

Psoriatic arthritis in developing/resource-poor countries

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Keywords – psoriatic arthritis, psoriasis, international, resource-poor, recommendations

Funding – This project was funded by an International League of Associations for Rheumatology (ILAR) project grant. Laura C Coates is funded by a National Institute for Health Research Clinician Scientist award. The research was supported by the National Institute for Health Research (NIHR) Oxford Biomedical Research Centre (BRC). The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health.

There is a dearth of published literature on the prevalence, incidence, management, and outcomes for psoriatic arthritis (PsA) from developing countries and under-resourced regions of the world. Most of the data available are from developed countries, especially Europe, USA, and Canada. Using these data, the European League Against Rheumatism (EULAR) and Group for Research and Assessment of Psoriasis and PsA (GRAPPA) have developed recommendations for the treatment of patients with PsA.<sup>1,2</sup> Because of a reliance on available data, these recommendations are mostly applicable to resource-replete countries. The EULAR and GRAPPA recommendations are often tailored to suit patients and healthcare settings in the developed world, but, to date, this has not been undertaken for the management of patients with PsA in resource-poor countries.

In view of this, the ILAR-PsA recommendation group—comprising rheumatologists and dermatologists from the Americas (excluding USA and Canada) and Africa with expertise in the management of PsA and psoriasis—compiled a set of recommendations for regions in which recommended treatments are not readily available, or their use is limited by contraindications.

The ILAR-PsA recommendation group adapted the EULAR and GRAPPA recommendations for the regions falling under the auspices of the group, using the ADAPTE process,<sup>3</sup> and specific areas of unmet need were formulated on the basis of challenges unique to these regions. These are now published in *Clinical Rheumatology*. This process included identification of key unmet needs, review of existing EULAR and GRAPPA recommendations for relevant information and a systematic literature review to address additional unanswered issues. Despite an exhaustive review of five databases (Medline, Embase, African Index Medicus (AIM), Cochrane Central, and Literatura Latino Americana en Ciencias de la Salud (Latin-American Literature in Health Science- LILACS)) there was a lack of published data from these regions of the world, and therefore much of the recommendations rely on expert opinion.

This lack of published data on the management of psoriatic arthritis in resource poor countries is the largest challenge in trying to draw up recommendations and gather information from these regions. This limits data availability to answer all other unmet needs. During the process, other key challenges identified were a shortage of human and financial resources, endemic infections and limited access to biologic disease modifying anti-rheumatic drugs (bDMARDs).

During the ADAPTE process, consensus regarding many issues including the goals of therapy and assessment of all domains of PsA using the GRAPPA and EULAR recommendations was achieved (> 80% consensus). However, given the limited resources available, there were unmet needs identified. When surveying clinicians from the target countries, there was a particularly low consensus on the applicability of the EULAR/GRAPPA Recommendations in terms of safety and monitoring of combination therapy (40% or less consensus).

These recommendations emphasised the need for early diagnosis and use of conventional synthetic disease modifying agents (csDMARDs), either as monotherapy or combination therapy, in order to attain minimal disease activity in regions in which the accessibility of biologics is limited. In most areas in South America and Africa the access to biologics is limited due to exorbitant costs and the lack of centralised healthcare funding/medical insurance. Only 10% of the patients in Latin America have access to biologics.<sup>4</sup> At the current time, there are no biosimilars available/registered for use in these areas. Given the reliance on conventional DMARDs, the group stressed the importance of frequent monitoring of haematological and biochemical parameters to monitor their safety and efficacy. Unfortunately, laboratory constraints for regular monitoring was also noted to be a limiting factor. In view of this, only 13% of the respondents thought that the current EULAR and GRAPPA recommendations can be safely applied to this aspect of management in resource poor regions.

Beyond safety linked to regular blood monitoring, the EULAR and GRAPPA recommendations fail to address the issue of a variety of infections endemic in the regions under review which may affect treatment decisions. The prevalence of infections, including tuberculosis and HIV, is much higher in the developing world compared to the developed world, and many biologic therapies are contraindicated or might increase the risk of active tuberculosis in these regions, especially anti-TNF therapies.<sup>10</sup> Other infections including hepatitis B, hepatitis C, Chagas disease, leishmaniasis, and leprosy, may need to be investigated prior to the commencement of immunosuppressive therapy. As the different countries covered by these recommendations are diverse, it is recommended that patients should be screened and monitored according to local/ regional guidelines. special note for screening and monitoring of tuberculosis in patients on anti-TNF therapy or in whom anti-TNF therapy is contemplated was emphasised.<sup>11,12</sup>

In some areas it was identified that there were no dermatologists or rheumatologists and treatment options were initiated by primary care physicians. Countries in the north of Africa including Algeria, Tunisia, Morocco, and Egypt, and South Africa have relatively more rheumatologist than the rest of Africa. In many countries in sub Saharan Africa they are either no rheumatologist or dermatologist.<sup>7</sup> A similar situation exists in South America. An analysis of the different states in Brazil showed varying number of patients per rheumatologist. In some urban and well-developed areas there was approximately 41,383 patients per rheumatologist whereas in rural areas this ratio increased to 758,786 inhabitants per rheumatologist.<sup>8</sup> In Nicaragua and Uruguay there was approximately 1 to 48 rheumatologists per 1 million inhabitants.<sup>9</sup> Acknowledging that access to dermatologists or rheumatologists is often limited in these regions, recommendations were made for the assessment and management of all aspects of disease by attending primary care physicians.<sup>5,6</sup>

One of the central conclusions of the committee was that data from these regions are sorely lacking. Thus, one of the key outputs from the ILAR recommendations was a proposed research agenda, emphasising a need for monitoring clinical outcomes and analysing the cost of such monitoring, in order to evaluate the utility of the proposed recommendations. We call on funders and researchers to aggressively explore these gaps and provide clear data to address unmet needs and to strengthen these recommendations. This work is required to improve and optimise clinical outcomes and better the lives of patients with PsA in resource-poor settings, in parallel with those of patients in North America and Western Europe.

#### Acknowledgements:

We are profoundly thankful for the support of Mario Eraso, Toronto Western Hospital, Toronto, for the splendid effort that she put into editing and compiling the original manuscript.

We also acknowledge the work of, and on behalf of ILAR-PsA recommendations group:

Abogamal A, Adebajo A, Ajibade A, Ayanlowo O, Azevedo V, Bautista-Molano W, Carneiro S, Goldenstein-Schainberg C, Hernandez-Velasco F, Ima-Edomwonyi U, Lima A, Medina-Rosas J, Mody GM, Narang T, Ortega-Loayza A, Ranza R, Sharma A, Toloza S, Vega-Espinoza L, Vega-Hinojosa O.

Our gratitude and appreciation for the efforts of the external/ independent reviewers of the adapted recommendations:

Professor Mohammed Tikly from South Africa and Dr Penélope Palominos from Brazil

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