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Class-Based Death: Covid-19 Among The Elderly People in Nigeria

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Kata Kunci	Abstrak
COVID-19 Kelas Sosial Kematian Kaum Lansia Nigeria	Artikel ini mengkaji asal muasal kematian yang berkaitan dengan komplikasi COVID-19 di Nigeria berdasarkan usia. Peneliti mengobservasi bahwa <i>National Centre for Disease Control</i> , yang bertanggungjawab untuk menangani COVID-19 dan melaporkan kasus harian, hanya menyediakan data mentah tentang kasus aktif terkonfirmasi serta kematiannya tanpa mengelompokkan data tersebut berdasarkan karakteristik demografis. Hal ini mendorong peneliti untuk melakukan <i>sampling</i> beberapa orang yang meninggal akibat COVID-19 dalam rangka melakukan analisis spesifik usia. Lima belas kaum lansia yang kematiannya disebabkan oleh COVID-19 dijadikan sampel. Untuk mencapai tujuan penelitian, data sekunder dijadikan sumber, dipresentasikan, diinterpretasi, dan dianalisis secara tabular. Penelitian ini menemukan bahwa terdapat kekurangan data COVID-19 yang menunjukkan karakteristik sosiodemografis baik mereka yang terinfeksi maupun mereka yang meninggal dunia. Senada dengan hal tersebut, artikel ini juga mengungkapkan bahwa sebagian besar kaum lansia yang meninggal karena COVID-19 adalah mereka yang menempati kelas sosial atas.
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Keywords	Abstract
COVID-19 Social Class Deaths Elderly Person Nigeria	The article examined the nature of deaths related to COVID-19 complications in Nigeria based on age. The researcher observes that National Centre for Disease Control, responsible for handling COVID-19 and reporting daily cases, only provides crude data about active, confirmed cases and deaths without grouping the data based on demographic characteristics. This motivated the researcher to sample some people who died as a result of the COVID-19 to carry out an age-specific analysis. Fifteen elderly people whose death was attributed to COVID-19 were sampled. To achieve the purpose of the study, secondary data were sourced, presented, interpreted, and analysed in a tabular form. The study found that there is a paucity of COVID-19 data that reveals the sociodemographic characteristics of either affected persons or those who died. Similarly, the paper established most of the elderly people who died as a result of the COVID-19 were at the top echelon of social class.
Submission	1 Mei 2021
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Introduction

Age-specific mortality rate is one of the measurements used by demographers particularly and social scientists generally to measure deaths in a particular age-cohort in the population and COVID-19 pandemic has affected all segments of the population. It is within the scope of Sociology to examine issues related to demography, medical sociology and gerontology because they are centered on social beings. Coronavirus which transformed from endemic in 2019 and pandemic in 2020 has caused deaths among old people than other age groups in many countries including Nigeria. It has been observed that old people were the worst in terms of deaths by the virus between 2020 and 2021 because of their weak body system due to old age, illness and poverty. United Nations Coordinated Response Appeal (2020) has classified old among the most vulnerable groups which suffered the effects of COVID-19. The report found that vulnerable population groups hit hard with the effects of the pandemic are confronted with violence and abuse, such as older people, LGBTI people, persons with disabilities, children and adolescents, particularly girls, as a result of prolonged lockdowns, harsh implementation of emergency measures by authorities, or being associated with COVID-19. Their access to preventative measures and treatment for COVID-19 is more difficult, as well as for other essential health services they may require. Australian Psychological Association (2020) explained that people who are above 60 years are more vulnerable to contract the coronavirus because of their weak body system. However, as a result of advancement in health care services, countries like Australia have enough medical personnel and equipment which enabled majority of the aged who contracted COVID-19 to recover unlike in developing countries such as Nigeria, where there are shortage of trained medical personnel and decrepit equipment in both public and private health care facilities.

The problem of the Study

Perrotta et al. (2020) found that the elderly are a specific cluster of people who are at high risk of contracting a disease. The aged constitute majority of the patients who developed COVID-19 and have shown a rapidly progressive clinical deterioration. The study found that in older individuals, immunosenescence and comorbid disorders are more likely to promote viral-induced cytokine storms resulting in life-threatening respiratory failure and multi-systemic involvement. This shows that even in developed countries with all their quality health care system, the old people were at risk of death from coronavirus.

Almagro (2020) observes that in the USA enough data to analyze the mortality rate of this virus in general. Experience from countries where the spread of the virus has reached advanced stages indicates that the highest mortality rate occurs among older people. This is the case in Italy where, although no deaths of persons under 30 years old have been reported among infected people, the mortality rate for the 30-59 age range is 1.1%, increasing to 11.5% for the 60-79 age range, and to 24% for those over 80 years old. Something similar is taking place in China, where the mortality rate of people with COVID-19 is 3.6% for the 60-69 age range, 8% for the 70-79 age range, and 14.8% for those over 80 years old (The Novel Coronavirus Pneumonia Emergency Response Epidemiology Team 2020). Similarly, in an empirical study conducted in Malaysia by Chee (2020), it was found that the COVID-19 older people were the most affected segment of the population in Malaysia. This correlates with the findings of the World Health Organization (2020) which revealed that older adults in aged care homes are at a higher risk of infection living in an enclosed environment with others. The study concluded that COVID-19 has brought unprecedented challenges and disproportionate threats to older adults' lives, relationships, and well-being. Based on the discourse, the objective of the study is to analyse the Case Fertility Rate (CFR) of COVID-19 related deaths in Nigeria from 2020-2021. This is because of the high profile deaths from the complications of COVID-19 but the National Centre for Disease Control (NCDC) in Nigeria's daily report of COVID-19 vases has failed to aggregates or present cases based on the demographic characteristics of the patients or dead. Therefore, the study asked the following question: what accounts for COVID-19 related deaths among the elderly from the upper class in Nigeria?

Review Related and Relevant Literature

Empirical evidence and observations have revealed that elderly people are vulnerable to deaths resulting from the complication of the COVID-19 infection. This is because of their weakened immune system and many of them degenerative diseases or comorbidities such as diabetes, hypertension, chronic kidney disease, and chronic obstructive pulmonary disease which led to a rate of death among the elderly. A study conducted by the United Kingdom (UK) Government (2020) examined the impact of COVID-19 on different age cohorts in the Kingdom and the result shows that: the virus has negative effects on the economy because people were locked in their homes, public and privates were closed. Similarly, the findings revealed that elderly people, physically challenged, people of colour, and the poor who live in a segregated part of the city were likely to be affected by the virus and even deaths. The experience in Nigeria revealed the contrary, the majority of the COVID-19 deaths were among people who lived in the city center or elitist areas. However, what is similar to the findings in the UK was that most of the COVID-19 deaths in Nigeria were among people above 50 years old. That is, the old people or the elderly, were the most affected category killed by the coronavirus.

In Asia and the Pacific, a rapid appraisal of the COVID-19 conducted by The Regional Risk Communication and Community Engagement (RCCE) (2020) has established that the elderly were the most affected segment of the population with the highest death rate in the Asia and Pacific. The higher fatality rate among the elder because of the COVID-19 was their inability to access health services that are distant from their homes or the services provided are not adequate for the elderly people. They further found that the majority of the elderly people have trouble taking care of themselves, hence depend on family or caregivers for routine assistance which is difficult in an emergency. The study concludes that the majority of the elderly in assisted-living facilities live close to each other and social distancing can be difficult. The study carried out by RCCE is related and relevant to this where it revealed the reasons for the higher fatality rate among the elder people in the Asia and Pacific. Unlike Asia and the Pacific, in Nigeria, there is no provision for elderly homes and any dedicated assisted-living facilities for the elderly. This made the elderly persons live together with people of different age brackets and became vulnerable to the disease.

As part of the response to the ravaging deaths caused by the COVID-19 pandemic, countries at the level were united in their response to the virus. A decade of Healthy Ageing (2020) reported that in the 73rd World Health Assembly, a response strategy has been adopted to tackle the COVID-19 pandemic. The response resolution was co-sponsored by 140 Member States. This was followed by the WHO COVID-19 strategic response, which is updated regularly. The COVID-19 pandemic is exposing dysfunction and fragility in many systems, including health, long-term care, and support, social protection, finance, information-sharing, agriculture and food, trade, labour, employment, and transport. It is revealing gaps in how we acknowledge and address risk, inequality, and intersecting discrimination. But it is also revealing our resilience and creativity, how we can connect in intergenerational solidarity to save and improve lives, and how we value the ecosystems on which we all depend. COVID-19 presents us with an opportunity to build a new “normal”.

A decade of Healthy Ageing (2020) has defined the elderly as people who are in their in the second half of their lives and bear the highest brunt of COVID-19 in different parts of the world. The proportion of deaths is highest in countries and regions in which a larger percentage of the population is aged 60 years and older. Older people have a higher risk of serious illness and higher case fatality rates than people in younger age groups. The COVID-19 pandemic has also shown that older people’s health status before the pandemic determines their susceptibility to serious illness, their recovery, and their longer-term health and well-being. Therefore, the crude case fatality rate increases among people with underlying conditions that affect their immune, cardiovascular or respiratory systems. The findings also indicated that other disparities have emerged, including ethnicity, gender, income, and some living arrangements, such as long-term care facilities. The findings of the Decade of Healthy Ageing have provided a detailed explanation of how COVID-19 has affected the elderly in different areas of the world including Nigeria. However, in Nigeria, the majority of the elderly who died from the

COVID019 were among the high come, earners.

Global Humanitarian Response Plan COVID-19 of the United Nations Coordinated Appeal (2020) found that In Niger Republic, about 67 percent of deaths due to COVID-19 have occurred among older people, and most deaths occurred as a result of the interrupted treatment for their chronic diseases. For example, the study revealed that 27 percent of older people in refugee camps in Tanzania stated that they were unable to follow hand washing advice, notably due to the lack of handwashing facilities. Therefore, COVID-19 has caused significant disruption to older people's access to medications for ongoing conditions. Additionally, there was 32 percent of older people in Iraq had not been able to access their medication since the start of the COVID-19 outbreak, 29 percent in Syria rising to 32 percent of older persons with a disability, and 43 percent of older people in camps.

Theoretical Framework

Cornelius (1972) Immunological Theory stated that immune system is designed to deteriorate with time, increasing vulnerability to infectious disease and, as a result, aging and mortality. It is well recognized that the immune system's efficacy peaks at puberty and then gradually declines with age. Khatami (2018) further elaborated that living a long life is a biological process marked by progressive changes in tissue/organ function, which is frequently linked to an increased risk of chronic diseases. Retardation of immune response dynamics, increased free radicals (oxido-redox imbalance), and increased genetic mutations are all significant explanations of aging. These age-related biological changes result in modest or substantial organ system readjustments, which are referred to as biological senescence and immunosenescence. Blending Immunological Theory and Aging Theory explained by Cornelius and Khatami buttresses how elderly people in Nigeria because of their frail or weak immune system in addition to degenerative diseases that some of the victims of COVID-19 in Nigeria have before they contracted the coronavirus. Therefore, theories alludes the deaths among the elderly people among those affected by the COVID-19 because the antibodies that supposed to protect their body system against germs or to cope with a disease is weak hence susceptible to deaths. This contradicts the explanation of a relationship between lifestyle and social class by Cockerham (2017) individuals in higher social classes tend to have more opportunities in life and have a better sense of control over their circumstances than those in lower social classes. In the case of Nigeria, individuals in upper social class, as a result of their lifestyle of travelling and international transactions with foreigners from countries where the COVID-19 was at its peak exposed them to them to contracting the disease.

Methodology

The researcher has adopted a cross-sectional study design under a quantitative research type. The rationale behind the selection of the research design and type is, it enables the researcher to elicit data within a short time from the targeted population or phenomenon of interest. The population of this study is the elderly people who died as a result of the COVID019 pandemic in Nigeria. The study sourced data from secondary sources of the reported deaths from COVID-19 in Nigeria between 2020 and 2021. People who are above the age of 50 years old are classified as elderly in this study. The researcher chose to collect data because the aim of the study to examine the impact of COVID-19 on the elderly and death could refer to as an ex post facto. Kothari (2004) explains that secondary data indicated that data are readymade, that is, they have been collected and kept by someone for a different purpose. Most of the secondary data used in this study were data published by the Federal Government (NCDC) various publications of foreign governments or international bodies and their subsidiary organisations; journals; books, magazines, and newspapers publications, etc.; reports prepared by research scholars, universities, economists, etc. in different fields; and (a) public records (b) statistics, (c) historical documents, and (d) other sources of published information. Examples of the publications are: Mercy Corps (2020). "Living with Two Worrysome Pandemics" How the COVID-19 Pandemic is Shaping Conflict in Nigeria, Premium Times (2020). Beyond Numbers: Profiling Nigerians who died from COVID-19 (1). Daily Trust (2021). COVID-19:

Some Prominent Nigerians Who Died In January, 2021.

The data collected is presented using the tabulation method and analysed to explain the deaths among the elderly in Nigeria since the outbreak of the disease.

Table 1: Data Presentation and Analysis

S/N	NAME	AGE	DATE
1.	Abba Kyari	67	17 April 2020
2.	Abiola Ajimobi	70	25 June 2020
3.	Wahab Adegbenro	65	2 July 2020
4.	Suleiman Achimugu	67	23 March, 2020
5.	Bayo Osinowo	64	15 June 2020
6.	Prof. Femi Odekunle	77	29 December 2020
7.	Prof. Lovett Lawson	72	14 July 2020
8.	Prof. Oye Ibidapo-Obe	71	3 January, 2020
9.	Prof. Ebere Onwudiwe	68	9 January 2021
10.	Prof. Durojaiye Ajeyalemi	70	6 January 2020
11.	Prof. Habu S. Galadima	57	20 December 2020
12.	Prof. Haruna Wakili	60	20 June, 2020
13.	Prof. Balarabe Maikaba	58	26 April, 2020
14.	Prof. Ibrahim Ayagi	80	April 2020
15.	Prof. Aliyu Umar Dikko	66	25 April 2020

Online Survey (2021)

However, data from the National Centre for Disease Control in Nigeria has on the 25th of March 2021, reported that 97 there were new confirmed cases and 5 deaths recorded in Nigeria

As of 25th March 2021, 162275 cases have been confirmed, 149882 cases have been discharged and 2036 deaths have been recorded in 36 states and the Federal Capital Territory (Abuja). The 97 new cases are reported from 15 states- Lagos (50), Kaduna (12), FCT (10), Bayelsa (8), Imo (3), Kwara (3), Bauchi (2), Osun (2), Akwa Ibom (1), Edo (1), Kano (1), Ogun (1), Oyo (1), Plateau (1), and Zamfara (1). A multi-sectoral national emergency operations centre (EOC), activated at Level 3 and continues to coordinate the national response activities. This implies that National Centre for Disease Control (NCDC) Nigeria since the outbreak of COVID-19 and subsequent confirmation of affected person in Nigeria, in March 2020, has not been providing data or statistics of confirmed cases or deaths of COVID-19 based on sex (gender), age and occupation. Therefore, above results portrayed the age and social status of people who died as a result of contracting the deadly virus, COVID-19.

Discussion of the Major Findings

The findings from the study revealed that majority of the people who died as a result of the COVID-19 virus were elderly persons in Nigeria who live in the urban. This correlates with the COVID-19 Statistics reported by Goldstein and Lee (2020) that COVID-19 mortality risk is many times higher for the old than the young, and indeed the vast majority of COVID-19 deaths are of older people. But the same is true for normal mortality the vast majority of deaths are of the elderly. It is estimated that 75% of all US COVID-19 deaths to be age 70 or above, somewhat above the 64% for normal mortality. In Nigeria, it has been observed that all the elderly persons who died were at the zenith of their career or retired from active public service. National Center for Disease Control (NCDC) (2021) cited in Mercy Corps (2021) states with largest population in Nigeria are invariably those with the high rate of

confirmed cases and deaths from COVID-19, the State are Lagos, FCT (Abuja), Kano, Plateau and Kaduna (NCDC 2021). This reveals the effects of the COVID-19 pandemic in Nigeria where there is no existing policy that caters to the elderly persons even in times of emergency has been catastrophic which is under the realm of Case Fertility Rate (CFR).

Similarly, the findings show that the NCDC in Nigeria do not present its COVID-19 cases based on the population dynamics and characteristics. The Centre only provides crude statistics or data of the active cases, confirmed cases, and deaths without separating them based on age, gender, sexual orientation, and occupation. Therefore, the above findings revealed the economic loss to the government that spent huge resources to train professors among the dead. This has further revealed that the number of deaths was prevalent among the elderly because of advancement in age which makes their body system or organs weak and susceptible to sickness and easily succumb to death which is in line with some of the assumptions of the Immunological Theory in medical sociology.

Additionally, it has further revealed a systemic failure in the inability of the Government in Nigeria to provide a health policy that focuses on the elderly persons with varied health challenges hence resulted in the avoidable deaths of the elderly due to the COVID-19. This is in line with the findings of a report on World Population Ageing 2020 Highlights: Living arrangements of older persons of the United Nations Department of Economic and Social Affairs, Population Division (2020) which stated that among other health and demographic issues, one of the main features of COVID-19 related deaths is the role of age: older persons are at much higher risk of dying from the disease than any other age group. Another study further revealed that in the United Kingdom a primary health care records of 17 million patients, including 11,000 who died from COVID-19, has indicated that patients over the age of 80 years were at least 20 times more likely to die from the disease than those in their 50s, and hundreds of times more likely than those below the age of 40 (Williamson et.al 2020). In the same vein, World Health Organization (WHO) (2020) added that age and underlying health conditions affecting the cardiovascular, respiratory, and immune systems confer an increased risk of severe illness and death among elder persons. The findings from Nigeria regarding the absence of a strategy to protect the elder from the COVID-19 pandemic, in some countries, there are strategies to support the elderly to fight the pandemic. However, in those countries, the strategies and policies have not prevented deaths among the old people let alone in developing countries like Nigeria with a decrepit health care system and inefficient health care service delivery for all age categories. This is in line with the submission of United for Global Mental Health (2020) which stated that despite the particular risks facing older people in the context of COVID-19, they are traditionally neglected in emergency responses. Measures that are currently used to contain COVID-19 have an impact on access, treatment, and care for older adults. Older people fear infection so are no longer accessing services. Italy had a 50 percent reduction in hospital admissions for stroke, while in Argentina visits to memory clinics almost completely stopped. There has also been a reduction in the workforce taking care of older people, as carers are diverted to work on COVID-19, and border closures - particularly in Europe - are preventing migrant workers who provide a large proportion of care for the elderly, from entering host countries.

It could be deduced from the above findings and discourse that unlike other parts of the world where deaths among the elderly persons were a result of the inability of the Government to provide adequate support and care for the elderly due to their fragile health status. However, in Nigeria, the sampled deaths in the above table indicated that they were all from the upper class who died in an expensive private Hospitals in Lagos, Abuja and Kano. The findings revealed that the deceased persons sampled were either highly placed politicians, public servants, or academics who reached the zenith of their chosen professions or careers hence cannot quality and expensive treatments even without the support of the Government. Additionally, all the sampled deceased died in one of the most expensive private Hospitals in Lagos, Kano, and Abuja which beyond the financial strength of the middle and lower-income earners in Nigeria. Furthermore, all the sampled deceased either contracted the virus from their foreign trips or interacted with people who returned from abroad. This indicates that most of the deaths were among people at the echelon of the social ladder who lived in splendour, afford travelling by air, and intermingled with people from different parts of the world where the virus originated

or was side spread. This explained a relationship between age and social class: weak immune system and social interactions with people who are vectors of the COVID-19 virus.

Conclusion

It could be deduced from the above findings that the elderly people who died in Nigeria from the COVID-19 were not low-income earners who lived in a poor neighbourhood. However, in reality, majority of the deaths occurred among people the upper class who contracted the disease or virus more than the middle and low-income earners in the country. This is partly because of their interaction with foreigners or people who embarked on foreign trips to a country or countries where the cases of the virus were rampant. The study, therefore, concludes that COVID-19 pandemic is a disease of the upper-class people who either contracted the disease abroad or returned to Nigeria to die or those who contracted the deadly disease from those returned to Nigeria from Europe or China where the disease was catastrophic. Deaths among the elderly have demographic implications in the reduction in the population of the aged. Similarly, the deaths among the aged have exposed the faulty health care delivery in Nigeria where there is no provision for the elderly who need special treatment and care. Additionally, the failure of the NCDC to collate COVID-19 based on demographic characteristics of the patients has masked the magnitude of the effects of the disease on the elderly and the commensurate economic loss the country has incurred to lose resourceful academics, public service technocrats, and politicians. This is not to downplay the effects of the COVID-19 on age brackets however, the unavailability of age-specific cases has hampered such analysis.

References

- Almagro, L. (2020). *Practical guide to inclusive and rights-based responses to COVID-19 in the Americas*. General Secretariat of the Organization of American States.
- Australian Psychological Association. (2020). *Coronavirus (COVID-19) anxiety and staying mentally healthy: for older adults*. Flinders: The Australian Psychological Society Limited.
- Chee, S. Y. (2020). COVID-19 pandemic: The lived experiences of older adults in aged care homes. *Millennial Asia*, 11(3), 299–317.
- Cockerham, W. C. (2017). *Medical sociology*. 14th Edition. Routledge.
- Cornelius, E. (1972). Increased incidence of lymphomas in thymectomized mice--evidence for an immunological theory of aging. *Experientia*, (28):459.
- Daily Trust (2021). COVID-19: Some Prominent Nigerians Who Died In January, 2021. <https://dailytrust.com/covid-19-some-prominent-nigerians-who-died-in-january-2021>
- Decade of Healthy Ageing (2020). COVID-19 and the decade of healthy ageing. *Connection Series*, (1), 1-6.
- Global Humanitarian Response Plan COVID-19 (2020). The United Nations coordinated appeal, April –December. *GHRP July Update*, 1-111.
- Goldstein, J.R. & Lee, R.D. (2020). Demographic Perspectives on Mortality of Covid-19 and other epidemics. *NBER Working Paper*, 27043. [https://www.who.int/publications/i/item/rational-use-of-personal-protectiveequipment-for-coronavirus-disease-\(covid-19\)-and-considerations-during-severeshortages](https://www.who.int/publications/i/item/rational-use-of-personal-protectiveequipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severeshortages).

- Khatami, M. (2018). Theories of aging and chronic diseases: Chronic inflammation an interdependent 'roadmap' to age-associated illnesses. *Inflammation, Aging and Cancer*, 91-174.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Delhi: New Age International (P) Ltd., Publishers.
- Mercy Corps (2021). "Living with two worrisome pandemics." How the COVID-19 Pandemic is Shaping Conflict in Nigeria.
- NCDC. (2021). NCDC Coronavirus COVID-19 Microsite. <https://covid19.ncdc.gov.ng/>.
- Perrotta, F., Corbi, G., Mazzeo, G., Boccia, M., Aronne, L., D'Agnano, V., Komici, K., Mazzeo, G., Roberto Parrella, R. & Bianco, A. (2020). COVID19 and the elderly: Insights into pathogenesis and clinical decisionmaking. *Aging Clinical and Experimental Research*, 1-10.
- Premium Times (2020). Beyond Numbers: Profiling Nigerians who died from COVID-19 (1). <https://www.premiumtimesng.com/news/headlines/401546-beyond-numbers-profiling-nigerians-who-died-of-covid-19.html>.
- The Novel Coronavirus Pneumonia Emergency Response Epidemiology Team (2020).
- The Regional Risk Communication and Community Engagement (RCCE). (2020). COVID-19: How to include marginalized and vulnerable people in risk communication and community engagement. <http://www.communityengagementhub.org/what-we-do/novel-coronavirus>.
- United For Global Mental Health. (2020). The impact of COVID-19 on global mental health: *A Briefing*, 1-13.
- United Kingdom (UK) Government. (2020). *Analysis of the health, economic and social effects of COVID-19 and the approach to tiering*. <http://www.gov.uk/dhsc>.
- United Nations Coordinated Appeal. (2020). Global humanitarian response plan COVID-19. GHRP July Update.
- United Nations Department of Economic and Social Affairs, Population Division. (2020). *World population ageing 2020. Highlights: Living arrangements of older persons*. ST/ESA/SER.A, 451.
- Williamson, E. (2020). Open safely: factors associated with COVID-19 death in 17 million patients. *Nature*. [http://doi: 10.1038/s41586-020-2521-4](http://doi:10.1038/s41586-020-2521-4).
- World Health Organization (WHO). (2020). COVID-19 Strategy Update, 14 April 2020. World Health Organization.
- World Health Organization (WHO). (2020). Rational use of personal protective equipment for coronavirus disease (COVID-19) and considerations during severe shortages