for such purposes does not undermine civilian organisations (Kalkman 2020). The study answers the question of how the NAF's crisis management response to COVID-19 has brought this about.

Following the introduction, the paper lays out the methodology adopted for the study. This is then accompanied by the section on the conceptual framework of analysis, after which the section highlighting an overview of the state of the COVID-19 pandemic in Nigeria is discussed. The section that then follows interrogates the Nigerian Air Force's crisis management response to COVID-19 in Nigeria. The paper ends with a conclusion.

Methods

This qualitative study adopts a descriptive and exploratory research design which draws on secondary sources of data obtained through peer reviewed journal articles, books,

official reports, and reputable online news reportage from international news sources, as well as local news sources, including official press releases by the Nigerian Air Force. The peer reviewed journal articles focused on the Nigerian Air Force as well as on COVID-19 and the state of the health sector in Nigeria. Official reports include some from the Nigeria Centre for Disease Control (NCDC). The local and international online news sources provided insights on the state of COVID-19 in the world as well as in Nigeria. The scope of the research covers the NAF's early crisis management response to the COVID-19 pandemic between the period from February 2020 when the first case was recorded in Nigeria, up until January 2021. The choice to focus on the NAF's early crisis management underscores the significance of its timely response at a time of scientific uncertainties concerning the nature and character of the virus. The study also utilises other relevant qualitative research techniques which include content analysis and the thematic data analysis method to analyse data, given its usefulness in identifying and reporting patterns within the data.

The military in national crisis management – a conceptual framework of analysis

Traditionally, the military as a distinct social organisation within the state ensures its territorial integrity is protected against external aggression. In certain instances, across the globe, the military has also been called upon to assist in internal security operations intended at restoring peace and security. However, some of its non-traditional roles have also involved the provision of relief materials through humanitarian operations during times of crisis, thereby legitimising its responses. Derived from the Greek word 'Krisis', a crisis has been described as a temporary event that while important, does not constitute the bulk of our existence (Alon, Matthew, and Shaomin 2020). Lipscy (2020) therefore argues that crises are defined by threat, uncertainty, and time pressure, noting that understanding them requires a careful examination of how these variables affect both political and economic outcomes.

As one of the tri-services of the military organisation in most countries, the air force represents the arm of the military that is mostly concerned with the use of air assets towards achieving military objectives. This often entails the use of various kinds of air assets such as airplanes, helicopters, drones, and other forms of unmanned ariel assets. It is worthy of note that as part of its composition, the air force also comprises personnel of various ranks including regiments and special operations forces that aid its effective operations (Aina 2023).

Airpower has been defined as anything that flies or has the capability to accomplish strategically worthwhile tasks in the air (Gray 2012). This is not limited to times of war, but also crisis situations that occur during peace times. In this regard, airpower therefore entails the use of aviation as it relates to the pursuit of power and other related security objectives of a nation-state as well as other political actors. Simply put, Oyewole (2020) defines it as the use of air assets for strategic purpose. This entails civil aviation such as air transportation, and surveillance, rescue, and relief missions amongst others, towards advancing a nation's security interests such as during times of crisis management resulting from a biosecurity threat. Dokubo (2011) therefore argues that airpower is no longer only primarily about air superiority and the destruction of enemy forces, but also about

the subtleties of creating security. This could also include biosecurity as a broader part of human security.

Crisis management on the other hand, has been defined as an art, involving the removal of risks and uncertainties, thereby allowing institutions to achieve their goals. It therefore entails decisions intended at addressing crisis situations (Ulmer 2001). Doing so often requires designing plans and implementing them. Crisis management therefore involves the management of crisis that considers preparedness, knowledge, awareness, capabilities, skills, and underlying management patterns (Al-Khashali and Al-Qutob 2007).

How the military frames the threat, such as in the case of a biosecurity threat often determines its response to it. Chatti (2022) however contends that the military's framing of health crises poses more problems than it solves, given that the fear of war unnecessarily exaggerates health risks thereby euphemising death as an acceptable loss. This approach has had the unintended effect of the securitisation of the response to national health crisis by the military. Securitisation here connotes an attempt to reframe a range of non-military topics and agendas as matters of security (Murciano 2020). In this regard, Erickson, Marko, and Nadav (2022), have argued that the decisions on the use of the military stems from the securitisation of domestic disaster relief rather than being a response to specific disaster-related features, shortcomings of state capacity or other social and political factors. The military's crisis management response to disasters can be understood from the perspective of the urgency the military accords to threat mitigation. As Comfort (2022), rightly notes where action is not taken in time during such situations, losses tend to be accelerated when the hazard does occur.

It is also imperative to note that while the military's response to national crisis may vary from country to country, in low-and middle-income countries (MIMCs), the is known to often fill the gaps owing to the prevalence of under-resourced health systems (Gibson-Fall 2021). Boin and Lodge (2021), identify two approaches to the crisis-induced uncertainty. This includes then *principled approach*, which is based on decisions on a core principle or value, as well as the *pragmatist approach*, which is based on an experimental, trial-and-error strategy. This paper subscribes to the principled approach which aligns with the theoretical perspective on crisis management – reflective of critical decision-making. as it relates to appraising the military's role in national crisis management. The principled approach within the context of a health emergency therefore prioritises public health such as the need to protect as many people as possible from a disease or virus (Boin and Lodge 2021).

Given the case with the COVID-19 pandemic its projection as a national security depicts the consequences of its spread on human lives (Oshewolo and Nwozor 2020). This provided the context upon which a military response was normalised, across the globe. Scholars such as Jetly Rakesh et al. (2020) argued that the use of military approaches and experiences such as mission-focused approach, clear leadership, and building resilience could potentially impact global efforts at slowing the spread of COVID-19. The professionalism and unique capabilities of most modern armed forces are thus essential during national health emergencies (Juvan 2022). The COVID-19 global pandemic has therefore brought to bear the need of a robust global health network that recognises and accommodates the military's capabilities such as in the areas of intelligence, surveillance, and reconnaissance (Baker et al. 2022)

COVID-19 pandemic in Nigeria – an overview

First discovered in Wuhan, China, in December 2019, the WHO notes that the Corona virus disease, popularly referred to as COVID-19, is an infectious disease, which is caused by the SARS-CoV-2 virus (WHO 2020). Other families of Corona virus from which this virus belongs are the more severe diseases such as the acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS) diseases. Following the rapid increase in the number of cases of infections from across the world, the WHO declared the disease as a global pandemic on 11 March 2020 (WHO 2020). With the spread of the disease also began the race to manufacture a vaccine. As of January 2023, 69.3% of the world's population had received at least one dose of the COVID-19 vaccine, with 13.23 billion doses administered globally and 1.19 million being administered daily (Our World in Data 2020). The situation in the world's poorest countries shows that as of April 2021, only 0.2% of the 700 million COVID-19 vaccine doses had been received (Otu et al. 2021).

Origins, infections and death rates

In Nigeria, which is Africa's largest country by population size, the first case of COVID-19 was confirmed on 27 February 2020, after an Italian citizen working in Nigeria had return from Milan through the Murtala International Airport in Lagos (NCDC 2020). The second recorded positive case of the virus was in the country's southwestern state of Ogun, which was followed by multiple positive cases across the country. According to the Nigeria Centre for Disease Control (NCDC), as of 25 March 2022, a total of 255,296 COVID-19 cases had been confirmed of which 249,495 cases have been discharged and 3,142 deaths have been recorded across Nigeria's 36 states and the Federal Capital Territory (NCDC 2022). On 23 January 2023, the total number of active COVID-19 cases in Nigeria stood at 2,785, with 64,884 confirmed cases, 1,163 deaths and 60, 936 recoveries (State House 2023). The leading non-military government agencies responsible for managing the COVID-19 crisis in Nigeria include the Federal Ministry of Health, the Federal Ministry of Interior, the Presidential Task Force on COVID-19, the National Emergency Operations Center, the NCDC, and the Nigerian Immigration Service, amongst others.

In recognition of biosecurity threat posed by the COVID-19 virus (Albert, Amado, and Joshua 2021), a Presidential Steering Committee (PSC) was established and mandated to coordinate and oversee the national response to the pandemic. This is in addition to also strengthening the capacity of the National Centre for Disease Control (NCDC) in carrying out large scale testing and other follow up medical responses on positive cases. The Presidential Task Force (PFT) on COVID-19 would eventually be established on 9 March 2020, to coordinate and oversee Nigeria's multi-sectoral inter-governmental efforts, with the goal of containing the spread and mitigating the impact of COVID-19 in Nigeria (State House 2023). Given the need to ensure that the PFT is able to effectively deliver on its mandate, a National COVID-19 Response Centre (NCRC) was also established within the PFT. Prior to the COVID-19 pandemic, there had already existed an oxygen supply gap in Nigeria, which initially had only about 30 oxygen plants catering to a population of over 200 million people.

As of 2016 out of 169 hospitals that were assessed in 8 states across the country, only 55% provided oxygen therapy. Similarly, within the same period, out of the paediatric

wards assessed, only 17% provided oxygen therapy, with only 11% of the hospitals having pulse oximeters (Goh 2017). The situation is further worsened by disruptions to production owing to poor maintenance, aging equipment, and unreliable power supply. The federal government in January 2021 however pledged to create a new oxygen plant in each of the country's 36 states (George and Akwagyiram 2021). This demonstrates the dire state of Nigeria's under-resourced healthcare system. The federal government had also embarked on the repairs of oxygen production plants across the country, which involved working with industrial oxygen producers to repurpose industrial oxygen plants intended at producing medical grade oxygen.

Other measures by the federal government included rolling out palliative measures targeting vulnerable groups, the emplacement of social and public health measures such as a nationwide lockdown, physical distancing, restrictions on the number of people in public spaces at a given time, isolation, and the quarantining of infected persons (PTF 2020). Besides the policy on social distancing impacting on citizen's access to healthcare facilities (Iwuoha et al. 2021a), some of these policies also had the unintended consequences at sub-sectoral level such as for small businesses (Iwuoha and Aniche 2021; Iwuoha et al. 2021b). Given Nigeria's peculiar socio-economic circumstances, it has been argued that there is a need for the adoption and institutionalisation of an indigenous Afro-centred approach towards the containment of the COVID-19 pandemic in the country (Iwuoha and Aniche 2020).

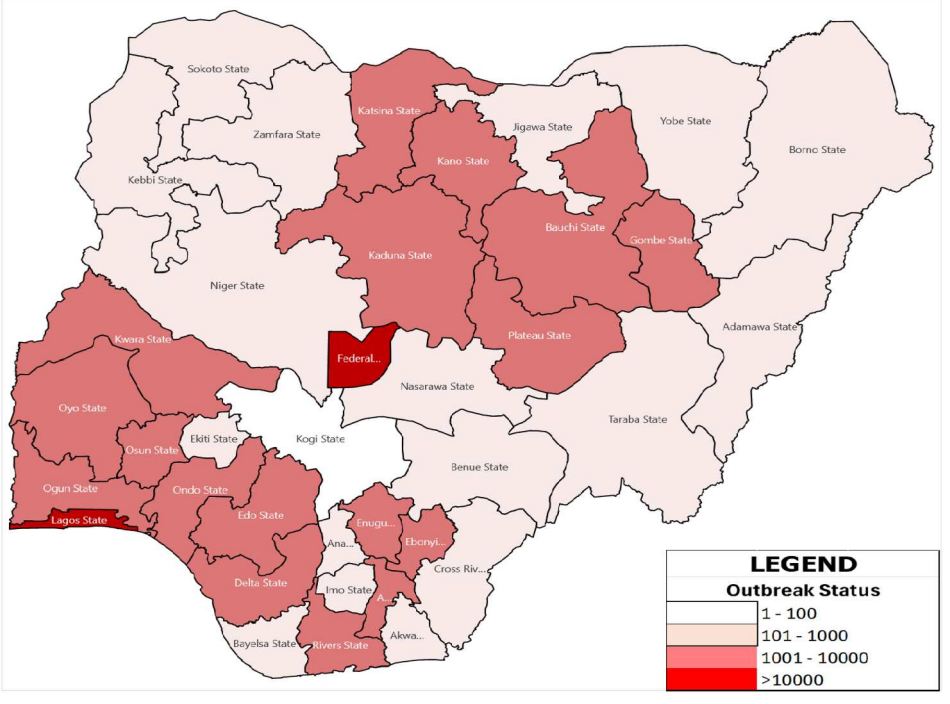

Figure 1. Map of Nigeria showing distribution of cumulative cases of COVID-19 in Nigeria as of January 2021.[1] Source: Designed by the author with data obtained from the Nigerian Centre for Disease Control (NCDC).

Figure 1 shows the cumulative distribution of COVID-19 cases in Nigeria as of 3 January 2021, with the Southwest and South South geopolitical zones recording some of the highest cases. Given that Lagos state recorded the first case of the virus, the state experienced a widespread before efforts at mitigating its spread was recorded. As a result, the state had recorded well over 10,000 cases in the days following its first recorded case. Given the centrality of what the FCT represents, the high influx and movement of persons is a likely reason for the increase in infection cases. While most of the Northwest and Northeast regions of the country had recorded lesser cases, some states such as Kano and Kaduna had higher cases. This could be attributed to their high populations as well as the high levels of illiteracy amongst these subnational states.

Vaccine availability and distribution

On 3 March 2021, the federal government of Nigeria took delivery of 3.94 million doses of the AstraZeneca vaccine, for use in the inoculation of the populace, making Nigeria the third country in West Africa, after Ghana and Ivory Coast to receive COVID-19 vaccines from the COVAX facility. The formal deployment of the COVID-19 vaccines across Nigeria would commence the following day, being 4 March 2021 (Usigbe 2021). Subsequently, Nigeria received additional batches including the Moderna, and Johnson and Johnson vaccines. Furthermore, the federal government had also mobilised the private sector in supporting vaccine procurement. For instance, in October 2021, MTN which is a telecoms company delivered 300,000 doses (Usigbe 2021). As of February 2022, the country's vaccination drive stood at just 100,000 doses a day (Princewell 2022). The federal government, through the Presidential Steering Committee would eventually announce on 13 October 2021, that beginning 1 December 2021, workers who failed to show proof of vaccination, or a negative COVID-19 result would be prevented from gaining access to government offices.

As part of efforts to increase geared towards the manufacture and production of its own COVID-19 vaccine, in January 2022, President Muhammadu Buhari announced Nigeria's ongoing plans to develop a COVID-19 vaccine, of which the Federal Ministry of Health is taking lead (Princewell 2022). Prior to this, the release of 10 billion Naira (approximately $26,315,789) had been announced by the federal government through the federal Ministry of Finance as part of efforts to boost local production of a COVID-19 vaccine in the country (Premium Times 2021). So far, at least two vaccines have been created by Nigerian scientists, with clinal trials underway initially (Omezia 2021). The NACOVID trials which took place in Ibadan, Oyo state, Southwest Nigeria have however since been stalled given that they did not meet their recruitment goals (Tsanni 2021).

Nigerian air force's crisis management response to COVID-19

Given the severity of biosecurity threat posed by the COVID-19 global pandemic on human lives, and the attendant issue of the stress inflicted on Nigeria's already weakened healthcare system (Obi-Ani et al. 2021). A challenge which is notably symptomatic of a wider problem of poor institutional and governance capacity of the Nigerian state (Omeje 2021). This was reflected in the high demand on health professionals and medical equipment, the Nigerian Armed Force stepped up to the

occasion. This was preceded by a directive from the Chief of the Defence Staff (CDS) calling on the military to 'articulate a strategic intervention to support the federal government of Nigeria's fight against the COVID-19 pandemic' (DHQ 2020a). This response has included the provision of local content driven solutions by the Defence Industries Corporation of Nigeria (DICON), intended at addressing the shortages of Personal Protective Equipment (PPE), as well as research and development (R&D), in tackling the biosecurity threat posed by COVID-19. Other efforts in this regard have included the provision of essential and lifesaving equipment such as over 1,500 dozen of DICSanz, which is a high-quality hand sanitiser for troops of the Nigerian Army, as well as providing thousands of non-permeable PPE kits for medical workers and other stakeholders across the country (DHQ 2020a).

Furthermore, the Nigerian military through DICON successfully produced a digital mechanical ventilator known as DICOVENT, which is a low-cost machine, that can deliver positive pressured ventilation using a volume-controlled ventilation (VCV) system. These efforts amongst others have contributed towards strengthening Nigeria's healthcare infrastructure in its fight against the COVID-19 pandemic. The military also embarked on several COVID-19 enlightenment campaigns and assisted in the distribution of palliatives to local communities, such as in Riyom and Basa local government areas of Plateau state in the Northcentral region in June 2020. (DHQ 2020b) Th rest of this section shall however focus on the specific role of the Nigeria Air Force crisis management response to the COVID-19 pandemic in Nigeria. These efforts included the deployment of airpower through military transportation to convey equipment, health professionals, relief materials and their distribution, administering medical care, and sensitisation campaigns amongst others, as part of its statutory responsibility in providing medical aid to civilian authority (MACA).

Military transportation of medical equipment, personnel, and supplies

On 4 March 2020, in a single mission, the NAF airlifted medical materials donated to Nigeria by the Jack Ma Foundation towards tackling the scourge of COVID-19 in the country, on a NAF C-130 Hercules aircraft (NAF 913) from the Murtala Mohammed International Airport (MMIA), in the Southwest region city of Lagos to the Nnamdi Azikwe International Airport (NAIA) in Abuja, Nigeria's capital city. These medical materials consisted of 107 boxes of medical supplies and equipment, including surgical masks, medical disposable protective clothing, face shields and virus detection kits, weighing about 3,000 pounds. They were handed over to a delegation from the federal Ministry of Health, the following day (NAF 2020a).

Similarly, on 10 April 2020, the NAF airlifted medical equipment and supplies donated by the government of Turkey, to Nigeria from the MMIA in Lagos to the NAIA in Abuja. These medical items which were airlifted by a NAF C-130 Hercules aircraft (NAF 917) included several boxes of equipment, medications, and other supplies weighing about 4,000 kg were handed over to a representative of the Presidential Task Force on COVID-19 for onward delivery to the Central Storage Facility in Abuja (NAF 2020b).

Prior to this, the NAF had airlifted a team of health officials with the Nigeria Centre for Disease Control (NCDC) from Brazzaville, in the Republic of Congo. The team undergone a training organised by the World Health Organisation on the management of the

COVID-19 pandemic. In the same vein, in Edo state, located in Nigeria's south south region, the NAF had airlifted some healthcare professionals from the Irua Specialist Teaching Hospital to Abuja. On 24 March 2020, the NAF airlifted medical materials consisting of 107 boxes of medical supplies and equipment, donated by the Jack Ma Foundation (NAF 2020b). As at 16 May 2020, the NAF had flown over 300 h of airlift support missions in support of the Presidential Task Force (PTF) on COVID-19, involving the airlifting of medical equipment and supplies, as well as personnel of the NCDC, and other federal and state government officials across the country towards enabling them curb the spread of the virus (NAF 2020h). In recognition of the NAF's contributions in this regard, the Minister of State for Health, Dr Olorunnimbe Mamora, noted that the NAF remained the backbone of the logistics operations of the PFT's response to the COVID-19 pandemic in Nigeria (NAF 2020m).

In December 2020, the Nigerian Air Force was enlisted by the federal government to increase liquid oxygen production at a plant in Yola, Adamawa state, located in Nigeria's Northeast region. This included flying 117 cylinders to two centres in Abuja given the shortages of oxygen shortages in the wake of the country's second wave of the coronavirus (George and Akwagyiram 2021). Similarly, on 7 January 2021, the NAF through a NAF C-130 Hercules aircraft, airlifted additional LOX, to the NAIA, from where they were distributed across designated hospitals and isolation centres in Abuja. The previous day, the NAF had also supplied cylinders of the LOX to the Maitama District Hospital, in Abuja, intended to be used for treating COVID-19 patients as part of its early crisis management response to the pandemic (NAF 2021).

Air capability readiness in biosecurity crisis

As of the time of its official commission, the NAFIL had produced about 40,000 face masks and 450 PPEs towards battling the COVID-19 pandemic in Nigeria (NAF 2020d). These efforts amongst others were also intended at ensuring that its medical and emergency personnel against COVID-19. In addition to this, the Air Force Research and Development Centre (AFRDC) also embarked on the development of locally manufactured ventilator to compliment efforts at addressing the medical equip shortages in the country's fight against the COVID-19 pandemic (NAF 2020b). As part of its crisis management response to the spread of COVID-19 in Nigeria, the NAF on 27 May 2020, unveiled two emergency ventilators called NAF E-Vents, in Kaduna. The ventilators had been locally produced by a team of researchers from the AFRDC and the Air Force Institute for Technology (AFIT), Kaduna, also in partnership with the Faculty of Veterinary Medicine, Ahmadu Bello University, (ABU), Zaria. It is notable to state that according to the NAF, the team had commenced work in early April 2020 and within three weeks had developed two prototypes (NAF 2020i).

Closing the gap in health care provisioning

Given the deficiencies in the availability of liquid oxygen (LOX) in addressing the biosecurity threat of the COVID-19 pandemic in Nigeria, which reflects a weakened healthcare system (Okolie, Kelechi, and Olihe 2022), the NAF through its Liquid Oxygen Plant located at the 103 Strike Group, in the Northeast region's city of Yola, Adamawa state, ramped up efforts in the production of LOX. The purpose was to aid distribution in

isolation centres and other designated hospitals across the country (NAF 2020b). In addition, the NAF had also donated 30 cylinders of liquid oxygen to the Presidential Task Force on COVID-19, part of which was deployed at the Asokoro Management Centre, in Abuja (NAF 2020k). On 17 September 2020, the NAF distributed over 140 cylinders of LOX to 2 isolation centres in Abuja as part of its crisis management response to COVID-19 in the country. It is significant to note that the NAF's 103 Strike Group (103 STG) at the NAF Base, Yola from where the LOX plant is located, runs for 24 h a day, and has the capacity to produce 1,000 litres of LOX every 8 h (NAF 2020p).

Distribution of relief materials and palliatives

In April 2020, the NAF, through its Sam Ethan Air Force Base (SEAFB) in Ikeja, Lagos state and with the support of the NAF Headquarters in Abuja, provided palliative measures intended at alleviating the sufferings of the base's community due to the lockdown which was in effect in Lagos state at the time due to the COVID-19 pandemic. This also included the establishment of a COVID-19 Compliant Mobile Farm Market on the Base, which was done with the assistance provided by the Lagos State Ministry of Agriculture (NAF 2020e).

Similarly, on 21 April 2020, the NAF distributed food items and other palliatives to indigent members of its host communities in Nuwalege, Zamani and Ushafa, in Abuja. These were part of its crisis management response aimed at complementing those of the federal government in mitigating the effects of the economic hardship caused by the lockdown imposed to curb the spread of the Coronavirus (COVID-19). The initiative targeted about 500 families in Abuja, as part of its first phase while the NAF had also announced that the distribution of the palliatives would be replicated across Nigeria's 6 geopolitical zones within the same month of April 2020 (NAF 2020f).

Furthermore, the NAF embarked on the distribution of food items between 23 April and 25 April 2020, through its Tactical, Mobility, Special Operations, Air Training, Ground Training and Logistics Commands. Some of the distributed items included beans, noodles, tubers of yam, rice, vegetable oil, semovita, bags of garri (cassava), condiments, hand sanitiser, and face masks amongst others Some of the palliatives distributed by the NAF in places such as Ewu, Shogunle, Mafoluku, and Shafa communities in Oshodi/Isolo and Alimosho Local Government Areas (LGAs) of Lagos state catered to 700 families. The palliatives were also specifically targeted at pregnant women, the disabled, and the aged within the communities (NAF 2020g).

Within the same period, in Enugu state, 200 indigent familes in Gabo Village, Emene, Ugbowa, Akpakpa Nike, and Agbani in Nkanu East LGA benefitted from the distribution of palliatives by the NAF's Ground Training Command (GTC). In Yenegoa, Bayelsa state, 120 poor and vulnerable households including widows and other less privileged persons from within the Opolo communities benefited from the palliatives distributed by the NAF. In Bauchi state, 200 families in Gwallaga and Durum communities in Bauchi LGA benefitted, while in Makurdi, Benue state, 240 families from Abinsi, Fiidi, Ogondu and Ter communities had benefitted. In Kaduna state, 350 families in Barkallahu, Kuaya and Kirama communities in the Rigachikun District of Igabi LGA of the state had also benefitted from the palliatives distributed to the poor and other vulnerable groups, intended at cushioning the economic hardships resulting from the COVID-19 pandemic in Nigeria (NAF 2020g).

Capacity building trainings, sensitization, and enlightenment campaigns

Within the period of February 2020 when the first case of the COVID-19 virus was confirmed in Nigeria and April 2020, the Medical Branch of the Air Force had embarked on a comprehensive sensitisation campaign across all its units. This also included emplacing preventive measures intended at averting an outbreak of the virus amongst personnel as well as their dependants. These sensitisation campaigns entailed awareness lectures on precautionary measures, in addition to the distribution of over 30,000 information, education, and communication materials on the COVID-19 pandemic (NAF 2020b). Furthermore, during the same period, the NAF had also mobilised and deployed some of its medical doctors, nurses, and other healthcare workers to support the federal government's efforts at curtailing the biosecurity threat posed by the COVID-19 pandemic (NAF 2020b). The Service also embarked on the disinfection of facilities and distribution of large quantities of hand sanitisers, and the installation of handwashing facilities across all NAF units including in the NAF headquarters in Abuja.

Similarly, the NAF had conducted a week-long training for some of its flight nurses and aircrew which ended on 23 April 2020. The training which was done via a stimulation exercise at the flight line of the 307 Executive Airlift Group, Nnamdi Azikwe International Airport, Abuja involved the use of a C-130H aircraft. The NAF C-130H aircraft had been configured to carry specialised stretchers, as well as life support equipment, including patient monitors, and ventilators. According to the Chief of the Air Staff, the acquisition of the aeromedical evacuation capability could be deployed during emergency movement for COVID-19 patients (NAF 2020c). On 29 May 2020, follow a two-week intensive training by the NAF at its School of Medical Sciences and Aviation Medicine (NAFSMSAM) Kaduna, another batch of 20 flight nurses and four loadmasters graduated at the NAF Base Kaduna. Some of the skills acquired by participants from the training include evacuating critical COVID-19 patients (NAF 2020j).

On 20 August 2020, the NAF through its Medical Services (MS) Branch conducted a one-day COVID-19 Sample Collection Training, in collaboration with the NCDC and the World Health Organisation (WHO) Nigeria. The training took place at the 063 NAF hospital with 34 medical laboratory personnel composed of 16 scientists and 18 technicians who were in attendance (NAF 2020n). The training was intended at helping to improve early detection of the coronavirus (COVID-19), thereby helping to curb its spread. Earlier, the NAF had also trained several NAF personnel on patient movement, infection prevention, and control, as part of efforts to curb the spread of COVID-19 in Nigeria.

Similarly, the 063 NAFH, had successfully processed over 250 COVID-19 between May and August 2020 (NAF 2020n). In the same month of August 2020, the NAF announced that it would be providing health education talks on COVID-19, along with the distribution of non-surgical cloth face masks to internally displaced persons (IDPs) in Kaduna state (NAF 2020o) On 3 December 2020, the NAF flagged off a 2-day training programme for medical laboratory scientists which focused on the use of the GeneXpert machine towards COVID-19 testing, prior to the machine being distributed to the NAF's hospitals across the country. The initiative was intended at curbing the spread of COVID-19 in Nigeria.

Other activities embarked upon by the NAF as part of its crisis management response to the COVID-19 pandemic in Nigeria included converting the Accident and Emergency

Unit at the 063 NAF hospital (NAFH) in Abuja to a 25-bed COVID-19 Management Centre in June, 2020 (NAF 2020k) Furthermore, as an additional management centre, the NAF had also equipped the newly-built 100 bunk students' hostel at the Air Force Girls' Comprehensive School (AFGCS) Abuja intended at catering to the needs of COVID-19 patients in the event of an increase in the number of cases (NAF 2020k). On 1 July 2022, the NAF also commissioned a newly constructed and well-equipped Dialysis Centre at the 063 NAF hospital in Abuja. Given its proximity to the COVID-19 Management Centre in Abuja, it is expected that it would further enhance the treatment of COVID-19 patients (NAF 2020l).

Conclusion

The Nigerian air force supported the national crisis management response against the COVID-19 pandemic in a timely manner. The implications of this were that it contributed towards ensuring a less catastrophic effect of the pandemic on human lives, particularly in places where air power was deployed for this purpose. However, as Acacio, Anaís, and David (2022) have argued, the tendency to over rely on the military's non-coercive role in disaster relief-related tasks could potentially create dependency on it that extends well into the future. While this mostly holds true, this paper has demonstrated how the Nigerian Air Force's crisis management response to the COVID-19 pandemic complemented the national effort, which proved to be crucial, given the dire state of Nigeria's under-resourced healthcare system. Despite these, it is worth noting that the Nigerian Air Force during this time also encountered some challenges owing to the limitations in the number of air assets required to enable it conduct and sustain a wider operation across the country. This can be attributed to issues related to budgetary constraints as well as insufficient medical human resources from its ranks while carrying out these operations. Furthermore, data on the number casualties, fatalities, and cases of accidents in the conduct of these operations are unavailable in the public domain. It is also pertinent to note that there were no separate budgetary provisions allocated to the Nigerian Air Force for the conduct of these operations and as such it had to primarily rely already appropriated funding. Some of the crucial steps taken by the NAF as part of its early crisis management response to the pandemic included airlifting medical equipment, personnel, and supplies; distribution of relief materials and palliatives to cushion the economic hardships on the poor and vulnerable caused by the pandemic; as well as embarking on capacity building trainings, sensitisation, and enlightenment campaigns.

Notes

1. Visual presented here is as of 3 January 2021.
2. Data presented here are from when Nigeria recorded its first case on 27 February 2020 up to 3 January 2021.

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