

Post Pandemic Assessment of Availability and Compliance with Covid-19 Preventive Protocols by Athletes, Coaches and Spectators in Sport Arenas in Southwestern, Nigeria.

Aderonmu Kehinde Adebayo Ph.D.

Department of Kinesiology, Health Education & Recreation

Faculty of Education Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria

DOI: <https://dx.doi.org/10.47772/IJRISS.2024.807037>

Received: 15 June 2024; Accepted: 24 June 2024; Published: 30 July 2024

ABSTRACT

The study investigated the availability and the level of compliance of athletes, officials, and coaches with the Covid-19 preventive in sports arena in Southwestern Nigeria. The study adopted the descriptive survey research design. The population for the study comprised all officials, athletes and spectators in sport arenas South-west Nigeria. Sample size comprised 220 respondents. The multi-stage sampling procedure was adopted for the study. Two questionnaires, titled: "State Athletes Welfare and COVID-19 Preventive Protocol Questionnaire" (SAWCPPQ) and the State Sports Administrators Questionnaire (SSAQ) were used to elicit information on the athletes' welfare and compliance with COVID-19 preventive protocols. Data collected were analysed using appropriate descriptive and inferential statistics

The findings also showed that there was moderate level of compliance with the Covid-19 preventive protocols among the athletes (63.1%), sports officials (61.9%) and spectators (61.1%), as 69 (31.36%) complied with the protocol all the time, while 151 (68.64%) only complied sometimes. The study concluded that there were preventive protocols in place at various sports arenas to ensure prevention of Covid-19. However, there were low level of compliance with the preventive protocols among the sportsmen and sportswomen during training and competitions in South West, Nigeria

Keywords: Availability, Compliance, Preventive protocols, Covid-19, Sports Arena, Southwest, Nigeria

BACKGROUND TO THE STUDY

Sports and sporting activities are crucial to living a healthy and happy life. The sport is a major activity people engage in their leisure time. Sport entails basic human skills being developed and exercised for individual benefits, in parallel with being exercised for their usefulness in a way to manage stress, enhance the quality of sleep, defer occurrence of diseases and has been useful in the therapy of many chronic diseases. Sporting activities in all categories requires physical direct contact such as exchanging baton, handshakes, defending against opponent, celebrations and jubilation among players, hugs, among others. These had been the usual practice among sport men and women before COVID 19 broke out in February 2020.

This deadly virus has infiltrate all aspects and walks of life, it has killed many people prematurely, spoilt businesses and investments among others. On February 28 2020, Nigeria reported its first index case, and as at first of November 2021, records revealed that out of three million three hundred and forty thousand three hundred and thirteen sample tested (3,340,313) confirmed cases were two hundred and eleven thousand, nine

hundred and sixty one (211,961), active cases were five thousand eight hundred and seventeen (5,817), discharged cases were two hundred and three thousand two hundred and forty eight (203,248) while death cases were two thousand eight hundred and ninety six (2,896) (Nigeria Centre for Disease Control NCDC, 2020).

The Covid-19 signs and symptoms are further explained by the World Health Organization (WHO) in 2021, and these include respiratory symptoms as coughing, fever, and breathing difficulties. At its worst, it may result in severe acute respiratory syndrome, pneumonia, and occasionally results to deaths. In order to prevent COVID-19 in the workplace, steps should be taken such as routine employee screening, assisting symptomatic employee testing, and implementing structural and operational improvements to allow for separation, enforcing the use of face masks and the proper personal protective equipment (PPE), and making sure that crevices are cleaned and disinfected thoroughly. The promotion of COVID-19 immunization is equally crucial (Minnesota Department of Health, 2021).

Ozil (2020) asserted that the COVID-19 phenomena have a variety of impacts on international athletic competitions. The spread of the virus created social distance, which led to the closure of sporting venues, workplaces, and events. Due to how quickly the virus was circulating and the growing unknowledgeable of how terrible things could be, sports fans began to flee the area and investors stopped investing in sports business. The loss of sports hostels has made life more challenging for emerging athletes. Their absence from the sporting arena had a negative impact on the club owners, almost all the football clubs downsize their staffs and reduced the wages of their employee, most of these clubs took a loan from financial institution before they were able to pay their workers.

The COVID-19 pandemic has significantly harmed athletes' preparation and performance, and became the biggest threat to the modern sports world as a whole. According to estimates, about a million jobs in Europe are directly or indirectly related to sports. These jobs include those for sports professionals as well as those in retail and sports-related services like travel and tourism, transportation, infrastructure management (such as grounds-keeping), catering, and media broadcasting, among others. Consequently, due to COVID 19 pandemic crowds of spectators were absent in the sporting arena for almost a year. The crowds of spectators, who financed, maintained and make the sport lively through purchase of game ticket and warm support to players on the field of play.

Most major international, local, regional, and national sporting events—from athletics championships to basketball games, marathons to football tournaments, handball to ice hockey, weightlifting to wrestling, rugby, cricket, yachting, and other sports have all been cancelled or postponed in order to safeguard the participants' health and the athletes. First time ever in the history of contemporary games, both the Olympics and the Paralympics were deferred, along with the Nigeria Sport Festival and the Euro 2020 football competition.

Similar to this, adhering to social distance, COVID-19-specific training, tight return-to-play rules, and limits may have permanently altered how athletes participate in organized sport. In the spirit of sportsmanship, athletes run, jog, train, and share housing. The outbreak had a greater impact on sports than on other spheres of life. When participating in training, games, or competitions, putting on and taking off equipment or uniforms, and sharing transportation to and from sporting events, people are frequently required to spend longer lengths of time together (National Collegiate Athletic Association, 2020). The narrative surrounding sporting events and activities has changed after the COVID 19 outbreak. Training sessions, sporting events, coaching sessions, and even spectators now fit into the new normal, which has, in some ways, lowered interest in participating in sports.

Due to high risk in transmission of COVID 19 sports trainings have taken another method of operations as coaches now make use of virtual training session with their athletes, sports training arena ceased to be overcrowded with athletes, coaches, officials and spectators, the numbers of athletes who can occupy a training ground in a particular time has been minimised in such a way that, there must be at least six feet (2m distancing) between participants on training ground. Wearing of face mask is also encouraged for participant training indoor in order to avoid face to face direct contact, the shaking of hands, hugging fellow athletes and other forms of direct physical contact during training period is strongly discouraged.

According to the Centres for Disease Control and Prevention (CDC, 2020), it is highly recommended to routinely wash hands throughout trainings and to use alcohol-based hand sanitizers both during and after training. It also suggested that training sessions for athletes, coaches, officials, and spectators take place outdoors to lower the rate of transmission, particularly in environments with inadequate ventilation because fine droplets and aerosol particles can build up in the air. Since the Centre and other national medical agencies have found a safe COVID-19 vaccine, it is crucial to become immunized as soon as it is available to lower the chance of transmission. Social activities and gatherings outside for trainings and games are major sources of transmission of COVID-19 among teammates.

Furthermore, it is recommended that athletes should adopt limiting social interactions, particularly when case levels are high in their communities. Use pods during practices or warm-ups. A “pod” refers a group of people who only practice or play with members of their own pod, thereby limits the chances of team-wide transmission in the occurrences of an exposure or outbreak. Whereas, prompt report of any signs of the disease to the appropriate health sectors or agencies is highly recommended, while the patients are obliged to apply for self-isolation service or exclude themselves from the public places, specifically the training ground (CDC, 2020),

Furthermore, COVID-19 has caused an unprecedented global shutdown, shocking both our society and the sporting world. The changes have had a transformational, complex, and greatly uneven impact on sport organization and events. Sport leagues have been cancelled, shut down, or rescheduled, and sporting events have faced financial ruin. Curfews and social isolation have lasted for several months in some countries, having a negative impact on sporting event organizing as well as lifestyle, behaviour, and health and welfare (Solfrid, 2021). Benin City's Samuel Ogbemudia Stadium in Edo State was supposed to host the 2020 Nigeria Sport Festival in March of that year. The event was moved to December 2020 as a result of the global health crisis brought on by the COVID-19 epidemic. The second wave of the virus's propagation caused yet further setback for the sports event, which was therefore postponed to 2021 (Punch Newspapers, 2021).

The Nigerian National Sport Festival, according to Nigeria Sports Commission (2021), is an every two years (biennial) multi-sport, competition organized by the National Sports Commission of Nigeria, on behalf of the Federal Government of Nigeria for athletes from the 36 States of Nigeria with the sole purpose of bridging religious and tribal divides and bringing all living Nigerians together to promote national unity. Young Nigerians should engage and socialize more, according to the athletic event's organizers, but the 2021 edition was unable to achieve this goal since the athletes had to perform in an empty stadium and because COVID-19 laws prevented spectators from entering.

Subsequently, the athletes were told to avoid making direct physical contact with one another. The numbers of occupancy per room was reduced; the organizers of this event provided an alcohol sanitizer, soap and water for washing of hands frequently, infrared thermometer for checking of temperature, there was also strict rule on social distancing. According to the athletes who attended the last edition of Nigeria sport festival game, they said it was too boring. Based on the aforementioned background, this study focus on Availability and compliance with Covid-19 preventive protocols in sports arena during training and competitions in south west State, Nigeria.

Sporting arenas were opened with guidelines from CDC to minimize the likelihood of transmission of the virus. WHO (2021) mandated that clubs hold athletic or sporting events in venues with assigned seating spaced widely enough for at least two meters of physical separation, temperature monitoring at entrances, seats numbering for contact tracing instances, and the provision of visual cues, such as wrist stamps and stickers, to help lower the likelihood of accidental contact. The club is required to provide access to hand washing stations, hand gel made with alcohol, and hygiene amenities at various locations inside the venue or accommodations for spectators at the arena (WHO, 2021).

The COVID-19 pandemic had two effects on international athletic competition. First, the virus propagation promoted social withdrawal, which caused sporting venues, stadiums, offices, and events to be cancelled. Two, as the infection spread quickly and there was increased concern about how awful things could get, sports fans began to flee the area (Ozili and Arun, 2020). Sports administrators are mandated the follow the following

protocol in getting the stadia ready for athletes and spectators' return to active sports:

1. The selection of COVID-19 Sport winners and teams/response personnel. The positions must be specified, and training and refresher courses must be offered. These procedures must be followed by the team at all times.
2. Athletes, individuals who support athletes, sports officials, site employees, suppliers of sporting products, and any other individuals with the authority to conduct sports may all be subject to health examinations, testing, and screening as determined by event organizers. organizers' MOSCH action plans must comply with these norms and other international regulations and be fully endorsed by them; Every location will have isolation and medical rooms available.
3. An additional slot for COVID-19 suspected cases and positive cases, as determined by the event's medical teams. There is enough water available, as well as soaps, garbage cans, and alcohol-based sanitizers. Before each function, the venue should be fully cleaned and sanitized.
4. Social distance markers should be visible at seating areas. Points of entry and exit need to be identified clearly.
5. According to public health recommendations, there should be clear signage about COVID-19 at the event.
6. Specific locations must be established for PWDs and other vulnerable populations.
7. Determine a location for cooling off, not the bathroom.

According to Kieran (2020), the suspension of live matches was prolonged in early April as a result of wider worldwide shifts in both football and other sports. For the first time in ten years, the European football calendar was cleared as a result of COVID-19's exogenous "market shock" to the game. Since March 2020, stakeholders and several parties such as club owners, investors, broadcasters, sponsors, and the football ecosystem were obliged to adjust their operational and commercial plans in order to deal with the aftereffects of event cancellations on a scale never before seen (Parnell, Bnd., Widdop, and Cockayne,2020a).

Statement of the Problem

COVID-19 pandemic significantly harmed athlete preparation and performance, and represented the biggest threat to the modern sports world as a whole. The pandemic had affected, and still having significant impacts on people across the world's physical and mental health. According to World Health Organization (2020), every effort must be made by nations to stop instances from developing into clusters and clusters from developing into deadly epidemics.

Athletes across the 36 states in Nigeria compete in the biennial Nigerian National Sport Festival, a multisport competition with the sole purpose of bridging religious and tribal divides and fostering national unity among Nigerians still living. However, the 2021 edition could not fulfil this aim as the athlete were made to perform in an empty stadium, the spectators were not allowed entry into the stadium due to the COVID-19 regulations. Even the athletes were instructed not to have physical or direct contact with their fellow athletes. The number of occupancy per room was reduced. Several aspects of life, including sports, have become prohibited, regulated, improvised or suspended and then rescheduled like the Tokyo Olympics and the Nigeria Sport Festival.

Both the professional and amateur realms of sport were severely impacted by the COVID-19 pandemic. Sport in the educational and recreational realms as well as amateur and elite sport, sport for all organizations, and sport for development organizations have all suffered significantly as a result. Lockdowns were instituted for safety reasons, and as a result, many communities were deprived of the sporting activities that had kept them lively prior to the crisis. As a result, many children missed school, and community-based sport programs were not able to hold in-person events because gyms, fitness studios, pools, and a variety of other spaces were no longer safe for the general public to access.

In attempt to stop the spread of the dreaded virus and stop the loss of lives, there were improvisations or the "new normal," for instance in sports where competitions are held under the strictest controls with athletes living in bubbles and playing matches in empty arenas, as in the American NBA and the British Premier Leagues. Similar to this, the COVID-19 Sports Code and Protocol was designed by the Federal Ministry of

Youth and Sports Development (FMYSO) as a preventative precaution to allow the return of sporting events in Nigeria without causing the virus to spread and fatalities. Officials, coaches, and athletes engage in a sporting context. The Covid-19 epidemic has caused the current regulation of these interactions. To control athletic events, the government created the Covid-19 preventative Sports-code. The availability and conformity to these Protocol in stadiums have not been proven by any recognized investigation. Thus, the study.

Objectives of the Study

The objectives of this study were to:

- i. investigate the level of compliance of athletes, officials; coaches and spectators with the Covid-19 preventive protocols in the study area;
- ii. Investigate the level of compliance of athletes, officials and spectators with the Covid-19 preventive protocols in the South-western states of Nigeria

METHODOLOGY

The cross-sectional survey approach was used in this study. Population for the study comprised of all athletes, officials, and spectators at sporting events in Southwest Nigeria. Sample size consisted of 220 participants. From the six State that makes up the southwestern state of Nigeria selected from four states Four States (Ondo, Ekiti, Osun and Oyo) out six States were selected using convenience sampling technique. In each of the four selected states, 40 athletes, 5 Sport administrators and 10 spectators were selected using convenience sampling technique. Two research instruments namely: “Availability and Compliance with Covid-19 Preventive Protocol Questionnaire” (ACPPQ) and the State Sports Administrators Questionnaire (SSAQ) This questionnaire is designed with question items to bring out information from the officials about the treatment of athletes by individual States in relation to adherence to the FMYSO set Covid-19 Code and Protocol in the States Preparatory Camps and training facilities. simple percentage. T-tests with significance levels of 0.05 were employed to test the inferential statistics.

Objective 1: Ascertain the availability of Covid-19 preventive protocols in sports arena Southwestern Nigeria

Table 1: Summary of Descriptive Analysis of Covid-19 Preventive Protocols

Availability Scores (AS)

Groups	High (≥ 33)	Moderate (≥ 17-32)	Low (≤ 16)	Total
EKITI STATE				
Athletes	27 (67.5%)	09 (22.5)	04 (10.0)	40 (100)
Sports Administrators	4 (80.0%)	01 (20.0)	00 (0.0)	5 (100)
Spectators	6 (60.0)	03 (30.0)	01 (10.0)	10 (100)
Total	37 (67.3%)	13 (23.6%)	5 (9.1%)	
ONDO STATE				
Athletes	31 (77.5)	07 (17.5)	02 (5.0)	40 (100)
Sports Administrators	4 (80.0)	1 (20.0)	00 (0.0)	5 (100)
Spectators	8 (80.0)	2 (20.0)	00 (0.0)	10 (100)
Total	43 (78.2%)	10 (18.2%)	2 (3.6%)	
OSUN STATE				
Athletes	16 (40.0)	21 (52.5)	03 (7.5)	40 (100)
Sports Administrators	4 (80.0)	1 (20.0)	0 (0.0)	5 (100)
Spectators	8 (80.0)	2 (20.0)	0 (0.0)	10 (100)
Total	28 (50.9%)	24 (43.6%)	3 (5.5%)	
OYO STATE				

Athletes	23 (57.5)	16 (40.0)	01 (2.5)	40 (100)
Sports Administrators	4 (80.0)	1 (20.0)	0 (0.0)	5 (100)
Spectators	4 (40.0)	6 (60.0)	0 (0.0)	10 (100)
Total	31 (56.4%)	23 (41.8%)	1 (1.8%)	
TOTAL AS	139 (63.2)	70 (31.8)	11 (5.0)	220

Results from Table I revealed that a total of 37(67.3%) of respondents from Ekiti State affirmed that Covid-19 preventive protocols were highly available, 13(23.6%) of the respondents indicated that the protocols were moderately available, while 5(9.1%) indicated low availability of Covid-19 preventive protocols in sports arenas in Ekiti State. Furthermore, a total of 43(78.2%) of respondents from Ondo State affirmed that Covid-19 preventive protocols were highly available, 10(18.2%) of the respondents indicated that the protocols were moderately available, while 2(3.6%) indicated low availability of Covid-19 preventive protocols in sports arenas in the state.

The Table further revealed that a total of 28(50.9%) of respondents from Osun State affirmed that Covid-19 preventive protocols were highly available, 24(43.6%) of the respondents indicated that the protocols were moderately available, while 3(5.5%) indicated low availability of Covid-19 preventive protocols in sports arenas in Osun State. Lastly, a total of 31(56.4%) of respondents from Oyo State affirmed that Covid-19 preventive protocols were highly available, 23(41.8%) of the respondents indicated that the protocols were moderately available, while 1(1.8%) indicated low availability of Covid-19 preventive protocols in sports arenas in the state. In addition, the total availability score (AS) for the high, moderate and low availability across the states were 134(63.2%), 70(31.8%) and 11(5.0%) respectively.

Therefore, the result revealed that Covid-19 preventive protocols such as running water container with soaps are provided at designated locations, face mask, Officials positioned in locations to enforce the 2-meter physical distancing, Sufficient number of infrared thermometers at the entrance, Sufficient hand sanitizers for everyone at all entry points, COVID- 19 response units with ambulances are stationed on training grounds, Good health notices are placed throughout all locations, locker rooms, training facilities, Disposable plastic bags and bins provided as required, standby cleaning agent, training kit and suit were made available for individuals, among others were all available across the study area.

Table 2: Summary of Descriptive Analysis of Level of Compliance of Athletes, Officials and Spectators with the Covid-19 Preventive Protocols in the South Western States of Nigeria

Respondents' Status	High	Moderate	Low
Athletes	50	101	9
Administrators	8	12	0
Spectators	24	12	4

Table 2 depicts a summary of the level of compliance of the athletes, administrators and spectators with the Covid-19 preventive protocols. Fifty athletes, representing 22.7% of the total respondents, as well as 8 administrators (3.6%) and 24 spectators (10.9%) showed high level of compliance with the Covid-19 preventive protocols. Also, 101 athletes representing 45.9% of the total respondents, 12 administrators (5.5%) and 12 spectators (5.5%) showed “”

moderate level of compliance, while 9 athletes (4.1%), 0 administrators as well as 4 spectators (1.8%) showed low level of compliant to the Covid-19 protocols

H₀₁: There is no significant difference in the available Covid-19 preventive protocols in sport arena and the level of compliance of athletes, officials and coaches with the Covid19 preventive protocols in the southwestern states of Nigeria

Table 3: Chi square of the association between available covid-19 protocols in sport arena and level of compliance among the athletes, officials and coaches in South West States, Nigeria.

S/N	Available Protocols	Chi Square	df	Significant
C1	Athletes and coaches: Covid- 19 tested and certified before allowed in camp?	5.22	2	0.07
C2	All coaches and officials accessing the games hostel have personal hand sanitizers?	5.48	2	0.07
C3	All entrants into any sports venues/facilities wear face mask?	5.22	2	0.07
C4	All observe the 2- meter distancing at the entrance and inside the facilities?	11.37	2	0.00
C5	Running water container with soaps are provided at designated locations?	7.33	2	0.03
C6	Sufficient number of infrared thermometers at the entrance?	5.12	2	0.08
C7	COVID- 19 response units with ambulances are stationed on training grounds?	1.73	2	0.42
C8	Remainders of Covid- 19 protocols done regularly through the public address system	9.11	2	0.01
C9	Hand bills, flyers etc. to promote require Covid- 19 protocols distributed?	6.00	2	0.05
C10	All participants do temperature screening at all entry point?	7.31	2	0.03

C1 has no significant influence; C2 has no significant influence; C3 has no significant influence; C4 has significant influence; C5 has significant influence; C6 has no significant influence; C7 has no significant influence; C8 has significant influence; C9 has no significant influence; C10 has significant influence at $p < 0.05$

DISCUSSION

Result from table 4.3 showed the level of compliance of athletes, officials and spectators with the covid-19 preventive protocols in the south western states of Nigeria. The study's findings were backed by Patel, Jernigan, Abdirizak, Abedi, Aggarwal, and Albina (2019), who stated that the key to flattening the curve is to sensitize and mobilize citizens must assume responsibility through firm application of non-pharmaceutical preventive approach. Combating the COVID-19 outbreak and re-building greater health systems in Nigeria in preparation for a "new normal" will necessitate an early, comprehensive, cogent, whole-of-government response that includes civil society and local communities. The Centre for Diseases Control (2021) also corroborates the findings of this study which advised that advise the athlete to daily competitor health check, physical (at least six feet) separating of competitors, officials, spectators and support staffs, thorough disinfection and cleaning after/between bouts/competitions, hiring of equipment should be discouraged, particularly ensuring that water bottles and cups are not shared; consider the safe use of closed containers for all disposable and reusable hygiene materials (tissue, towels, napkin among others). It is required to designate an isolation room/space to house any sick person discovered at the event while awaiting patient transport to a medical facility.

As regard the result of this findings which affirmed that spectators, officials, athletes all comply with the protocol of COVID-19, this corroborates with the guidelines of Nigeria ministry of Sport (2020) that, Players/athletes who have been vaccinated against COVID-19 with a two-dose AstraZeneca vaccine or a full dosage of any other vaccine recommended by the government will be regarded "completely vaccinated" twenty-one days after the final dose of vaccine (the second dose for a two-dose regimen, or the single dose for a single-dose regimen). Coaching staff should keep documentation of immunization status and present it to visiting teams throughout competition. Anyone who is sick, even if completely vaccinated, should isolate themselves. Individuals who have been vaccinated must continue to follow the COVID-19 preventative measures at all times because they are still at risk of contracting an infection that can be transmitted to others during sporting events.

REFERENCE

1. Center for Disease Control and Prevention, "Past Pandemics," (2020b), <https://www.cdc.gov/flu/pandemic-resources/basics/past-pandemics.html>
2. Centre for Disease Control Prevention (CDC). (2020). Duration of Isolation and Precautions European Parliamentary Research Service. (2021). Taking stock of the health-related Sustainable Development Goals in the COVID-19 era with a focus on leaving no one behind. WHO> (Europe)
3. Henshaw, U. O., Christopher, O. O., Egono-Nja, G. M., Dennis, A. A., and Ejemot-Nwadiaro, R. I. (2021). COVID-19 in Nigeria: account of epidemiological events, response, management, preventions and lessons learned. GERM Vol. 11, 3
4. Kieran, M. (2020) COVID-19: the return of football fans, *Managing Sport and Leisure*, DOI: 10.1080/23750472.2020.1841449 To link to this article: <https://doi.org/10.1080/23750472.2020.1841449>.
5. Minnesota department of health, (2021). COVID-19 Recommendations for Critical Infrastructure Businesses and Industries
6. National Centre for Disease Control and Prevention. (NCNC), (2020). National Strategy to Scale Up Access to Coronavirus Disease Testing in Nigeria. A Publication of National Centre for Disease Control and Prevention
7. National sport festival-federal ministry of youth and sports development: www.nigeriasportsfestival.org. retrieved 12/06/2021.
8. Ozili, P. K. And Arun, G. T (2020) Spillover of COVID-19: SSRN Electronic Journal. DOI: 10.2139/ssrn.3562570
9. Parnell, D., Bond, A. J., Widdop, P., and Cockayne, D. (2020b). Football Worlds: Business and networks during COVID-19. *Soccer & Society*, <https://doi.org/10.1080/14660970.2020.1782719>.
10. Patel A, Jernigan DB, Abdirizak F, Abedi G, Aggarwal S, Albina D, (2019). Initial public health response and interim clinical guidance for the 2019 novel coronavirus outbreak - United States, December 31, 2019- Morb Mortal Wkly Rep. 2020;69:140-6. Medline:32027631 doi:10.15585/mmwr.mm6905e.-topics/coronavirus [accessed
11. World Economic Forum. COVID-19 in Africa: insights from our 23 April WHO media briefing [Internet]. World Economic Forum. 2020 [cited 2020 Apr 25]. Available from: <https://www.weforum.org/agenda/2020/04/covid19-in-africa-our-media-briefing-with-who/>. World Health Organization (WHO). Coronavirus. WHO; 2020 <https://www.who.int/health>
12. World Health Organization European Parliamentary Research Service, (2021).