Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

length of at least 1·5–2·0 cm and high-level expertise when interpreting the histology are essential in establishing a final diagnosis.

FB has received consultancy fees, honoraria, and travel expenses from Horizon Therapeutics, Roche, and Sanofi, and grant support from Horizon Therapeutics, Mundipharma, Roche, and Sanofi, outside of the submitted work. FB also served as co-principal investigator and site investigator in a trial in polymyalgia rheumatica sponsored by Mundipharma. FB currently serves as principal investigator and site investigator in giant cell arteritis and polymyalgia rheumatica trials sponsored by Sanofi. CD has received consultancy fees, honoraria, and travel expenses from AbbVie, Roche, Eli Lilly, Pfizer, Novartis, and Sanofi. CD currently serves and has served as site investigator in giant cell arteritis trials sponsored by AbbVie and as co-principal investigator and site investigator in a trial in polymyalgia rheumatica sponsored by Roche.

Frank Buttgereit, Christian Dejaco
frank.buttgereit@charite.de

Department of Rheumatology and Clinical Immunology, Charité University Medicine, Berlin 10117, Germany (FB); Department of Rheumatology and Immunology, Medical University of Graz, Graz, Austria (CD); and Department of Rheumatology, Hospital of Brunico, Südtiroler Sanitätsbetrieb–Azienda Sanitaria dell'Alto Adige, Brunico, Italy (CD)

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COVID-19 and African rheumatology: progress in adversity

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The pandemic of COVID-19, the disease caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), hit Africa later than much of Asia, Europe, and North America. It has led to immense disruption of health-care services, economic hardship, and loss of life in Africa. By Sept 17, 2020, more than 1 million cases of SARS-CoV-2 infection and 33 000 deaths from COVID-19 had been confirmed across Africa.[1] However, the cataclysm of COVID-19 has taught us major lessons and incited the potential for rapid growth in African rheumatology after the pandemic subsides.

In response to the pandemic, an unprecedented number of research collaborations began in African rheumatology, mainly facilitated through the networks of the African League Against Rheumatism (AFLAR). The first collaborative effort was the pan-African survey[2] of the experience of rheumatologists across all five regions of the continent, done between April 21 and May 7, 2020, which provided a far-reaching understanding of the structure of rheumatology services and the degree of service disruption as a result of the COVID-19 pandemic. Before the survey, no data were available on the number and distribution of rheumatologists across the continent. Findings showed that there are far more rheumatologists in northern Africa than in other regions, with the lowest number in central Africa; that women represent 72% of rheumatologists; and that 44% of rheumatologists treat both adults and children.[2]

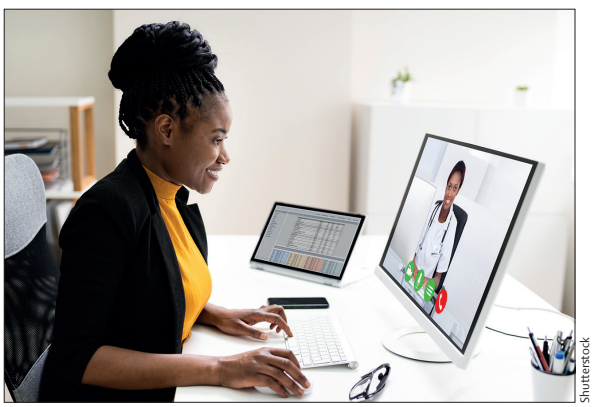
With ongoing lockdown in several countries, appreciation for the usefulness of virtual conferencing and telemedicine has increased. Until now, telemedicine has not had substantial political support in many African countries, although the prospect of its use to supplement service deficiencies in health care has been a lingering promise.[3] Videoconferencing has fostered and accelerated collaborations among rheumatologists across the continent. AFLAR also commissioned a task force to draft recommendations for management of rheumatic diseases in Africa in the face of COVID-19. Members of the task force assessed Africa-specific challenges, in addition to the global crises of the pandemic, in the management of patients with rheumatic diseases. This process, which led to increased recognition of the diversity in the structures and resources of rheumatology services available in countries within the AFLAR network, culminated in the formation of 22 statements of recommendations for the management of rheumatic diseases in Africa in the context of COVID-19.[4] The task

force also recognised the problem of limited resource availability, such as biological drugs, specialist doctors, and ventilators.

The widespread suggestion of a role for various disease-modifying antirheumatic drugs in the treatment of patients with COVID-19 triggered an increase in demand that resulted in a shortage of hydroxychloroquine in many rheumatology services. More than 60% of African rheumatologists reported shortages of this drug in their practice, leading some rheumatologists to reduce doses of the drug for their patients to prolong supply.[2] Hoarding of hydroxychloroquine, and hikes in prices of available supplies, have been seen across Africa, while self-use by patients and toxic effects were reported after indiscriminate promotion of hydroxychloroquine as a COVID-19 treatment, mostly via social media.[5,6] Unfortunately, scant decisive governmental action has been taken to stem these ongoing shortages.

Other drugs commonly used in rheumatology have also gained prominence for treatment of patients with COVID-19. Corticosteroids were initially shown to slow SARS-CoV-2 clearance in a small observational study,[7] but preliminary results from the large RECOVERY trial[8] later showed survival benefits with use of low-dose dexamethasone in patients with severe disease. Early in the pandemic, some patients with severe COVID-19 were recognised to have cytokine storm. This finding led researchers and clinicians to consider use of interleukin-6 inhibitors such as tocilizumab for the management of these patients.[9] Timing of administration, dosing, and efficacy of tocilizumab have not yet been determined; trials are ongoing across many countries, including centres in Kenya and South Africa, in which tocilizumab is being given at an average dose of 4–8 mg/kg bodyweight as a single infusion.[10] However, there is yet insufficient evidence to recommend the wide use of tocilizumab for treating COVID-19 outside of trials. Due to its high cost, tocilizumab is available for treatment of rheumatoid arthritis in very few African countries, and it is uncertain whether this situation would change if tocilizumab proves to be effective for treating severe COVID-19.

Amid the upheaval caused by the COVID-19 pandemic, AFLAR found renewed strength and brought together members from 20 African countries by organising and launching virtual learning events, including national and regional sessions on the practice of rheumatology



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in the era of COVID-19, workshops on neuromuscular ultrasound, vasculitis, and connective tissue diseases, and monthly paediatric continuing medical education programmes. Experts from different areas of rheumatology came together to a degree not previously experienced by the AFLAR membership, raising hope for a bright future with regards to educational and research growth for African rheumatology. For years, trainees have had to travel between African countries for rheumatology fellowship programmes. The new normal of increased virtual collaboration and real-time delivery of educational sessions offers AFLAR members a horizon of possibilities and the chance to learn from the models of the more vibrant rheumatology services, such as those in northern Africa and South Africa.

The rise and sustenance of virtual academic offerings, service improvement, and research meetings will hopefully foster the growth of rheumatology services and promote effective continuing medical education in rheumatology across Africa. Following this trend, AFLAR is likely to grow in both its capacity and reach, as it uses the services of international volunteers and research collaborators to foster inclusiveness and develop Afrocentric clinical guidelines for the management of the various rheumatic diseases in Africa. Optimistically, as rheumatology develops further on the African continent, patient advocacy will also increase, leading to greater attention by policy makers towards better funding of training, procurement of biologics and equipment, as well as investments into research.

We declare no competing interests.

*Richard O Akintayo, Asgar Kalla, Adewale Adebajo
r.akintayo@nhs.net

Rheumatology Department, Dumfries and Galloway Royal Infirmary, Dumfries DG2 8RX, UK (ROA); Department of Medicine, University of

Cape Town, Cape Town, South Africa (AK); and Faculty of Medicine, Dentistry and Health, University of Sheffield, Sheffield, UK (AA)

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