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Commentary

# The outlook of rheumatological care in Africa: Current state, challenges, and recommendation

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ABSTRACT

There is a gross lack of access to rheumatological access in Africa. For example, the most populous country in the continent, Nigeria, has just 30 rheumatologists serving a population of about 200 million. In Ghana, there are just 2 rheumatologists serving a population of about 28 million people. Unfortunately, the prevalence of rheumatologic and musculoskeletal diseases is on the rise in Africa. The main issues facing rheumatologic care in Africa are inadequate health professionals, inadequate research, and a weak health system. These factors have hindered the progress of rheumatologic care and treatment in the region. Prompt action must be taken in tackling these effects and to achieve better care for rheumatologic patients in Africa. This paper analyzes carefully the current state of rheumatologic care in Africa, identifying the needs for rheumatologic care, determinants of quality of rheumatologic care delivery, and the challenges currently facing rheumatology care in Africa. Also, this review gives some recommendations on ways by which the existing system of rheumatologic care in Africa can be improved.

## 1. Introduction

Rheumatologic conditions are among the most prevalent health challenges in the world. They affect about one-third of the world's population, especially the older population, making them a prime cause of disabilities in the developing world [1]. In addition, rheumatological diseases have the highest incapacitating rates on health-related quality of life and daily functioning [1].

The exact prevalence of rheumatologic diseases in Africa has not been recorded but the World Health Organization (WHO) has named rheumatic and musculoskeletal diseases the second most common cause of disability around the globe [2]. A review must be made on how these rheumatologic conditions are being managed and taken care of in a continent like Africa which consists mostly of developing countries, with limited access to quality health services, and with most people engaging in manual labor which could predispose them to rheumatologic conditions [3].

The purpose of this review is to analyze carefully the current state of rheumatologic care in Africa, identifying the needs for rheumatologic care, determinants of quality of rheumatologic care delivery, and the challenges currently facing rheumatology care in Africa. Also, this review gives some recommendations on ways by which the existing system of rheumatologic care in Africa can be improved.

## 2. Current state of rheumatology care in Africa

There is a gross lack of rheumatologists in Africa. For example, the continent's most populous country, Nigeria, has just 30 rheumatologists serving a population of about 200 million. In Ghana, there are just 2 rheumatologists serving a population of about 28 million people [4]. Unfortunately, the prevalence of rheumatologic and musculoskeletal diseases is on the rise in Africa [5].

Epidemiologic studies have been performed in Zimbabwe, Togo, and Nigeria. A study showed that 210 patients out of over 20,000 patients seen in the urban general outpatient clinics had rheumatologic diseases while of the 471 patients seen at the rural outpatient clinics, 47 (10%) had musculoskeletal symptoms. Most of these patients complained of low back pain, 2 had septic arthritis, and 4 patients with osteoarthritis. Just one patient presented with inflammatory polyarthritis and one with tuberculosis of the spine [6].

A study conducted in 2020 which assessed the Rheumatologic care of migrants from sub-Saharan Africa receiving care in the UK, confirmed that there are indeed less than 150 rheumatologists serving about 1 billion people in Sub-Saharan Africa which limits access to healthcare and makes diagnosis difficult since it depends on clinical expertise [7]. The study also shows that most of the countries have no formal rheumatology training programs and treatments are quite expensive as many of the countries in sub-Saharan Africa are also middle to low-income countries [8,9].

Difficulty in accessing specialists was also noted as this is to be expected due to the low volume. Specialist medications were also often unavailable and there was a case where a participant reported a certain test was unattainable in her country. Traditional medicine was also widely used despite seeking conventional medical attention. The understanding of rheumatologic diseases was also found to be limited amongst doctors because they had no experience with rheumatologic cases and this led to patients seeking advice from multiple doctors and having them receive fragmented care [10].

As a result, due to poor access to appropriate healthcare, in Africa, patients with rheumatologic diseases are often diagnosed late, and undertreated and may develop high levels of disabilities and comorbidities [11].

## 3. Challenges facing rheumatology care in Africa

According to the 2010 global burden of diseases survey, rheumatic

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and musculoskeletal skeletal diseases were found to be the fourth highest global impact on disability-adjusted life years and the second leading cause of disability as measured by the life lived with disability [12,13]. Africa is the second most populous continent, and with a high rate of urbanization currently has some challenges in managing the rheumatologic disease. Some of these challenges include is the low number of practicing rheumatology specialists; although some North African countries such as Algeria, Morocco, and Egypt have a larger number of rheumatologists, other countries have very few specialists especially sub-Saharan African countries which have contributed massively to the burden of rheumatologic diseases in the continent [14]. With an increasing number of reports of rheumatologic cases all over Africa, some African countries are still faced with the challenge of accessing adequate equipment and technologies that are crucial in the diagnosis and management of rheumatologic diseases [15].

A study reported that the continent had just 120 rheumatologists as of 2016, the majority of whom are based in South Africa [16]. With over 1 billion population, the specialist-to-population ratio is below the ideal ratio of 1 specialist to 150,000 populace [17]. This is indicating that there are many African who cannot access rheumatologic care despite the increased burden of rheumatologic diseases. Another study highlighted the negative impacts of the financial and logistics constraints of the people in Africa on patient care [7]. People in rural and sub-urban regions had to travel miles away from their residents to access the little available care. Also underfunding of the health sector by the government poses a challenge to rheumatologic care as only a few could the services available. Deficient health records keeping system such as that reported in Sudan, in patient-held clinical record is employed; does not only affect the optimal patient care but also distort the national health surveillance on the burden of the disease [7].

## 4. Recommendation

The main issues facing rheumatologic care in Africa are inadequate health professionals, inadequate research, and a weak health system. These factors have hindered the progress of rheumatologic care and treatment in the region. Prompt action must be taken in tackling these effects and to achieve better care for rheumatologic patients in Africa.

First and foremost, there is a need for the training and re-training of health practitioners. This can be accomplished by planning a variety of regional or global seminars and conferences; the founding of the pediatric society of the African League against Rheumatism (PAFLAR) in 2019 is a prime example [18]. PAFLAR is hosting several webinars in Africa intending to enhance the region's pediatric rheumatology education [18]. The organization also collaborated with the Juvenile Inflammatory Rheumatism (JIR) winter school in Switzerland in creating virtual conferences to enrich the experience of rheumatologists across Africa [18]. Another noteworthy instance is the international training of rheumatologists in Kenya and Nigeria, as well as the UWEZO project, which involved the collaboration of rheumatologists from the UK, Kenya, and Sweden; they trained various doctors and health workers who then delivered educational programs to more than 500 healthcare professionals in Kenya [19]. Additionally, rheumatologists from Canada and the United States are conducting training in Ethiopia, where there are no rheumatologists [14].

Furthermore, there is a need for the conductance of research on various aspects of the disease. This can be achieved through the provision of grants by the government, and local and international bodies to deserving researchers. Also, the collaboration of academic institutions in Africa with international institutions will greatly help in receiving mentorship and support for researchers in these institutions [20]. This would help in identifying the disease incidence and risk factors and provide novel approaches to treating the disease.

Finally, governments and stakeholders should pool resources towards the healthcare system in their various countries, since the major barrier to healthcare in Africa is the poor healthcare system. This would support the equitable and accessible provision of rheumatologic care to a range of patients in need. Additionally, telemedicine and e-health would greatly help in improving accessibility to rheumatic care in Africa.

## 5. Conclusion

Africa is in dire need of rheumatological services for its increasing population. The continent ranks low in access to rheumatological services despite being one of the most populous continents on the globe. Public health stakeholders, governments, private-sector, and health care professionals, in Africa, must develop adequate measures to mitigate the impact of this and also target long-term solutions in form of improved funding and manpower training.

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## Author contributions

Aderinto Nicholas: Conceptualization, Project administration, Writing-review and Designing.
Alare Kehinde: Collection and assembly of data.
Aderinto Nicholas: Reviewed and edited the final draft.
Manuscript writing: All authors.
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## Registration of research studies

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## *Consent*

Not Applicable.

## Declaration of competing interest

No conflicts of interest declared.

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