Opportunities for advancement of African rheumatology and rheumatic musculoskeletal diseases on the African continent

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Rheumatology is a young subspeciality on the African continent[1,2]. Rheumatic Musculoskeletal Diseases (RMDs) in children and adults are increasingly presenting themselves at primary care institutions and general hospitals and optimal care by general physicians is scarce. The overwhelming issue is that of late diagnosis of debilitating diseases such as Juvenile Idiopathic Arthritis (JIA), Rheumatoid Arthritis (RA), Systemic Lupus Erythematosus (SLE) and osteoporosis, to name a few. The resurgence of activity in the African League Against Rheumatism (AFLAR) provides a unique opportunity to evaluate the prevalence and burden of RMDs across the continent[3]. There is strong evidence that RMDs are on the increase across Africa and the need for specialised care is becoming increasingly important. However, the number of specialist rheumatologists per 100,000 population is in the region of 1:1.5m in some countries, way below the ratios in developed countries. Many regions do not have any rheumatological services whatsoever.

Since AFLAR is an affiliate of the International League of Associations for Rheumatology (ILAR), it seems reasonable to pursue similar aims and objectives as our sister leagues within that organisation, such as the American College of Rheumatology (ACR) and EULAR (the European League). We need to develop collaborative actions involving players from as many countries as possible within Africa, with the aim of standardising and optimising education, service delivery and research in RMDs across the continent. The time has come for us to combine resources, promote centres of excellence in rheumatology and create an environment on the continent which is conducive to promoting health care for patients with RMDs across Africa[4]. We need to canvass governments to understand that the burden of untreated RMDs is equivalent to that of patients with triple-vessel coronary artery disease. Total joint replacements for secondary OA are expensive and require special surgical skills. Effective treatment of RA early will reduce the need for such operations. When the burden of infectious diseases is controlled by improved socio-economic developments, RMDs will become one of the dominant diseases draining the health budget globally and in Africa.

It is incumbent on the executive committee of AFLAR to develop strong sub-committees and other structures to promote our image across the world, not only in Africa. Important strides have been made over the last few years with the participation of AFLAR at the ACR annual meetings. We have established links with the ACR which allow us access to teaching materials and other resources used in the Northern hemisphere, and we should take full advantage of these opportunities. AFLAR has also been interacting with EULAR. In the last year we have had several lectures from prominent members of the EULAR team, and these have been well attended and were highly interactive. We had our AFLAR Congress in Mauritius in 2019 and are looking forward to our next meeting in Kenya, very soon. Our new website can be visited at *www.aflar.org.za.*

The COVID-19 pandemic has clearly had a major impact globally and many of us have had to change the way in which we practice medicine. AFLAR conducted a survey of its members to evaluate the impact of COVID-19 among rheumatologists in Africa and the results of the survey have been published[5]. This could only have been achieved by the collaboration

and broad participation of rheumatologists from the different countries in Africa[6]. As with Chikungunya and Human Immunodeficiency Virus (HIV) infection, there is a possibility of chronic musculoskeletal symptoms and the initiation of Auto-immune Rheumatic Diseases (ARDs) following COVID-19. There is a wealth of research that Africa could contribute to this area and much of this would not require sophisticated diagnostic tools.

Another area where we could make an impact globally is in HIV-associated RMDs. Several reports from across Africa have shown the relationship between HIV and spondyloarthritis (SpA), as well as the reduction in cases with the advent of Anti-Retroviral Therapy (ART) rollout by governments across the continent [7,8]. In addition, the COVID-19 pandemic has been a stimulus for general collaboration between AFLAR member countries[3]. A collaborative research effort in AFLAR has resulted in a publication on consensus evidence-based development of guidelines for management of osteoporosis in Africa[9]. The editor of *Clinical Rheumatology*, the Journal of ILAR, devoted a special issue on rheumatology in Africa in 2021[10]. This could potentially give impetus to the collaborative research and discussions by rheumatologist across our so-called "dark" continent.

The development of disease registries would go a long way towards understanding the impact of debilitating conditions like RA, SLE, Systemic Sclerosis (SSc) and Osteo Arthritis (OA) across the African continent, to name a few[11]. Such registries would enable us to assess the effect of poverty, level of education, socio-economic status, early diagnosis, access to effective medications as well as general lifestyle and other relationships to RMDs on the continent. We may well identify huge differences from other patient groups in other continents. There is also the possibility that genetic factors may differ from other parts of the globe, resulting in more severe disease[12,13].

The education committee could look at developing an undergraduate and post graduate curriculum, evaluating and establishing centres of excellence for rheumatology training and research and disseminating service resources to rural environments. Service delivery could be enhanced by establishing mobile clinics furnished with facilities for extracting and collecting blood samples, basic injections for soft-tissue and joint conditions, and screening for co-morbidities like hypertension, hypercholesterolaemia and diabetes.

The research and scientific committee of AFLAR would have a key role in developing projects and evaluating proposals for research in a manner that will achieve some of the above objectives. The team would need to keep abreast of current developments in rheumatology and identify areas where we might make an impact globally. Randomised Controlled Trials (RCTs) of newer biologic agents are rarely carried out on the African continent due to infra structural limitations. However, this may be the only means whereby needy patients can be offered these expensive therapies, especially in Low- and Middle-Income Communities (LMICs). Such a committee could also liaise with government departments such as health and social services to improve access for our patients to social grants, public places, clinics, expensive medications, and hospital care.

The paediatric committee of AFLAR (PAFLAR) was officially ordained in 2019 and has developed in leaps and bounds. There are regular monthly seminars, which are very well attended and rotate across the different countries. Several successful meetings were hosted last year. The committee successfully conducted a virtual congress of Paediatric Rheumatology in 2021, and the abstracts have been published in *Rheumatology* (Oxford)[14].

While previous editorials have emphasised the challenges that rheumatologist face in Africa[1,2], there is also the potential to exploit several opportunities. These can be discussed and evaluated by a "think-tank" of the AFLAR leadership and presented to the various committees. AFLAR has its own Journal of Rheumatology and publishes predominantly on research from Africa [4]. The journal needs support and is dependent on researchers in Africa and elsewhere to publish their findings in this journal. In this regard, the editorial, education, and scientific committees within AFLAR could combine efforts to improve the standard of the journal and increase the impact factor.

The time has come for us to join forces in the promotion of optimal care for our patients with RMDs in Africa. We need to set aside our language differences, forget our political alliances, shake off our obsession with cultural differences, dissipate our artificial borders, and strive towards the common purpose of enhancing and developing the speciality of rheumatology across Africa, where many patients go undetected and suffer enormous consequent disabilities. North, South, Central, East and West Africa need to become a United Force of Rheumatology (UFR).

Very little can be achieved by an organisation like AFLAR without the necessary financial resources. We need to urgently develop a strategy to raise funds by using advertising space, government support, pharmaceutical support, membership fees, philanthropic donations, web-based meetings,

congresses, and other income-generating activities. Through such activities we could establish a reserve of funds which could be utilised towards making some of our dreams a reality. Our sister leagues such as ACR and EULAR had similar humble beginnings but have grown into giants of rheumatology over the years. There is no reason why AFLAR should not aspire and strive towards similar goals in our development strategy. Unity is Strength.

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