The management of psoriatic arthritis in Africa

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Psoriatic Arthritis (PsA) is a chronic inflammatory arthritis associated with the inflammatory skin disease, psoriasis. It is generally accepted that the prevalence of psoriasis is approximately 1-3% of the general population[1-3]. Various studies have reported the prevalence of psoriatic arthritis to be between 6-42% of those patients with psoriasis (depending on the criteria used). The prevalence of psoriatic arthritis among patients with psoriasis is approximately 30%[4]. In approximately 70 to 75% of patients with psoriasis, the skin disease usually antedates the onset of the musculoskeletal manifestations; in 10-15% of patients, there is a simultaneous appearance of both the skin and musculoskeletal manifestations, and in approximately 10 to 15% of patients' musculoskeletal manifestations may antedate the cutaneous manifestations[5]. Psoriatic arthritis is a heterogeneous disease encompassing many domains, including skin and nails, peripheral arthritis, enthesitis, dactylitis, and axial involvement. An overlap of the above domains often manifests the heterogeneity and complexity of the disease. The phenotype of the cutaneous and musculoskeletal manifestations forms separate courses.

Choosing treatment should be targeted at the most active domain resulting in the most disability and contributing to the highest disease burden. When choosing therapy, shared decision-making is important, to empower the patient and thus improve adherence and compliance. Not only do the various domains have to be considered when considering therapy, but associated comorbidities also drive the choice of therapy to improve patient outcomes. A multidisciplinary team approach generally improves outcomes.

To drive the decision-making process and facilitate therapeutic options, the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) and the European Alliance of Associations of Rheumatology (EULAR) have drawn up recommendations that are generally followed the world over[6,7]. Sadly, these recommendations are based on studies/research from the developed world with little input from researchers/studies from developing/resource-poor countries. There is generally a dearth of published literature from resource-poor countries and a lack of published country-specific recommendations from the developing world. In most countries in the developing world, experts treating psoriatic arthritis tailor the GRAPPA and EULAR recommendations to meet the requirements of their populations. This is not ideal, but it is generally done. Given the above, a group of experts from the International League of Associations of Rheumatology (ILAR) put together a working group to develop recommendations for treating PsA that will assist in decision-making processes specific to resource-poor countries[8]. The ILAR-PsA working group comprised rheumatologists and dermatologists with an interest in PsA and psoriasis (PsO), mainly from Africa and Latin America. The Asia-Pacific countries were not included as they were in the process of drawing up their own recommendations.

There are various challenges in the management of psoriatic arthritis in Africa. There is a limitation of access to specialists with interest in PsO and PsA on the African continent. The shortage of both rheumatologists and dermatologists on the continent negatively impacts the management of patients with this complex disease. Several African countries do not have specialist rheumatologists interested in psoriatic arthritis, and those countries that do, have their rheumatologists generally located in urban rather than rural areas, resulting in poor access to a large proportion of the population. Another challenge on the African continent is a delay in diagnosis and appropriate referral to specialised centres for patients with PsA. The delay in diagnosis is multifactorial, including a lack of resources, a lack

of qualified specialists, (including rheumatologists, dermatologists, and allied health professionals such as rheumatology nurses as well as specialist rheumatology physiotherapists / occupational therapists), inadequate training of primary care physicians to identify and refer patients with PsA, and the high unemployment rate as well as the huge distances that patients must travel to access specialist care. In addition, there is a paucity of locally conducted psoriatic arthritis-focused research, creating the notion that PsA is rare in African countries.

Various studies have shown that delayed diagnosis and lower socio-economic status are associated with worse prognoses and poorer outcomes. Another challenge on the African continent is a lack of specialised musculoskeletal radiologists to assist rheumatologists in making clinical decisions in difficult patients. Also, the continent has limited access to Magnetic Resonance Imaging (MRI), and other specialised imaging techniques, which are increasingly being used in Western countries. With the presence of a high prevalence of infectious diseases on our continent, and the focus of many governments' attention and resources on communicable diseases, non-communicable diseases are placed on the back burner. Another challenge amongst African rheumatologists is a lack of validated questionnaires in the respective local languages.

Approaches to managing PsA include evidence-based recommendations to be integrated with individual patient needs and factors. Most rheumatologists on the African continent follow either the GRAPPA or EULAR recommendations. GRAPPA criteria particularly provide a leeway, as the recommendations offer the options of 'standard' and 'expedited' pathways, with the standard pathway being quite favourable to low resource African countries. Concerning the treatment of peripheral arthritis, the line of sequential therapy includes Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) and the institution of conventional synthetic disease-modifying agents (csDMARDs), which proffers relatively easy choices, as methotrexate and sulphasalazine are available in most countries. Challenges arise in patients with predominantly axial disease, enthesitis and dactylitis, where biological therapy is recommended, and in patients with peripheral arthritis who have an inadequate response to csDMARDs. The cost of these therapies makes access to these drugs difficult in most developing countries, and countries on the African continent are not spared. Some countries on the African continent do not have privately funded healthcare systems, and most patients here rely on government-aided schemes for their healthcare, which may not cover biologics therapy. For other African countries, healthcare payment is out of pocket, and hence, the majority of Africans cannot afford biological therapies. Biosimilars are now becoming increasingly available on the African continent, with an increase in their use. These biosimilars may help to reduce the costs of biologic treatment of psoriatic arthritis in Africa.

The high prevalence of tuberculosis on the continent makes the routine use of the anti-tumour necrosis factor alpha group of drugs challenging. The presence of other infectious diseases, including hepatitis B, hepatitis C and Human Immunodeficiency Virus (HIV), complicate the use of biological therapy on the continent.

Treat-to-target paradigms have now been advocated in many diseases, including psoriatic arthritis. There are various composite disease activity indices, including Minimal Disease Activity (MDA), Disease Activity for Psoriatic Arthritis (DAPSA), Composite Psoriasis Disease Activity Index (CPDAI), and Psoriatic Arthritis Disease Activity Score (PASDAS), available[9-12]. Rheumatologists are advised to become aware with these indices and routinely use them in daily clinical practice to manage patients with PsA. Treat-to-target paradigms improve patient outcomes. Considering the multiple disease domains involved in PsA, multi-disciplinary management would make a huge impact. Studies have documented a significant percentage of undiagnosed PsA in dermatology clinics[13]. Collaborating with dermatologists, and offering training on the use of questionnaires / criteria that will help in early recognition of PsA is likely to improve outcome.

There is generally a lack of published data from the African continent on PsA. Greater interest in the disease and research should be encouraged amongst trainee and junior rheumatologists in the field of psoriatic arthritis. National psoriatic arthritis registries would be beneficial, to gather real world data, and assess the true impact of the disease. In addition, various societies in Africa need to develop recommendations / guidelines that are region specific for the management of psoriatic arthritis to complement current global guidelines in the management of patients with PsA.

In conclusion, there are various challenges in managing PsA on the African continent. However, we should use the resources available to us to best manage these patients within the constraints of our continent. The GRAPPA and EULAR recommendations currently provide us with a framework to assist in making decisions. However, at the end of the day, local and regional recommendations would be of greatest value. We want to emphasise the importance of the African League Against Rheumatism (AFLAR) in driving forward this initiative and helping develop rheumatologists with an interest in PsA. We hope that this editorial helps to increase awareness of our shortcomings on the one hand, but on the other hand, also serves as a stimulant of interest not only to rheumatologists, but also to researchers, governments,

and financial entities in Africa to recognise the importance of PsA and its associated comorbidities that negatively impact on the lives of patients as well as the challenges specific to the African continent.

We hope that the unmet needs in psoriatic arthritis will soon be a reality and not just a pipe dream.

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