AFRO Weekly COVID-19 Literature Update

2022/10/29-2022/11/04

Prepared by AFRO COVID-19 IMST through its information management cell, together with DAK team of the ARD's office

Issue No. 63

Due to the abundance of information and literature produced on COVID-19 in the world in general and in Africa in particular, the WHO Regional Office for Africa is publishing a weekly "Weekly COVID Literature Update" to highlight the most important literature. Each week we will select some articles per topic as well as reports and grey literature when available.

The aim is to provide an easy-to-read summary of each publication. This Bulletin is organised according to several categories of interest.

The publications shared are the result of a bibliographic research work carried out regularly on several online information sources with a major search strategy "COVID-19 AND Africa" in combination with the following keywords: **epidemiology (response activities OR hygiene practices OR social distancing OR case management), vaccination, public perceptions, other diseases and other sectors**. For this issue, the list of information sources is as follows: WHO Covid-19 database, PubMed, BioMed Central, Lancet (including sister journals), One library, African Index Medicus, Nature (including sister journals), Science (including sister journals), PLOS, Google scholar, Oxford University Press, Taylor & Francis, Springer, the BMJ.
The list is subject to change and kindly note that the choice of the publications to be included in this update is subjective.

***

En raison de l'abondance d'informations et de littérature produites sur la COVID-19 dans le monde en général et en Afrique en particulier, le Bureau régional de l'OMS pour l'Afrique publie chaque semaine "Weekly COVID Literature Update" pour mettre en évidence la littérature la plus importante. Chaque semaine, nous sélectionnerons quelques articles par sujet ainsi que les rapports et la littérature grise quand c'est disponible.

L'objectif est de fournir un résumé facile à lire de chaque publication. Ce bulletin est organisé suivant plusieurs catégories d'intérêt.

Les publications partagées sont le résultat d'un travail de recherche bibliographique effectué régulièrement sur plusieurs sources d'information en ligne avec une comme stratégie de recherche majeure "COVID-19 ET Afrique" combinés aux mots clés suivants : **epidemiology (response activities OR hygiene practices OR social distancing OR case management), vaccination, public perceptions, other diseases and other sectors.** Pour ce numéro, la liste des sources d'information utilisées est la suivante : WHO Covid-19 database, PubMed, BioMed Central, Lancet (including sister journals), One library, African Index Medicus, Nature (including sister journals), Science (including sister journals), PLOS, Google scholar, Oxford University Press, Taylor & Francis, Springer, the BMJ.
Cette liste est susceptible d'être modifiée. Veuillez noter que le choix des publications à inclure dans cette mise à jour est subjectif.

***

Devido à abundância de informação e literatura produzida sobre a COVID-19 no mundo em geral e em África em particular, o Escritório Regional da OMS para África está a publicar semanalmente uma "Weekly COVID Literature Update" para destacar a literatura mais importante. Cada semana iremos seleccionar alguns artigos por tópico, bem como relatórios e literatura cinzenta, quando disponível.

O objectivo é fornecer um resumo de fácil leitura de cada publicação. Este boletim está organizado de acordo com várias categorias de interesse.

As publicações partilhadas são o resultado de um trabalho de pesquisa bibliográfica realizado regularmente em várias fontes de informação em linha com uma grande estratégia de pesquisa "COVID-19 E África" em combinação com as seguintes palavras-chave: **epidemiology (response activities OR hygiene practices OR social distancing OR case management), vaccination, public perceptions , other diseases and other sectors. Para esta edição, a lista de fontes de informação é a seguinte:** WHO Covid-19 database, PubMed, BioMed Central, Lancet (including sister journals), One library, African Index Medicus, Nature (including sister journals), Science (including sister journals), PLOS, Google scholar, Oxford University Press, Taylor & Francis, Springer, the BMJ.
A lista está sujeita a alterações e note-se que a escolha das publicações a serem incluídas nesta actualização é subjectiva.

Contents

Limited handwashing facility and associated factors in sub-Saharan Africa: pooled prevalence and multilevel analysis of 29 sub-Saharan Africa countries from demographic health survey data

C. COVID-19 vaccination

A socio-ecological exploration to identify factors influencing the COVID-19 vaccine decision-making process among pregnant and lactating women: Findings from Kenya

Couverture vaccinale et raisons de l'acceptation et de l'hésitation à la vaccination contre la COVID-19 chez les patients porteurs de pathologie cardiovasculaire à Ouahigouya

COVID-19 Vaccine Attitude and Its Predictors Among People Living With Chronic Health Conditions in Ibadan, Nigeria

D. COVID-19 public perceptions and effects

COVID-19 risk perception and associated factors in older adults in southern Ethiopia

Risk assessment and preventive health behaviours toward COVID-19 amongst bushmeat handlers in Nigerian wildlife markets: Drivers and One Health challenge

E. COVID-19 effects on other diseases and sectors

COVID-19 effect on tuberculosis care in Sierra Leone: are we in the recovery phase?

The impact of the COVID-19 pandemic on paediatric surgical volumes in Africa: A retrospective observational study

Crimean-Congo Hemorrhagic Fever Outbreak in Refugee Settlement during COVID-19 Pandemic, Uganda, April 2021

Comparison of maternal and neonatal outcomes of COVID-19 before and after SARS-CoV-2 omicron emergence in maternity facilities in Malawi (MATSurvey): data from a national maternal surveillance platform

What have we learned about socioeconomic inequalities in the spread of COVID-19? A systematic review

Rift Valley Fever Outbreak during COVID-19 Surge, Uganda, 2021

The effect of COVID-19 on burn management and outcomes in a resource-limited setting

Impact of COVID-19 on schooling in rural Zimbabwe

Health diplomacy in Africa-opportunities post-COVID-19 /Essay

Conflicts increased in Africa shortly after COVID-19 lockdowns, but welfare assistance reduced fatalities

Measuring customer satisfaction with the Gautrain during the COVID-19 pandemic using the service quality model

Trends in Neurotrauma Epidemiology, Management, and Outcomes During the COVID-19 Pandemic in Kigali, Rwanda

A case study of digital eye strain in a university student population during the 2020 COVID-19 lockdown in South Africa: evidence of an emerging public health issue

TOPICS

A. COVID-19 EPIDEMIOLOGY/ SURVEILLANCE (trends/ distribution)

Title: Modelling and forecasting new cases of Covid-19 in Nigeria: Comparison of regression, ARIMA and machine learning models
Journal: Scientific African
Publish Date: November 2022
URL: https://doi.org/10.1016/j.sciaf.2022.e01404
Abstract:
Covid-19 remains a global pandemic threatening hundreds of countries in the world. The impact of Covid-19 has been felt in almost every aspect of life and it has introduced globally, a new normal of livelihood. This global pandemic has triggered unparalleled global health and economic crisis. Therefore, modelling and forecasting the dynamics of this pandemic is very crucial as it will help in decision making and strategic planning. Nigeria as the most populous country in Africa and most populous black nation in the world has been adversely affected by Covid-19 pandemic. This study models and compares forecasting performance of regression, ARIMA and Machine Learning models in predicting new cases of Covid-19 in Nigeria. The study obtained data on daily new cases of Covid-19 in Nigeria between 27th February, 2020 and 30th November, 2021. Graphical analysis showed that Nigeria had witnessed three waves of Covid-19 with the first wave between 27th February, 2020 and 23rd October, 2020, the second wave between 24th October, 2020 and 20th June, 2021 and the third wave between 21st June, 2021 and 30th November, 2021.The second wave recorded the highest spikes in new cases compared to the first wave and third wave. Result reveals that in terms of forecasting performance, inverse regression model outperformed other regression models considered as it shows lowest RMSE of 0.4130 compared with other regression models. Also, the ARIMA (4, 1, 4) outperformed other ARIMA models as it reveals the highest R^2 of 0.856 (85.6%), least RMSE (0.6364), AIC (-8.6024) and BIC (-8.5299). Result reveals that Fine tree which is one of the Machine Learning models is more reliable in forecasting new cases of Covid-19 in Nigeria compared to other models as Fine tree gave the highest R^2 of 0.90 (90.0%) and least RMSE of 0.22165. Result of 15 days forecasting indicates that Covid-19 pandemic is not over yet in Nigeria as new cases of Covid-19 is projected to increase on 15/12/2021 with predicted new cases of 988 compared with that of 14/12/2021, where only 729 new cases was predicted. This therefore emphasizes the need to strengthen and maintain the existing Covid-19 preventive measures in Nigeria.

Title: Prehospital characteristics of COVID-19 patients transported by emergency medical service and the predictors of a prehospital sudden deterioration in Addis Ababa, Ethiopia
Journal: International Journal of Emergency Medicine
Publish Date: October 28, 2022
URL: https://doi.org/10.1186/s12245-022-00463-z
Abstract:
Background

Severally ill COVID-19 patients may require urgent transport to a specialized facility for advanced care. Prehospital transport is inherently risky; the patient's health may deteriorate, and potentially fatal situations may arise. Hence, early detection of clinically worsening patients in a prehospital setting may enable selecting the best receiving facility, arranging for swift transportation, and providing the most accurate and timely therapies. The incidence and predictors of abrupt prehospital clinical deterioration among critically ill patients in Ethiopia are relatively limited.

Study objectives

This study was conducted to determine the incidence of sudden clinical deterioration during prehospital transportation and its predictors.

Methods

A prospective cohort study of 591 COVID-19 patients transported by a public EMS in Addis Ababa. For data entry, Epi data V4.2 and SPSS V 25 were used for analysis. To control the effect of confounders, the candidate variables for multivariable analysis were chosen using a p 0.25 inclusion threshold from the bivariate analysis. A statistically significant association was declared at adjusted relative risk (ARR) ≠ 1 with a 95 % confidence interval (CI) and a *p* value < 0.05 after adjusting for potential confounders.

Results

The incidence of prehospital sudden clinical deterioration in this study was 10.8%. The independent predictors of prehospital sudden clinical deterioration were total prehospital time [ARR 1.03 (95%; CI 1.00–1.06)], queuing delays [ARR 1.03 (95%; CI 1.00–1.06)], initial prehospital respiratory rate [ARR 1.07 (95% CI 1.01–1.13)], and diabetic mellitus [ARR 1.06 (95%; CI 1.01–1.11)].

Conclusion

In the current study, one in every ten COVID-19 patients experienced a clinical deterioration while an EMS provider was present. The factors that determined rapid deterioration were total prehospital time, queueing delays, the initial respiratory rate, and diabetes mellitus. Queueing delays should be managed in order to find a way to decrease overall prehospital time. According to this finding, more research on prehospital intervention and indicators of prehospital clinical deterioration in Ethiopia is warranted.

Title : Profil épidémioclinique et issue thérapeutique des patients hospitalisés pour COVID-19 au Centre Hospitalier Universitaire Sourô Sanou de Bobo Dioulasso (Burkina Faso)

Journal: Health Sciences and Disease
Publish Date: October 29, 2022
URL: http://hsd-fmsb.org/index.php/hsd/article/view/4012/3264

Abstract:

Objective. The occurrence of several cases of pneumonia of unknown origin in China led to the identification of SARS-CoV-2. The aim of this study was to describe the epidemiological and clinical profile of patients admitted to our care center to contribute to the improvement of the control of this pandemic. Population and methods. This was a retrospective cohort study which took place from 19 March to 31 September 2020 at the CHUSS of Bobo Dioulasso. Results. A total of 44 patients were included in the study. The mean age of the patients was 46.8 years [14- 84 years]. The sex ratio was 0.7. The most represented age group was 50-64 years with 38.4% of patients. Diabetic and hypertensive

patients represented 25% and 29.5% of the cases respectively. The main symptoms were dyspnea, fever and cough, which were noted in 54.5%, 54.5% and 47.7% of cases respectively. On chest X-ray, micronodular opacities were the most common in 66.7% of cases. Oxygen therapy was required in 38.6% of cases. The Covid-19 protocol in force in the country was implemented in 90.9% of cases. With an average hospital stay of 12.4 days, the clinical course was marked by death in 22.7% of cases. Conclusion. In our context, this disease remains the prerogative of elderly subjects with comorbidities. One of the difficulties of its management was the insufficiency of the technical platform explaining in large part this high rate of lethality

Title: Information about COVID-19: lessons learned from Mali
Journal Health Sciences and Disease
Publish Date: October 29, 2022
URL: http://www.hsd-fmsb.org/index.php/hsd/article/view/4016/3267
Abstract:
Introduction. In Mali, information related to COVID-19 is regularly shared by the coordination board against COVID-19 through daily official press releases and situation reports. The goal of this study was to analyze data related to the tested samples; and the confirmed, contacts, recovered and dead cases in order to take lessons for the future. Population and methods. Data from the first 100 days after the detection of the first cases in Mali were collected and recorded on an Excel file before they got analyzed using SPSS 25.0 software. Analyses were descriptive and correlational. Results. We included 14938 tested samples, 2260 confirmed cases, 12864 contact cases, 1502 recovered cases and 117 deaths were reported during the first 100 days of the epidemic. There was a positive correlation between the number of confirmed cases; and the number of tested samples, the number of recovered cases and the number of deaths. These results suggest that the number of confirmed cases increase with the number of tested samples. Conclusion. These results call for more testing and encourage the identification, location and follow-up of COVID-19 cases. They can also be used to support the improvement of data quality and the response to COVID-19. As a result, they can contribute to improve population health.

Title: Coronavirus Antibody Responses before COVID-19 Pandemic, Africa and Thailand
Journal: Emerging Infectious Disease
Date Published: November 2022
URL: https://doi.org/10.3201/eid2811.221041
Abstract
Prior immune responses to coronaviruses might affect human SARS-CoV-2 response. We screened 2,565 serum and plasma samples collected from 2013 through early 2020, before the COVID-19 pandemic began, from 2,250 persons in 4 countries in Africa (Kenya, Nigeria, Tanzania, and Uganda) and in Thailand, including persons living with HIV-1. We detected IgG responses to SARS-CoV-2 spike (S) subunit 2 protein in 1.8% of participants. Profiling against 23 coronavirus antigens revealed that responses to S, subunit 2, or subunit 1 proteins were significantly more frequent than responses to the receptor-binding domain, S-Trimer, or nucleocapsid proteins ($p<0.0001$). We observed similar responses in persons with or without HIV-1. Among all coronavirus antigens tested, SARS-CoV-2, SARS-CoV-1, and Middle East respiratory syndrome coronavirus antibody responses were

much higher in participants from Africa than in participants from Thailand ($p<0.01$). We noted less pronounced differences for endemic coronaviruses. Serosurveys could affect vaccine and monoclonal antibody distribution across global populations.

Title: The COVID-19 Pandemic and Explaining Outcomes in Africa: Could Genomic Variation Add to the Debate?
Journal: OMICS
Publish Date: November 2, 2022
URL: https://doi.org/10.1089/omi.2022.0108
Abstract
Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the etiological agent of COVID-19, emanated from the Wuhan Province in China and rapidly spread across the globe causing extensive morbidity and mortality rate, and affecting the global economy and livelihoods. Contrary to early predictions of "body bags" across Africa, the African COVID-19 pandemic was marked by apparent low case numbers and an overall mortality rate when compared with the other geographical regions. Factors used to describe this unexpected pattern included a younger population, a swifter and more effective national health policy, limited testing capacities, and the possibility of inadequate reporting of the cases, among others. However, despite genomics contributing to interindividual variations in many diseases across the world, there are inadequate genomic and multiomics data on COVID-19 in Africa that prevent richer transdisciplinary discussions on the contribution of genomics to the spread of COVID-19 pandemic. To invite future debates on comparative studies of COVID-19 genomics and the pandemic spread around the world regions, this expert review evaluates the reported frequency distribution of genetic variants in candidate genes that are likely to affect COVID-19 infection dynamics/disease outcomes. We propose here that genomic variation should be considered among the many factors determining the COVID-19 infection and its outcomes in African populations and across the world.

B. COVID-19 RESPONSE ACTIVITIES
(hygiene practices, social distancing, case management)

Title: Risk communication in an informal settlement during COVID-19: case of Dinaweng, Bloemfontein South Africa
Journal: Urban Governance
Date Published: October 29, 2022
URL: https://doi.org/10.1016/j.ugj.2022.10.002
Abstract
This article interrogates the nuances of risk communication in a poor neighbourhood of South Africa during the COVID-19 pandemic. We argue that risk communication had multifaceted implications for managing and governing the COVID-19 pandemic. This pandemic has coincided with the information age, where multiple communication channels affect the success of risk communication through miscommunication, false news, or distortion. Using a qualitative study premised on a phenomenological research

design, data were collected from 60 purposively sampled residents in Bloemfontein to capture their perspectives regarding risk communication on COVID-19. This data was triangulated with secondary sources to enhance the validity of the findings. Among the secondary data sources are reviews of news media outlets reporting on the COVID-19 pandemic at the international and the local level. The study's findings reveal that the poor residing in informal settlements are marginalised in risk communication. This is mainly a result of the digital divide that has resulted in challenges for the poor communities in accessing specific news channels, while also making it difficult for them to validate some information.

Title: Epidemics and the military: Responding to COVID-19 in Uganda
Journal: Social Science & Medicine
Date Published: October 29, 2022
URL: https://doi.org/10.1016/j.socscimed.2022.115482

Abstract
The UN Security Council's response to Ebola in 2014 legitimised militarised responses. It also influenced responses to COVID-19 in some African countries. Yet, little is known about the day-to-day impacts for ordinary citizens of mobilising armies for epidemic control. Drawing on 18 months ethnographic research, this article analyses militarised responses to COVID-19 during, and following, two lockdowns at contrasting sites in Uganda: a small town in Pakwach district and a village in Kasese district. Both field sites lie close to the border of the Democratic Republic of Congo. Although the practice of health security varied between sites, the militarised response had more impact than the disease in these two places. The armed forces scaled back movement from urban conurbations to rural and peri-urban areas; while simultaneously enabling locally based official public authorities to use the proclaimed priorities of President Museveni's government to enhance their position and power. This led to a situation whereby inhabitants created new modes of mutuality to resist or subvert the regulations being enforced, including the establishment of new forms of cross-border movement. These findings problematise the widely held view that Uganda's response to COVID-19 has been successful. Overall, it is argued that the on-going securitisation of global health has helped to create the political space to militarise the response. While this has had unknown effects on the prevalence of COVID-19, it has entrenched unaccountable modes of public authority and created a heightened sense of insecurity on the ground. The tendency to condone the violent practice of militarised public health programmes by international and national actors reflects a broader shift in the acceptance of more authoritarian forms of governance.

Title: Utilization of Palliative Care Services in Patients with COVID-19 Admitted to an Intensive Care Unit at a Tertiary Hospital in Kenya
Journal: Journal of Pain and Symptom Management
Date Published: November 2022
URL: https://doi.org/10.1016/j.jpainsymman.2022.07.005

Abstract: No abstract

Title: Using drones to transport suspected COVID-19 samples; experiences from the second largest testing centre in Ghana, West Africa
Journal: PLos One
Date Published: November 2022
URL: https://doi.org/10.1371/journal.pone.0277057
Abstract
Background: The declaration of COVID-19 as a pandemic on March 11 2020, by the World Health Organisation prompted the need for a sustained and a rapid international response. In a swift response, the Government of Ghana, in partnership with Zipline company, launched the use of Unmanned Automated Vehicles (UAV) to transport suspected samples from selected districts to two foremost testing centres in the country. Here, we present the experiences of employing this technology and its impact on the transport time to the second largest testing centre, the Kumasi Centre for Collaborative Research in Tropical Medicine (KCCR) in Kumasi, Ghana.
Methods: Swab samples collected from suspected COVID-19 patients were transported to the Zipline office by health workers. Information on the samples were sent to laboratory personnel located at KCCR through a WhatsApp platform to get them ready to receive the suspected COVID-19 samples while Zipline repackaged samples and transported them via drone. Time of take-off was reported as well as time of drop-off.
Results: A total of 2537 COVID-19 suspected samples were received via drone transport from 10 districts between April 2020 to June 2021 in 440 deliveries. Ejura-Sekyedumase District Health Directorate delivered the highest number of samples (765; 30%). The farthest district to use the drone was Pru East, located 270 km away from KCCR in Kumasi and 173 km to the Zipline office in Mampong. Here, significantly, it took on the average 39 minutes for drones to deliver samples compared to 117 minutes spent in transporting samples by road ($p<0.001$).
Conclusion: The use of drones for sample transport during the COVID-19 pandemic significantly reduced the travel time taken for samples to be transported by road to the testing site. This has enhanced innovative measures to fight the pandemic using technology.

Title: Coronavirus Antibody Responses before COVID-19 Pandemic, Africa and Thailand
Journal: Social Science & Medicine
Date Published: October 29, 2022
URL: https://doi.org/10.1016/j.socscimed.2022.115482
Abstract: No abstract

Title: Incidence and follow-up of persistent lung perfusion abnormalities as a result of suspected air trapping or microthrombosis in non-hospitalised COVID-19 patients during the early half of the pandemic – experience in a tertiary institution in South Africa
Journal : South African Medical Journal
Publish Date : November 3, 2022
URL: https://doi.org/10.7196/SAMJ.2022.v112i11.16578

Abstract :
Background. Available clinical data have revealed that COVID-19 is associated with a risk of pulmonary microthrombosis and small airway disease, especially in patients with severe disease. These patients present with persistent pulmonary symptoms after recovery, with ventilation and perfusion abnormalities present on several imaging modalities. Few data are available on the occurrence of this complication in patients who earlier presented with a milder form of COVID-19, and their long-term follow-up.
Objective. To assess the incidence of persistent lung perfusion abnormalities as a result of suspected air trapping or microthrombosis in non-hospitalised patients diagnosed with COVID-19. The long-term follow-up of these patients will also be investigated.
Methods. This was a retrospective study conducted at the nuclear medicine department of Universitas Academic Hospital, Bloemfontein. We reviewed the studies of 78 non-hospitalised patients with SARS-CoV-2 infection referred to our department from July 2020 to June 2021 for a perfusion-only single-photon emission computed tomography/computed tomography (SPECT/CT) study or a ventilation perfusion (VQ) SPECT/CT study. All 78 patients were suspected of having pulmonary embolism, and had raised D-dimer levels, with persistent, worsening or new onset of cardiopulmonary symptoms after the diagnosis of COVID-19.
Results. Seventy-eight patients were studied. The median (interquartile range) age was 45 (41 - 58) years and the majority (88.5%) were females. Twenty-two (28.2%) of these patients had matching VQ defects with mosaic attenuation on CT. All 9 of the patients who had follow-up studies had abnormalities that persisted, even after 1 year.
Conclusion. We confirm that persistent ventilation and perfusion abnormalities suspicious of small airway disease and pulmonary

Title: Limited handwashing facility and associated factors in sub-Saharan Africa: pooled prevalence and multilevel analysis of 29 sub-Saharan Africa countries from demographic health survey data
Journal: BMC Public Health
Date Published: October 2022
URL: https://doi.org/10.1186/s12889-022-14390-4
Abstract:
Introduction: Handwashing is fundamentally an inexpensive means of reducing the spread of communicable diseases. In developing countries, many people die due to infectious diseases that could be prevented by proper hand hygiene. The recent coronavirus (COVID-19) pandemic is a threat to people who are living in resource-limited countries including sub-Saharan Africa (SSA). Effective hand hygiene requires sufficient water from reliable sources, preferably accessible on premises, and access to handwashing facility (water and or soap) that enable hygiene behaviors. Therefore, this study aims to determine the prevalence of limited handwashing facility and its associated factors in sub-Saharan Africa.
Methods: Data from the Demographic and Health Surveys (DHS) were used, which have been conducted in 29 sub-Saharan African countries since January 1, 2010. A two-stage stratified random cluster sampling strategy was used to collect the data. This study comprised a total of 237,983 weighted samples. The mixed effect logistic regression model

with a cluster-level random intercept was fitted. Meta-analysis and sub-group analysis were performed to establish the pooled prevalence.
Results: The pooled prevalence of limited handwashing facility was found to be 66.16% (95% CI; 59.67%-72.65%). Based on the final model, household head with age group between 35 and 60 [AOR = 0.89, 95% CI; 0.86-0.91], households with mobile type of hand washing facility [AOR = 1.73, 95% CI; 1.70-1.77], unimproved sanitation facility [AOR = 1.58, 95% CI; 1.55-1.62], water access more than 30 min round trip [AOR = 1.16, 95% CI; 1.13-1.19], urban residential area [AOR = 2.08, 95% CI; 2.04-2.13], low media exposure [AOR = 1.47, 95% CI; 1.31-1.66], low educational level [AOR = 1.30, 95% CI; 1.14-1.48], low income level [AOR = 2.41, 95% CI; 2.33-2.49] as well as lower middle-income level [AOR = 2.10, 95% CI; 2.14-2.17] and households who had more than three children [AOR = 1.25, 95% CI; 1.20-1.31] were associated with having limited handwashing facility.
Conclusion and recommendation: The pooled coverage of limited handwashing facility was high in sub-Saharan Africa. Raising awareness of the community and promoting access to handwashing materials particularly in poorer and rural areas will reduce its coverage.

C. COVID-19 VACCINATION

Title: A socio-ecological exploration to identify factors influencing the COVID-19 vaccine decision-making process among pregnant and lactating women: Findings from Kenya
Journal: Vaccine
Date Published: October 31, 2022
URL: https://doi.org/10.1016/j.vaccine.2022.10.068
Abstract
The vaccine decision-making process of pregnant and lactating women is complex. Regarding COVID-19, pregnant women are at increased risk for severe disease and poor health outcomes. While pregnant and lactating women were excluded from COVID-19 vaccine trials, available evidence suggests that COVID-19 vaccines are safe and protective during pregnancy. In this study, we used a socio-ecological approach to explore factors influencing the decision-making process for COVID-19 vaccines in pregnant and lactating women in Kenya, for the purpose of informing demand generation strategies. As pregnant and lactating women are influenced by many factors, we conducted 84 in-depth interviews with a variety of stakeholders, including 31 pregnant or lactating women, 20 healthcare workers such as nurses, midwives, doctors, and frontline workers, 25 male family members of pregnant or lactating women, and 8 gatekeepers such as community leaders and faith-based leaders. These individuals were recruited from six communities in Kenya: three urban, and three rural. We applied a grounded theory approach to identify emerging themes and organized emerging themes using the SAGE Vaccine Hesitancy model, which includes three categories of determinants of vaccine acceptance, including contextual influences, individual and group influences, and vaccine and vaccination specific issues. Myths, interpersonal norms, and religion emerged as themes related to contextual influences. Safety, risk perception, and the role of the healthcare worker emerged as themes related to individual and group influences. For vaccine and vaccination specific

issues, emerging themes included availability, accessibility, and eligibility. While maternal immunization can substantially reduce the effect of infectious diseases in mothers and infants, vaccine acceptance is critical. However, vaccines do not save lives; vaccination does. We hope the results of this study can be used to tailor communication efforts to increase vaccine demand among pregnant and lactating women.

Title: Framing the future of the COVID-19 response operations in 2022 in the WHO African region
Journal: Global Health Action
Publish Date: December 31, 2022
URL: https://doi.org/10.1080/16549716.2022.2130528
Abstract:
Background: With the evolving epidemiological parameters of COVID-19 in Africa, the response actions and lessons learnt during the pandemic's past two years, SARS-COV 2 will certainly continue to circulate in African countries in 2022 and beyond. As countries in the African continent need to be more prepared and plan to 'live with the virus' for the upcoming two years and after and at the same time mitigate risks by protecting the future most vulnerable and those responsible for maintaining essential services, WHO AFRO is anticipating four interim scenarios of the evolution of the pandemic in 2022 and beyond in the region.
Objective: In preparation for the rollout of response actions given the predicted scenarios, WHO AFRO has identified ten strategic orientations and areas of focus for supporting member states and partners in responding to the COVID-19 pandemic in Africa in 2022 and beyond.
Methods: WHO analysed trends of the transmissions since the first case in the African continent and reviewed lessons learnt over the past months.
Results: Establishing a core and agile team solely dedicated to the COVID-19 response at the WHO AFRO, the emergency hubs, and WCOs will improve the effectiveness of the response and address identified challenges. The team will collaborate with the various clusters of the regional office, and other units and subunits in the WCOs supported with good epidemics intelligence. COVID-19 pandemic has afflicted global humanity at unprecedented levels.
Conclusion: Two years later and while starting the third year of the COVID-19 response, we now need to change and adapt our strategies, tools and approaches in responding timely and effectively to the pandemic in Africa and save more lives.

Title: Couverture vaccinale et raisons de l'acceptation et de l'hésitation à la vaccination contre la COVID-19 chez les patients porteurs de pathologie cardiovasculaire à Ouahigouya
Journal: Health Sciences and Disease
Publish Date: October 29, 2022
URL: http://hsd-fmsb.org/index.php/hsd/article/download/4014/3266/11710
Abstract:
Objective. COVID-19 pandemic has caused high mortality in patients with comorbidities such as cardiovascular pathologies. The acceleration of the marketing of vaccines against the pandemic has caused reluctance towards them. The study focuses on the attitude of

patients with cardiovascular disease seen in cardiology consultation in Ouahigouya vis-à-vis COVID-19 vaccination. Population and methods. A cross-sectional study was conducted from April 1 to 25, 2022 in three private clinics of the city of Ouahigouya. We included consenting patients and carriers of cardiovascular pathology seen in cardiology consultation. Our main data of interest were the knowledge, attitude and practice of this population towards vaccination, especially the reasons for accepting or refusing vaccination. Results One hundred and one patients were interviewed. The sex ratio was 1.46 with an average age of 48.26 ± 11.93 years. The most represented were the self-employed, urban dwellers, Muslims, the uneducated and the married. Hypertension and its complications were the most common cardiovascular disorders (93.07%). The proportion of vaccinated was 55.45%. The reasons most mentioned by the vaccinated for getting vaccinated were to protect themselves (100%) and to follow government recommendations and agents, respectively 78.52% and 72.21%. The most cited reasons for vaccine hesitation were: COVID-19 is a common disease (62.22%) and fear of side effects (44.44%). Conclusion. Vaccination against COVID-19 must continue, accompanied by effective awareness-raising in order to improve the vaccination coverage rate among patients with cardiovascular pathologies

Title: COVID-19 Vaccine Attitude and Its Predictors Among People Living With Chronic Health Conditions in Ibadan, Nigeria
Journal: International Journal of Public Health
Publish Date: October 2022
URL: https://doi.org/10.1111/irv.13042
Abstract:
Objective: To assess vaccination attitude and its associated factors among people with chronic health conditions. **Methods:** In this cross-sectional study, participants were 423 patients with chronic medical conditions. Data were collected on socio-demographic and COVID-19-related characteristics, *via* Open Data Kit software. A Vaccination Attitudes Examination (VAX) Scale was adopted. The main outcome was vaccine attitude status defined as positive if a VAX sum score was above the median value; otherwise, non-positive. Data were analysed using Chi-square and multivariate logistic regression analyses, at 5% level of significance. **Results:** Overall proportion of patients with a positive attitude towards COVID-19 vaccination uptake was 46.6%. The most influential factor towards positive attitude was rating the government high in handling the pandemic. Other factors were education, income, COVID-19 knowledge and living room arrangement ($p < 0.05$). **Conclusion:** Less than half of people living with a chronic medical condition had a positive attitude towards the COVID-19 vaccine. The attitudes are strongly mediated by confidence in the government. The government could promote a positive vaccine attitude by improving the clarity of health instructions that shows government transparency and effective communication. These are critical tools for maintaining public trust and confidence.

D. COVID-19 PUBLIC PERCEPTIONS AND EFFECTS

Title: COVID-19 risk perception and associated factors in older adults in southern Ethiopia

Journal: Influenza Other Respiratorty Viruses
Publish Date: November 2022
URL: https://doi.org/10.1111/irv.13042
Abstract:
Background: COVID-19 remains a public health concern in lower income countries. Risk perception has been studied in different countries with different population groups. However, there have been few studies conducted risk perception on older adults and limited data from African continent. This study aimed to assess coronavirus disease low risk perception level and associated factors among older adults in Ethiopia.
Methods: We conducted a cross-sectional study among older adults in Areka town, Wolaita Zone, Southern Ethiopia, from August 1, 2021, to August 30, 2021. Multi-stage sampling method was applied to select study participants. The data were collected through a structured questionnaire with the mobile application created with Open Data Kit mobile.
Results: Overall, risk perception was fairly low. Risk perception was particularly low among individuals aged 65 to 74 years (AOR = 4.76, 95% CI: 2.35-9.64), poor practice on preventing coronavirus disease (AOR = 2.39, 95% CI: 1.51-3.78), with low trust level in medical professionals (AOR = 2.44, 95% CI: 1.45-4.10), no history of coronavirus disease (AOR = 6.45, 95%CI [2.02-20.58]), and poor perceived self-efficacy for preventive practice (AOR = 2.25, 95% CI: 1.43-3.54).
Conclusions: In the current study area, the perception of risk of coronavirus disease was affected by age, perceived self-efficacy, trust in medical professionals, preventive practice, and history of COVID-19. The findings of this study would help lower income countries to generate evidence-based policy decisions for older adults during the COVI-D-19 pandemic and future pandemic(s).

Title: Risk assessment and preventive health behaviours toward COVID-19 amongst bushmeat handlers in Nigerian wildlife markets: Drivers and One Health challenge
Journal: Acta Tropica
Publish Date: November 2022
URL: https://doi.org/10.1016/j.actatropica.2022.106621
Abstract:
Over 70% of emerging infectious diseases are zoonotic and 72% of them have wildlife reservoirs with consequent global health impacts. Both SARS-CoV-1 and SARS-CoV-2 emerged certainly through wildlife market routes. We assessed wildlife handlers' zoonotic risk perceptions and preventive health behaviour measures toward COVID-19 during pandemic waves, and its drivers at wildlife markets using Health Belief Model (HBM) constructs. A cross-sectional study was conducted at purposively selected wildlife markets in Nigeria between November 2020 and October 2021. Descriptive, univariate, and multivariable logistic regressions analyses were performed at 95% confidence interval. Of the 600 targeted handlers in 97 wildlife markets, 97.2% (n = 583) participated. Consumers were the majority (65.3%), followed by hunters (18.4) and vendors (16.3%). Only 10.3% hunters, 24.3% vendors and 21.0% consumers associated COVID-19 with high zoonotic risk. Also, only few handlers practiced social/physical distancing at markets. Avoidance of handshaking or hugging and vaccination was significantly (p = 0.001) practiced by few handlers as preventive health behaviours at the markets. All the socio-demographic variables were significantly (p<0.05) associated with their knowledge, risk perceptions, and

practice of preventive health behaviours toward COVID-19 at univariate analysis. Poor markets sanitation, hygiene, and biosecurity (OR=3.35, 95% CI: 2.33, 4.82); and poor butchering practices and exchange of wildlife species between shops [(OR=1.87; 95% CI: 1.34, 2.60) and (OR=2.03; 95% CI: 1.43, 2.88), respectively] were more likely to significantly influence COVID-19 emergence and spread at the markets. To tackle the highlighted gaps, collaborations between the public health, anthropologists, and veterinary and wildlife authorities through the One Health approach are advocated to intensify awareness and health education programmes that will improve perceptions and behaviours toward the disease and other emerging diseases control and prevention.

E. COVID-19 EFFECTS ON OTHER DISEASES AND SECTORS

Title: COVID-19 effect on tuberculosis care in Sierra Leone: are we in the recovery phase?
Journal: Pulmonology
Publish Date: October 31, 2022
URL: https://doi.org/10.1016/j.pulmoe.2022.10.008
Abstract:

Title: The impact of the COVID-19 pandemic on paediatric surgical volumes in Africa: A retrospective observational study
Journal: Journal of Pediatric Surgery
Publish Date: October 31, 2022
URL: https://doi.org/10.1016/j.jpedsurg.2022.10.047
Abstract:
Background: The aim of this study is to investigate the impact that COVID-19 had on the pattern and trend of surgical volumes, urgency and reason for surgery during the first 6 months of the pandemic in sub-Saharan Africa.
Methods: This retrospective facility-based study involved collection of paediatric operation data from operating theatre records across 5 hospitals from 3 countries: Zimbabwe, Zambia and Nigeria over the first half of 2019 and 2020 for comparison. Data concerning diagnosis, procedure, anaesthesia, grade, speciality, NCEPOD classification and indication was collected. The respective dates of enactment of cancellation policies in each country were used to compare changes in weekly median surgical case volume before cancellation using the Wilcoxon Sign-Rank Test.
Results: A total of 1821 procedures were recorded over the study period. Surgical volumes experienced a precipitous drop overall from a median of 100 cases/week to 50 cases/week coinciding with cancellation of surgical electives. Median accumulated weekly procedures before COVID-related cancellation were significantly different from those after cancellation ($p = 0.027$). Emergency surgery fell by 23.3% while electives fell by 78,9% (P=0.042). The most common primary indication for surgery was injury which experienced a 30.5% drop in number of procedures, only exceeded by congenital surgery which dropped 34.7%.
Conclusions: The effects of surgical cancellations during the covid-19 pandemic are particularly devastating in African countries where the unmet need and surgical caseload

are high. Continued cancellations that have since occurred will cause similar drops in surgical case volume that these health systems may not have the resilience to recover from.

Title: Crimean-Congo Hemorrhagic Fever Outbreak in Refugee Settlement during COVID-19 Pandemic, Uganda, April 2021
Journal: Emerging Infectious Diseases
Publish Date: November 2022
URL: https://doi.org/10.3201/eid2811.220365
Abstract:
Crimean-Congo hemorrhagic fever (CCHF) was detected in 2 refugees living in a refugee settlement in Kikuube district, Uganda. Investigations revealed a CCHF IgG seroprevalence of 71.3% (37/52) in goats within the refugee settlement. This finding highlights the need for a multisectoral approach to controlling CCHF in humans and animals in Uganda.

Title: Comparison of maternal and neonatal outcomes of COVID-19 before and after SARS-CoV-2 omicron emergence in maternity facilities in Malawi (MATSurvey): data from a national maternal surveillance platform
Journal: The Lancet Global Health
Publish Date: November 2022
URL: https://doi.org/10.1016/s2214-109x(22)00359-x
Abstract:
Background: Outcomes of omicron-associated COVID-19 in pregnancy have not been reported from low-resource settings, and data from sub-Saharan Africa before the emergence of omicron are scarce. Using a national maternal surveillance platform (MATSurvey), we aimed to compare maternal and neonatal outcomes of COVID-19 in Malawi during the omicron wave to the preceding waves of beta and delta.
Methods: All pregnant and recently pregnant patients, up to 42 days following delivery, admitted to 33 health-care facilities throughout Malawi with symptomatic, test-proven COVID-19 during the second (beta [B.1.351]: January to April, 2021), third (delta [B.1.617.2]: June to October, 2021), and fourth (omicron [B.1.1.529]: December 2021 to March, 2022) waves were included, with no age restrictions. Demographic and clinical features, maternal outcomes of interest (severe maternal outcome [a composite of maternal near-miss events and maternal deaths] and maternal death), and neonatal outcomes of interest (stillbirth and death during maternal stay in the health-care facility of enrolment) were compared between the fourth wave and the second and third waves using Fisher's exact test. Adjusted odds ratios (ORs) for maternal outcomes were estimated using mixed-effects logistic regression.
Findings: Between Jan 1, 2021, and March 31, 2022, 437 patients admitted to 28 health-care facilities conducting MATSurvey had symptoms of COVID-19. SARS-CoV-2 infection was confirmed in 261 patients; of whom 76 (29%) had a severe maternal outcome and 45 (17%) died. These two outcomes were less common during the fourth wave (omicron dominance) than the second wave (adjusted OR of severe maternal outcome: 3·96 [95% CI 1·22-12·83], p=0·022; adjusted OR of maternal death: 5·65 [1·54-20·69], p=0·0090) and the third wave (adjusted OR: 3·18 [1·03-9·80], p=0·044; adjusted OR: 3·52 [0·98-12·60],

p=0·053). Shortness of breath was the only symptom associated with poor maternal outcomes of interest (p<0·0001), and was less frequently reported in the fourth wave (23%) than in the second wave (51%; p=0·0007) or third wave (50%; p=0·0004). The demographic characteristics and medical histories of patients were similar across the three waves. During the second and third waves, 12 (13%) of 92 singleton neonates were stillborn or died during maternal stay in the health-care facility of enrolment, compared with 0 of the 25 born in the fourth wave (p=0·067 vs preceding waves combined).
Interpretation: Maternal and neonatal outcomes from COVID-19 were less severe during the fourth wave of the SARS-CoV-2 pandemic in Malawi, during omicron dominance, than during the preceding beta and delta waves.

Title: What have we learned about socioeconomic inequalities in the spread of COVID-19? A systematic review
Journal: Sustainable Cities and Socities
Publish Date: November 2022
URL: https://doi.org/10.1016/j.scs.2022.104158
Abstract
This article aims to provide a better understanding of the associations between groups of socioeconomic variables and confirmed cases of COVID-19. The focus is on cross-continental differences of reported positive, negative, unclear, or no associations. A systematic review of the literature is conducted on the Web of Science and SCOPUS databases. Our search identifies 314 eligible studies published on or before 31 December 2021. We detect nine groups of frequently used socioeconomic variables and results are presented by region of the world (Africa, Asia, Europe, Middle East, North American and South America). The review expands to describe the most used statistical and modelling techniques as well as inclusion of additional dimensions such as demographic, healthcare weather and mobility. Meanwhile findings agree on the generalized positive impact of population density, per capita GDP and urban areas on transmission of infections, contradictory results have been found concerning to educational level and income.

Title: Rift Valley Fever Outbreak during COVID-19 Surge, Uganda, 2021
Journal: Emerging Infectious Diseases
Publish Date: November 2022
URL: https://doi.org/10.3201/eid2811.220364
Abstract:
Rift Valley fever, endemic or emerging throughout most of Africa, causes considerable risk to human and animal health. We report 7 confirmed Rift Valley fever cases, 1 fatal, in Kiruhura District, Uganda, during 2021. Our findings highlight the importance of continued viral hemorrhagic fever surveillance, despite challenges associated with the COVID-19 pandemic.

Title: The effect of COVID-19 on burn management and outcomes in a resource-limited setting
Journal: Burns
Publish Date: November 2022
URL: https://doi.org/10.1016/j.burns.2022.08.004

Abstract
Introduction: Optimal burn care includes fluid resuscitation and early excision and grafting. During the COVID-19 pandemic, resource-constrained environments were susceptible to interruptions in burn care. We sought to characterize pre- and intra-pandemic burn-associated outcomes at a busy tertiary hospital in Malawi.
Methods: This is a retrospective analysis of burn patients that presented to Kamuzu Central Hospital Lilongwe from 2011 through December 2021. We compared patients based on whether they presented pre- or intra-pandemic, starting on March 11, 2020, the date of official WHO designation. Comparing these cohorts, we used modified Poisson modeling to estimate the adjusted risk of undergoing an operation and the risk of death.
Results: We included 2969 patients, with 390 presenting during the pandemic. Patient factors were similar between the cohorts. More patients underwent surgery pre-pandemic (21.1 vs 10.3 %, $p < 0.001$) but crude mortality was similar at 17.3 % vs. 21.2 % ($p = 0.08$). The RR of undergoing surgery during the pandemic was 0.45 (95 % CI 0.32, 0.64) adjusted for age, sex, % TBSA, flame burns, and time to presentation. During the pandemic, the risk ratio for in-hospital mortality was 1.23 (95 % CI 1.01, 1.50) adjusted for age, sex, % TBSA, surgical intervention, flame burns, and time to presentation.
Conclusions: During the pandemic, the probability of undergoing burn excision or grafting was significantly lower for patients, independent of the severity. Consequently, the adjusted risk of mortality was higher. To improve patient outcomes, efforts to preserve operative capacity for burn patients during periods of severe resource constraint are imperative.

TItle: Impact of COVID-19 on schooling in rural Zimbabwe.
Journal: Child Care, Health and Development
Publish Date: November 2022
URL: https://doi.org/10.1111/cch.12955
Abstract:
No abstract available

Title: Health diplomacy in Africa-opportunities post-COVID-19 /Essay
Journal: Pan African Medical Journal
Publish Date: October 19, 2022
URL: https://www.panafrican-med-journal.com/content/article/43/91/full/
Abstract:
For the last seventy years, Africa has suffered a disease burden that is steadily growing in scale and complexity. Despite that, health development in the continent has continued to rely on donors´ packages since decolonization. The last decade, however, has marked some health-related achievements on the continent such as the development of the Africa Health Strategy 2016-2030, the establishment of Africa Centres for Disease Control and Prevention (Africa CDC), the launch of The African Continental Free Trade Area (AfCFTA) and most recently the African Medicines Agency (AMA). These developments and the response to the COVID-19 pandemic have highlighted the importance and the opportunities of practicing Global Health Diplomacy on the continent. Home to 27% of the world´s countries, Africa has a tremendous global voting power which makes global health diplomacy an unequivocally effective soft power tool to achieve “The Africa we want”. In

this paper, we will expand on the importance of Global Health Diplomacy (GHD) practice in Africa as a soft power tool, illustrate the COVID-19 response in the continent championed by the Africa Centres for Disease Control and Prevention (Africa CDC) as a case study, and offer some recommendations to sustain and strengthen GHD´s role in the continent.

Title: Conflicts increased in Africa shortly after COVID-19 lockdowns, but welfare assistance reduced fatalities
Journal: Economic Modelling
Publish Date: November 2022
URL: https://doi.org/10.1016/j.econmod.2022.105991
Abstract:
Understanding how rises in local prices affect food-related conflicts is essential for crafting adequate social welfare responses, particularly in settings with an already high level of food vulnerability. We contribute to the literature by examining how rises in local food prices and the lockdowns implemented to contain the first wave of the COVID-19 pandemic affected conflict. We analyze real-time conflict data for 24 African countries during 2015–2020, welfare responses to COVID-19, changes in local food prices, and georeferenced data on areas with cultivation, oil, mines, all associated with differentiated risk of conflict. We find that the probability of experiencing food-related conflicts, food looting, riots, and violence against civilians increased shortly after the first strict lockdowns of 2020. Increases in local prices led to increases in violence against civilians. However, countries that timely provided more welfare assistance saw a reduction in the probability of experiencing these conflicts and in the number of associated fatalities. Our results suggest that providing urgent aid and assistance to those who need it can help reduce violence and save lives.

Title: Measuring customer satisfaction with the Gautrain during the COVID-19 pandemic using the service quality model
Journal : Journal of Transport and Supply Chain Management
Publish Date: November 3, 2022
URL: https://doi.org/10.4102/jtscm.v16i0.771
Background: The Gautrain was created with the sole purpose of availing efficient transportation between the three metropolitan municipalities, namely the City of Tshwane, the City of Johannesburg and the City of Ekurhuleni. The Gautrain has been transporting more than five million passengers annually. However, ridership decreased drastically because of COVID-19. Poor ridership has resulted in less revenue income and the halting of expansion. In prior years, the Gautrain Management Agency (GMA) measured customer satisfaction levels; however, it has not undertaken such a study since the start of COVID-19 pandemic.
Objectives: The study measured service quality experienced by Gautrain users amidst the COVID-19 pandemic through the service quality (SERVQUAL) model. Unknown customer satisfaction levels with the Gautrain services during the COVID-19 pandemic posed a problem for the agency.

Method: This study followed a descriptive and quantitative path. A cross-sectional survey via online platforms was used to collect the data. The study had a sample size of 84 Gautrain commuters.
Results: The findings revealed that users experienced a negative service quality in terms of SERVQUAL dimensions, namely assurance, tangibles, empathy and responsiveness.
Conclusion: The study concluded that COVID-19 had a negative impact on some of the Gautrain service factors; however, users were still satisfied with some of the service factors. It is recommended that the Gautrain can improve services by understanding what customers expect in terms of service factors during the pandemic.

Title: Trends in Neurotrauma Epidemiology, Management, and Outcomes During the COVID-19 Pandemic in Kigali, Rwanda
Journal: Journal of Neurotrauma
Publish Date: November 3, 2022
URL: https://doi.org/10.1089/neu.2022.0166
Abstract:
Background: National regulations to curb COVID-19 transmission and healthcare resource reallocation may have impacted incidence and treatment for neurotrauma, including traumatic brain injury (TBI) and spinal trauma, but these trends have not been characterized in Sub-Saharan Africa. This study analyzes differences in epidemiology, management, and outcomes preceding and during the COVID-19 pandemic for neurotrauma patients in a Rwandan tertiary hospital.
Methods: The study setting was Centre Hospitalier Universitaire de Kigali (CHUK), Rwanda's national referral hospital. Adult injury patients presenting to the CHUK Emergency Department were prospectively enrolled from 1/27/20-6/28/20. Study personnel collected data on demographics, injury characteristics, serial neurological examinations, treatment, and outcomes. Differences in patients before (1/27/20-3/22/20) and during (6/1/20-6/28/20) the COVID-19 pandemic were assessed using chi-squared and Mann-Whitney tests.
Results: The study population included 216 neurotrauma patients (83.8% TBI, 8.3% spine trauma, and 7.9% with both). Mean age was 34.1 years (standard deviation=12.5) and 77.8% were male. Patients predominantly experienced injury following road traffic accident (65.7%). Weekly volume for TBI (mean=16.5 vs. 17.1, P=0.819) and spine trauma (mean=2.0 vs. 3.4, P=0.086) was similar between study periods. During the pandemic, patients had lower GCS (mean=13.8 vs. 14.3, P=0.068) and Kampala Trauma Scores (mean=14.0 vs. 14.3, P=0.097) on arrival, denoting higher injury severity, but these differences only approached significance. Patients treated during the pandemic period had higher occurrence of hemorrhage, contusion, or fracture on CT imaging (47.1% vs. 26.7%, P=0.003) and neurologic decline (18.6% vs. 7.5%, P=0.016). Hospitalizations also increased significantly during COVID-19 (54.6% vs. 39.9%, P=0.048). Craniotomy rates doubled during the pandemic period (25.7% vs. 13.7%, P=0.003), but mortality was unchanged (5.5% vs. 5.7%, P=0.944).
Conclusions: Neurotrauma volume remained unchanged at CHUK during the COVID-19 pandemic, but presenting patients had higher injury acuity and craniotomy rates. These findings may inform care during pandemic conditions in Rwanda and similar settings.

Title: A case study of digital eye strain in a university student population during the 2020 COVID-19 lockdown in South Africa: evidence of an emerging public health issue
Journal: Journal of Public Health in Africa
Publish Date: October 2022
URL: https://doi.org/10.4081/jphia.2022.2103
Abstract:
Background: The COVID-19 pandemic resulted in a nationwide lockdown in South Africa, initiating a shift in society's interaction to the online space. Students therefore became reliant on electronic devices for learning.
Objective: The study aimed to investigate the prevalence of digital eye strain (DES) in a university student population during the nationwide COVID-19 lockdown in South Africa.
Methods: Randomly sampled 290 university students were surveyed online about their screen time and DES during lockdown. The survey included a validated screen time questionnaire to measure screen time in hours per day and a validated computer vision syndrome questionnaire (CVS-Q) to measure the frequency and intensity of symptoms during edevice use (s). Descriptive statistics were used to analyze CVS-Q scores and screen time.
Results: The mean (SD) age of the sample was 21.04 _ 2.32 years. Of these, 82.41% used smartphone devices and 55.52% of the participants did not use any optical correction. The prevalence of DES during COVID-19 lockdown in 2020 was 64.24%. Screen time on an average weekday and over the weekend, as a primary activity, had a median of 13 hours per day during lockdown.
Conclusion: The high prevalence of digital eye strain may be a harbinger of a decrease in student performance. Creating awareness of proper visual hygiene amongst students is paramount in decreasing the high prevalence of DES.