

AFRO Weekly COVID-19 Literature Update

2022/12/03-2022/12/09

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

Issue No. 68

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 palavraschave: 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

A. COVID-19 epidemiology/ surveillance (trends/ distribution)

Long-term validation of a reverse transcription loop-mediated isothermal amplification (RT-LAMP) assay for the rapid detection of SARS-CoV-2 from March 2020 to October 2021 in Central Africa, Gabon

What happened during COVID-19 in African ICUs? An observational study of pulmonary co-infections, superinfections, and mortality in Morocco

Gradual emergence followed by exponential spread of the SARS-CoV-2 Omicron variant in Africa

B. COVID-19 response activities (hygiene practices, social distancing, case management)

Community engagement in Ebola outbreaks in sub-Saharan Africa and implications for COVID-19 control: A scoping review

C. COVID-19 vaccination

High anti-SARS-CoV-2 seroprevalence among unvaccinated mother-child pairs from a rural setting of north-eastern Tanzania during the second wave of COVID-19

COVID-19 vaccine acceptability, and uptake among people living with HIV in Uganda

D. COVID-19 public perceptions and effects

Survey of healthcare worker perceptions of changes in infection control and antimicrobial stewardship practices in India and South Africa during the COVID-19 pandemic

The psychological impact, risk factors and coping strategies to COVID-19 pandemic on healthcare workers in the sub-Saharan Africa: a narrative review of existing literature

Perception and willingness to accept COVID-19 Vaccines: A cross-sectional survey of the general population of Sokoto State, Nigeria

Knowledge, attitudes and perceptions of a patient population on the COVID-19 vaccine rollout

E. COVID-19 effects on other diseases and sectors

The COVID-19 pandemic and health workforce brain drain in Nigeria

Antepartum SARS-CoV-2 infection and adverse birth outcomes in South African women

COVID-19 infection at a psychiatric hospital in KwaZulu-Natal, South Africa: Clinical service planning and challenges

Topics

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

Title: Long-term validation of a reverse transcription loop-mediated isothermal amplification (RT-LAMP) assay for the rapid detection of SARS-CoV-2 from March 2020 to October 2021 in Central Africa, Gabon

Journal: PLOS NEGLECTED TROPICAL DISEASES

Publish Date: December 1, 2022

URL:

https://journals.plos.org/plosntds/article/file?id=10.1371/journal.pntd.0010964&type=print able

Abstract:

Introduction

Background

Despite the development of several methods for diagnosing COVID-19, long-term validation of such methods remains limited. In the early phase of the COVID-19 pandemic, we developed a rapid and sensitive diagnostic method based on reverse transcription loopmediated isothermal amplification (RT-LAMP) methodology, which is suitable for point-ofcare application or for use in resource-limited settings to detect SARS-CoV-2. To assess the applicability of the RT-LAMP assay technique to resource-limited regions, such as rural areas in Africa, and to verify the usability of the method against various SARS-CoV-2 variants, the method was validated using clinical samples collected longitudinally during the pandemic.

Methodology/Principal findings

First, the sensitivity of the RT-LAMP assay for detecting 10 SARS-CoV-2 variants was evaluated using viral RNA samples extracted from cell culture with a portable batterysupported device, resulting in the successful detection of 20-50 copies of the viral genome within 15 min, regardless of the variant. COVID-19 positive samples collected in Gabon between March 2020 and October 2021 were used to evaluate the sensitivity of the assay and to calculate the copy number of the SARS-CoV-2 genome. More than 292 copies of the viral genome were detected with 100% probability within 15 min in almost all tests.

Conclusions

This long-term validation study clearly demonstrated the applicability of the RT-LAMP assay for the clinical diagnosis of COVID-19 in resource-limited settings of Africa, such as rural areas in Gabon. The results show the potential of the assay as a promising COVID-19 diagnostic method, especially in rural and remote regions located far from the official diagnosis facilities in urban or semi-urban areas.

Title: What happened during COVID-19 in African ICUs? An observational study of pulmonary co-infections, superinfections, and mortality in Morocco

Journal: PLOS ONE

Publish Date: December 1, 2022

URL:

https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0278175&type=print able

Abstract:

Background

There is a growing literature showing that critically ill COVID-19 patients have an increased risk of pulmonary co-infections and superinfections. However, studies in developing countries, especially African countries, are lacking. The objective was to describe the prevalence of bacterial co-infections and superinfections in critically ill adults with severe COVID-19 pneumonia in Morocco, the micro-organisms involved, and the impact of these infections on survival.

Methods

This retrospective study included severe COVID-19 patients admitted to the intensive care unit (ICU) between April 2020 and April 2021. The diagnosis of pulmonary co-infections and superinfections was based on the identification of pathogens from lower respiratory tract samples. Co-infection was defined as the identification of a respiratory pathogen, diagnosed concurrently with SARS-Cov2 pneumonia. Superinfections include hospital-acquired pneumonia (HAP) and ventilator-associated pneumonia (VAP). A multivariate regression analysis was performed to identify factors independently associated with mortality.

Results

Data from 155 patients were analyzed. The median age was 68 years [62–72] with 87% of patients being male. A large proportion of patients (68%) received antibiotics before ICU admission. Regarding ventilatory management, the majority of patients (88%) underwent non-invasive ventilation (NIV). Sixty-five patients (42%) were placed under invasive mechanical ventilation, mostly after failure of NIV. The prevalence of co-infections, HAP and VAP was respectively 4%, 12% and 40% (64 VAP/1000 ventilation days). The most isolated pathogens were *Enterobacterales* for HAP and *Acinetobacter* sp. for VAP. The proportion of extra-drug resistant (XDR) bacteria was 78% for *Acinetobacter* sp. and 24% for *Enterobacterales*. Overall ICU mortality in this cohort was 64.5%. Patients with superinfection showed a higher risk of death (OR = 6.4, 95% CI: 1.8–22; p = 0.004).

Conclusions

In this single-ICU Moroccan COVID-19 cohort, bacterial co-infections were relatively uncommon. Conversely, high rates of superinfections were observed, with an increased frequency of antimicrobial resistance. Patients with superinfections showed a higher risk of death.

Title: Gradual emergence followed by exponential spread of the SARS-CoV-2 Omicron variant in Africa Journal: Science Publish Date: 1 December 2022 URL: https://www.science.org/doi/10.1126/science.add8737?cookieSet=1#

Abstract: Objectives

The geographic and evolutionary origins of the SARS-CoV-2 Omicron variant (BA.1), which was first detected mid-November 2021 in Southern Africa, remain unknown. We tested 13,097 COVID-19 patients sampled between mid-2021 to early 2022 from 22 African countries for BA.1 by real-time RT-PCR. By November-December 2021, BA.1 had replaced the Delta variant in all African sub-regions following a SouthNorth gradient, with a peak Rt of 4.1. Polymerase chain reaction and near-full genome sequencing data revealed genetically diverse Omicron ancestors already existed across Africa by August 2021. Mutations, altering viral tropism, replication and immune escape, gradually accumulated in the spike gene. Omicron dominated transmission. These data also indicate that travel bans are ineffective in the face of undetected and widespread infection.

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

Title Community engagement in Ebola outbreaks in sub-Saharan Africa and implications for COVID-19 control: A scoping review

Journal: International Journal of Infectious Diseases

Publish Date: 30 November 2022

URL: <u>https://www.ijidonline.com/action/showPdf?pii=S1201-9712%2822%2900625-7</u> Abstract:

Objectives

There is a paucity of scoping data on the specific roles community engagement played in preventing and managing the Ebola Virus Disease outbreak in Sub-Saharan Africa. We assessed the role, benefits, and mechanisms of community engagement to understand its effect on Ebola Virus Disease case detection, survival, and mortality in Sub-Saharan Africa. Implications for COVID-19 prevention and control were also highlighted.

Methods

We searched for articles between 2010 and 2020 in MEDLINE and EMBASE databases. Study types included were randomized trials, quasi-experimental studies, observational studies, case series, and reports.

Results

A total of 903 records were identified for screening. 216 articles met the review criteria, 103 were initially selected, and 44 were included in the final review. Our findings show that effective community involvement during the Ebola Virus Disease outbreak depended on the survival rates, testimonials of survivors, risk perception, and the inclusion of community leaders. Community-based interventions improved knowledge and attitudes, case findings, isolation efforts, and treatment uptake.

Conclusion

Although the studies included in this review were of highly variable quality, findings from this review may provide lessons for the role of community engagement in the COVID-19 ' 'pandemic's prevention and control in Sub-Saharan Africa.

C. COVID-19 VACCINATION

Title: High anti-SARS-CoV-2 seroprevalence among unvaccinated mother-child pairs from a rural setting of north-eastern Tanzania during the second wave of COVID-19 **Journal:** JJID Regions

Date Published: 28 November 2022

URL:

https://www.sciencedirect.com/science/article/pii/S2772707622001448/pdfft?md5=2f86d7 6d0900a8e741fc53a8e07a470c&pid=1-s2.0-S2772707622001448-main.pdf

Abstract

Background

The reported infection rates, and the burden of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) in low- and middle-income countries, including sub-Saharan Africa, are relatively low compared to Europe and America, partly due to limited testing capabilities. Unlike many countries, in Tanzania, neither mass screening nor restrictive measures such as lockdowns have been implemented to date. The prevalence of SARS-CoV-2 infection in rural mainland Tanzania is largely unknown.

Methods

Between April and October 2021, we conducted a cross-sectional study to assess anti-SARS-CoV-2 seroprevalence among mother-child pairs (n=634 children, n=518 mothers) in a rural setting of north-eastern Tanzania.

Findings

We found a very high prevalence of anti-SARS-CoV-2 antibody titres with seroprevalence rates ranging from 29% among mothers and 40% among children, with a dynamic peak in seropositivity incidence at the end of July/early in August being revealed. Significant differences in age, socioeconomic status and body composition were associated with seropositivity in mothers and children. No significant associations were observed between seropositivity and comorbidities, including anaemia, diabetes, malaria, and HIV.

Interpretations

The SARS-CoV-2 transmission in a rural region of Tanzania during 2021 was high, indicating a much higher infection rate in rural Tanzania compared to that reported in the UK and USA during the same period. Ongoing immune surveillance may be vital to monitoring the burden of viral infection in rural settings without access to molecular genotyping where a load of communicable diseases may mask COVID-19. Surveillance could be implemented in tandem with the intensification of vaccination strategies.

Title: COVID-19 vaccine acceptability, and uptake among people living with HIV in Uganda **Journal:** PLOS ONE

Date Published: December 2, 2022

URL:

https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0278692&type=pri ntable Abstract:

Background

Despite being a priority population for COVID-19 vaccination, limited data are available regarding acceptability of COVID-19 vaccines among people living with HIV (PLWH) in Sub-Saharan Africa. We described COVID-19 vaccine acceptability and factors associated with vaccine acceptability among PLWH in Uganda.

Methods

This was a cross-sectional study conducted among PLWH, aged ≥18 years, enrolled participants who were seeking HIV care from six purposely selected accredited ART clinics in Kampala. We obtained data on vaccine acceptability defined as willingness to accept any of the available COVID-19 vaccines using interviewer-administered questionnaires. In addition, we assessed vaccination status, complacency regarding COVID-19 disease, vaccine confidence, and vaccine convenience. Factors associated with COVID-19 vaccine acceptability were evaluated using modified Poisson regression with robust standard errors.

Results

We enrolled 767 participants of whom 485 (63%) were women. The median age was 33 years [interquartile range (IQR) 28–40] for women and 40 years [IQR], (34–47) for men. Of the respondents 534 (69.6%,95% confidence interval [CI]: 66.3%-72.8%) reported receiving at least one vaccine dose, with women significantly more likely than men to have been vaccinated (73% vs. 63%; p = 0.003). Among the unvaccinated 169 (72.7%, 95% CI: 66.6%-78.0%) were willing to accept vaccination, had greater vaccine confidence (85.9% had strong belief that the vaccines were effective; 81.9% that they were beneficial and 71% safe for PLWH; 90.5% had trust in health care professionals or 77.4% top government officials), and believed that it would be easy to obtain a vaccine if one decided to be vaccinated (83.6%). Vaccine acceptability was positively associated with greater vaccine confidence (adjusted prevalence ratio [aPR] 1.44; 95% CI: 1.08–1.90), and positive perception that it would be easy to obtain a vaccine (aPR 1.57; 95% CI: 1.26–1.96).

Conclusion

vaccine acceptance was high among this cohort of PLWH, and was positively associated with greater vaccine confidence, and perceived easiness (convince) to obtained the vaccine. Building vaccine confidence and making vaccines easily accessible should be a priority for vaccination programs targeting PLWH.

D. COVID-19 PUBLIC PERCEPTIONS AND EFFECTS

Title: Survey of healthcare worker perceptions of changes in infection control and antimicrobial stewardship practices in India and South Africa during the COVID-19 pandemic

Journal: IJID Regions

Publish Date: 28 November 2022

URL:

https://www.sciencedirect.com/science/article/pii/S277270762200145X/pdfft?md5=5485e 50afd9f23c01aa7f23984245bfa&pid=1-s2.0-S277270762200145X-main.pdf Abstract:

Objective

To identify perceptions and awareness of changes in IPC and AMS practices among healthcare workers (HCWs) during the COVID-19 pandemic in India and South Africa (SA).

Method

A self-administered online survey which included participant demographics, knowledge and sources of COVID-19 infection, perceived risks and barriers, and self-efficacy. Data were analysed using descriptive statistics.

Results

321 responses (response rate: 89.2%); 131/321 (40.8%) from India and 190/321 (59.2%) from SA; male to female response rate was 3:2, with majority of respondents aged 40-49 (89/321, 27.7%) and 30-39 (87/321, 27.1%) years. Doctors comprised 47.9% (57/119) of respondents in India and 74.6% (135/181) in SA. Majority of respondents in India (93/119, 78.2%) and SA (132/181, 72.9%) were from the private and public sectors, respectively with more respondents in SA (123/174, 70.7%) than in India (38/104, 36.5%) were involved in antimicrobial prescribing. Respondents reported increased IPC practices since the pandemic and noted need for more training on case management, antibiotic and personal protective equipment (PPE) use. While they noted increased antibiotic prescribing since the pandemic; they did not generally associate their practice with such increase. A willingness to be vaccinated, when vaccination becomes available, was expressed by 203/258 (78.7%) respondents.

Conclusions

HCWs reported improved IPC practices and changes in antibiotic prescribing during the COVID-19 pandemic. Targeted education on correct use of PPE was an identified gap. Although HCWs expressed concerns about antimicrobial resistance, their self-perceived antibiotic prescribing practices seemed unchanged. Additional studies in other settings could explore how our findings fit other contexts.

Title: The psychological impact, risk factors and coping strategies to COVID-19 pandemic on healthcare workers in the sub-Saharan Africa: a narrative review of existing literature **Journal**: BMC Psychology

Publish Date: 01 December 2022

URL: <u>https://bmcpsychology.biomedcentral.com/counter/pdf/10.1186/s40359-022-00998-</u> z.pdf

Abstract:

Background

The ongoing COVID-19 pandemic has significantly impacted the physical and mental health of the general population worldwide, with healthcare workers at particular risk. The pandemic's effect on healthcare workers' mental well-being has been characterized by depression, anxiety, work-related stress, sleep disturbances, and post-traumatic stress disorder. Hence, protecting the mental well-being of healthcare workers (HCWs) is a considerable priority. This review aimed to determine risk factors for adverse mental health outcomes and protective or coping measures to mitigate the harmful effects of the COVID-19 crisis among HCWs in sub-Saharan Africa.

Methods

We performed a literature search using PubMed, Google Scholar, Cochrane Library, and Embase for relevant materials. We obtained all articles published between March 2020

and April 2022 relevant to the subject of review and met pre-defined eligibility criteria. We selected 23 articles for initial screening and included 12 in the final review.

Result

A total of 5,323 participants in twelve studies, predominantly from Ethiopia (eight studies), one from Uganda, Cameroon, Mali, and Togo, fulfilled the eligibility criteria. Investigators found 16.3–71.9% of HCWs with depressive symptoms, 21.9–73.5% with anxiety symptoms, 15.5–63.7% experienced work-related stress symptoms, 12.4–77% experienced sleep disturbances, and 51.6–56.8% reported PTSD symptoms. Healthcare workers, working in emergency, intensive care units, pharmacies, and laboratories were at higher risk of adverse mental health impacts. HCWs had deep fear, anxious and stressed with the high transmission rate of the virus, high death rates, and lived in fear of infecting themselves and families. Other sources of fear and work-related stress were the lack of PPEs, availability of treatment and vaccines to protect themselves against the virus. HCWs faced stigma, abuse, financial problems, and lack of support from employers and communities.

Conclusion

The prevalence of depression, anxiety, insomnia, and PTSD in HCWs in sub-Saharan Africa during the COVID-19 pandemic has been high. Several organizational, community, and work-related challenges and interventions were identified, including improvement of workplace infrastructures, adoption of correct and shared infection control measures, provision of PPEs, social support, and implementation of resilience training programs. Setting up permanent multidisciplinary mental health teams at regional and national levels to deal with mental health and providing psychological support to HCWs, supported with long-term surveillance, are recommended.

Title: Perception and willingness to accept COVID-19 Vaccines: A cross-sectional survey of the general population of Sokoto State, Nigeria **Journal**: PLOS ONE

Publish Date: December 1, 2022 URL:

https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0278332&type=print able

Abstract:

The number of confirmed cases of COVID-19 globally is well over 400 million, however, the number of cases is showing a downward trend especially in developed countries largely as a result of effective vaccination against COVID-19. In developing countries, vaccination coverage is still very low as a result of vaccine hesitancy, which could be attributed to misconceptions about COVID-19 itself and its newly developed vaccines. This study assessed COVID-19 vaccine acceptance and perception amongst the adult population in Sokoto state, Nigeria. A cross-sectional study was conducted in Sokoto state among 854 respondents selected via a multi-stage sampling technique. Data was collected electronically using a set of structured questionnaire and analysis was done using IBM SPSS version 25. Respondents' perception was assessed using a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Respondents having a score of 3 and below were graded as having poor perception and those having scores above 3 were graded as having good perception. Respondents' ages ranged from 17 to 76 years, with a

mean of 34.8 ± 12.07 ; more than half [474(53.7%)] of the respondents were males, 667(75.5%) were married and 539(61.0%) had formal education. The majority [839(95.0%)] of the respondents had a good perception of COVID -19 vaccine; 49.9% agreed enough research would be required on the safety of the vaccine. The majority, (72.4%) expressed their willingness to accept the COVID- 19 vaccine (male 38.4% vs. female 34.0%); 410(47.4%) said they can spend more than one hour to get the vaccine. Significant predictors of willingness to accept COVID 19 vaccine include age (p = 0.006; aOR = 0.223; 95% CI = 0.077–0.645), education (p<0.001; aOR = 1.720; 95% CI = 1.274–2.321) and perception of COVID 19 vaccine (p<0.001; aOR = 0.020; 95% CI = 0.009–0.044). The majority of the respondents had a good perception of COVID- 19 vaccine and more than two-thirds were willing to be vaccinated with the vaccine. Government should make the vaccine available for vaccination since a significant proportion of the respondents expressed their willingness to accept the vaccine

Title: Knowledge, attitudes and perceptions of a patient population on the COVID-19 vaccine rollout

Journal: Health SA Gesondheid

Date published: 5 December 2022

URL: https://doi.org/10.4102/hsag.v27i0.1845

Abstract:

Background: The coronavirus disease 2019 (COVID-19) pandemic has had dire effects on South Africa. Vaccines against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) are critical in the fight against COVID-19. This study is necessary to optimise vaccine acceptance.

Aim: To determine the knowledge, attitudes and perceptions of a patient population in South Africa on the COVID-19 vaccine rollout.

Setting: This study was conducted via a retail pharmacy in Merebank, Wentworth and Bluff (Ward 68), which is in the eThekwini Metropolitan Municipality in the KwaZulu-Natal province.

Methods: A quantitative study was conducted using an online self-administered questionnaire between April 2021 to September 2021. There were a total of 430 participants. Data were collected on Google Forms, recorded in Microsoft Excel and analysed using descriptive and inferential statistics.

Results: Knowledge of COVID-19 in the population was 81.86%. A total of 65% of participants stated that they would definitely take the COVID-19 vaccine, and 33.7% stated that they were hesitant to receive the vaccine. Reasons for hesitancies included concerns surrounding side effects of the vaccines, its safety and efficacy and the fast-tracking of the vaccine.

Conclusion: Education campaigns need to be customised to provide the population with reliable and vetted vaccine information and address specific concerns or hesitancies present. Health care workers and the government need to work with religious leaders to improve public trust and confidence in the vaccine. To reach herd immunity and prevent increased morbidity rates, there needs to be a rise in vaccine acceptance across South Africa and globally.

Contribution: With the intention of ensuring a successful COVID-19 vaccine rollout strategy in South Africa, it is of great importance to address the reasons for vaccine hesitancy and to determine the knowledge, attitudes and perceptions of the population on the COVID-19 vaccines. This study will therefore aid in developing strategies aimed at improving vaccine education and awareness, thereby resulting in a greater uptake of the COVID-19 vaccine by the population.

E. COVID-19 EFFECTS ON OTHER DISEASES AND SECTORS

Title: The COVID-19 pandemic and health workforce brain drain in Nigeria

Journal: International Journal for Equity in Health

Publish Date: 05 December 2022

URL: https://equityhealthj.biomedcentral.com/counter/pdf/10.1186/s12939-022-01789z.pdf

Abstract:

Over the years, the Nigerian healthcare workforce, including doctors, nurses, and pharmacists have always been known to emigrate to developed countries to practice. However, the recent dramatic increase in this trend is worrisome. There has been a mass emigration of Nigerian healthcare workers to developed countries during the COVID-19 pandemic. While the push factors have been found to include the inadequate provision of personal protective equipment, low monthly hazard allowance, and inconsistent payment of COVID-19 inducement allowance on top of worsening insecurity, the pull factors are higher salaries as well as a safe and healthy working environment. We also discuss how healthcare workers can be retained in Nigeria through increment in remunerations and prompt payment of allowances, and how the brain drain can be turned into a brain gain via the use of electronic data collection tools for Nigerian health workers abroad, implementation of the Bhagwati's tax system, and establishment of a global skill partnership with developed countries.

Title: Antepartum SARS-CoV-2 infection and adverse birth outcomes in South African women

Journal: Journal of Global Health

Publish Date: December 3, 2022

URL: https://jogh.org/wp-content/uploads/2022/12/jogh-12-05050.pdf

Abstract:

Background

SARS-CoV-2 infection in pregnant women has been associated with severe illness in the women and higher rates of premature delivery. There is, however, paucity of data on the impact of the timing of SARS-CoV-2 infection and on symptomatic or asymptomatic infections on birth outcomes. Data from low-middle income settings is also lacking.

Methods

We conducted a longitudinal study from April 2020 to March 2021, in South Africa, where symptomatic or asymptomatic pregnant women were investigated for SARS-CoV-2 infection during the antepartum period. We aimed to evaluate if there was an association

between antepartum SARS-CoV-2 infection on birth outcomes. SARS-CoV-2 infection was investigated by nucleic acid amplification test (NAAT), histological examination was performed in a sub-set of placentas.

Results

Overall, 793 women were tested for SARS-CoV-2 antenatally, including 275 (35%) who were symptomatic. SARS-CoV-2 infection was identified in 138 (17%) women, of whom 119 had symptoms (COVID-19 group) and 19 were asymptomatic. The 493 women who were asymptomatic and had a negative SARS-CoV-2 NAAT were used as the referent comparator group for outcomes evaluation. Women with COVID-19 compared with the referent group were 1.66-times (95% confidence interval (CI) = 1.02-2.71) more likely to have a low-birthweight newborn (30% vs 21%) and 3.25-times more likely to deliver a very low-birthweight newborn (5% vs 2%). Similar results for low-birthweight were obtained comparing women with SARS-CoV-2 confirmed infection (30%) with those who had a negative NAAT result (22%) independent of symptoms presentation. The placentas from women with antenatal SARS-CoV-2 infection had higher percentage of chorangiosis (odds ratio (OR) = 3.40, 95% CI = 1.18-.84), while maternal vascular malperfusion was more frequently identified in women who tested negative for SARS-CoV-2 (aOR = 0.28, 95% CI = 0.09-0.89).

Conclusions

Our study demonstrates that in a setting with high HIV infection prevalence and other comorbidities antenatal SARS-CoV-2 infection was associated with low-birthweight delivery.

Title : COVID-19 infection at a psychiatric hospital in KwaZulu-Natal, South Africa:

Clinical service planning and challenges

Journal: South African Journal of Psychiatry

Date published: 07 December 2022

URL: https://doi.org/10.4102/sajpsychiatry.v28i0.1933

Abstract

Background: South Africa had over 4 million cases of coronavirus disease 2019 (COVID-19) infections and more than 1 million COVID-19-related deaths. Despite the devastating psychological impact of the COVID-19 pandemic, there is little qualitative, critical evaluation of government mental health services in this resource-limited setting.

Aim: The authors describe the clinical service plan and response to the COVID-19 pandemic at a government psychiatric hospital.

Setting: KwaZulu-Natal, South Africa.

Methods: A descriptive narrative overview of the specialised psychiatric hospital's clinical response (April 2020 – March 2021) to the COVID-19 pandemic was undertaken in the following domains: screening policy; testing and swabbing policy; staff training and monitoring; and restructuring the wards to accommodate mental health care users (MHCUs) with suspected cases of COVID-19.

Results: The in-depth narrative reviews led to the introduction of staff training, routine COVID-19 reverse transcription polymerase chain reaction (RT-PCR) testing of all MHCUs, the creation of designated quarantine and isolation facilities and screening of physical health status of patients with COVID-19 prior to transfer being implemented to prevent an outbreak or increased morbidity or mortality.

Conclusion: Implementing a service plan early which included staff training, screening and routine COVID-19 testing services for psychiatric admissions in a rapidly evolving environment with few additional resources was challenging. The absence of guidelines early in the pandemic that addressed the unique needs of a clinical psychiatric inpatient population is a noteworthy learning point.

Contribution: The article highlights that the inpatient infrastructural requirements and clinical management protocols of acutely psychiatrically ill inpatients, in the context of infectious outbreaks, require dedicated task teams and bespoke policies