## Challenges in rheumatology practice in Asia and Africa – shared concerns, common solutions?

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Africa and Asia encompass nearly three quarters of the population of the world, however, many countries in these regions are less developed economically compared to other regions of the globe<sup>1</sup>. This healthcare in these regions poses unique challenges for governments, health administrators, doctors, and the patients themselves. Rheumatology is an upcoming specialty in many parts of the world, including numerous Asian and African countries. In this editorial, we discuss challenges in rheumatology practice in Asia and Africa, and attempt to arrive at common solutions.

There is a definite lack of rheumatology specialists in many regions of Asia, and also in Africa as a whole<sup>2-5</sup>. The reasons for this could be numerous. Rheumatology is just starting to emerge as a recognizable specialty in many parts of the world, and may not hold the same promise for financial rewards as intervention-based medical specialties, like cardiology, and gastroenterology. The intellectual charm of rheumatology practice, with such specialists being often the last consultation of defense when one encounters a challenging case, may not attract every physician<sup>6</sup>. In Indian settings, it has been shown that rheumatology as a specialty is under-represented in undergraduate and postgraduate general medical training, despite musculoskeletal problems being prevalent in nearly a fifth of the population. This could be due to overlap with care with other specialties like orthopaedics7. Also, such patients need long-term care for these patients, many with seemingly indolent disease course, which may result in neglect from the patient (as they erroneously ascribe it to ageing or other natural processes) or the doctor (who may not recognize the importance of early diagnosis and institution of appropriate treatment, especially in busy practice settings, with more seemingly urgent problems at hand, like heart disease or neurological disease). Such lack of awareness from doctors and patients might have resulted in a neglect of the specialty in certain areas of the world like Asia and Africa.

Another important aspect differences in healthcare delivery in many areas of Asia, including India, is the overreliance on doctors to not only diagnose and treat disease, but also to counsel patients, dispense medicines, check compliance, and answer any patient queries, without the aid of any other healthcare personnel such as specialist nurses. Such lack of trained healthcare personnel is also probably the case in lesser-developed regions of the world, such as Africa, as well. In Asian countries like India, the accurate estimation of the burden of rheumatic diseases in the community still remains to be known, and the same is true in regions of Africa as well. The greater prevalence of infectious diseases, such as Human Immunodeficiency Virus (HIV), tuberculosis and leprosy in the community, which may mimic rheumatic diseases, or affect patients with rheumatic diseases who are undergoing immunosuppressive therapy, is another important shared consideration in these parts of the globe<sup>8</sup>.

Overall, the healthcare coverage (as depicted by proportion of doctors to population) is below the required number on numerous parts of the world, including Asia and Africa9. Therefore, it is logical that the requirement of healthcare professionals able to care for rheumatic diseases in these areas of the globe remains sub-optimal. Solving the conundrum of adequate rheumatology service delivery in these parts of the globe is not easy. Focusing on training specialists in internal medicine to deliver rheumatology services is ideal, however, this may not be able to provide adequate rheumatology service delivery at the community level. An alternative strategy might be to strength rheumatology curricula at the undergraduate medical training level, so that every physician can diagnose rheumatic diseases, treat common ones such as osteoarthritis and rheumatoid arthritis, and refer more complicated cases to a rheumatologist. It may also be considered to intiate shortterm training programs for existing physicians and nurses to enable them to diagnose rheumatic diseases and treat the

common ones. Such a strategy might help in the optimal utilization of available healthcare resources to deliver rheumatology care<sup>7</sup>. There should also be a move towards development of specialist nursing services in different specialties, including rheumatology, akin to those already existing in more developed regions of the world. Such specialist nurses can share the burden of rheumatologists, and help ensure wider coverage of delivery of rheumatology services in the community. Governments in Asian and African countries should consider funding studies to identify the burden of rheumatic diseases in their communities. This shall help them better understand the need to allocate resources for appropriate delivery of such services. In general, there is a need for greater sensitization of patients, doctors, healthcare professionals, bureaucrats and political leaders towards rheumatology as a specialty, to enable greater spending on rheumatology training and service development. It should be the responsibility of the global community to reach out to parts of Africa with poorly developed healthcare services, including rheumatology services, via organizations such as the World Health Organization, World Bank, United Nations and others.

Since many Asian and African countries remain less financially equipped than other regions of the world, it may be a stretch too far to assume that guidelines or recommendations for the management of rheumatic diseases from regions of the world such as Europe or the Americas would be directly applicable to their populations. Considerations such as the lack of universal healthcare coverage, or adequate insurance support for medical treatment, resulting in significant out-of-pocket expenditures, would mean that more expensive therapies like biological disease-modifying anti-rheumatic drugs may be inaccessible, or not sustainable in the long-term, for the common man from these regions8. Also, the genetic make-up of populations from Asia and Africa is likely different to those from Caucasian populations, with resultant different responses to treatment. Therefore, there remains an unmet need to develop cost-effective, as well as culturally acceptable treatment regimens for rheumatic diseases, for regions of Asia and Africa<sup>10</sup>. There may also be a scope to initiate exchange programs for physicians between countries from these two continents, to facilitate human resource development, and enable greater understanding of sociocultural mileu related to healthcare. These may serve as the first steps in Afro-Asian collaborations, with the eventual hope that such collaborations may help develop therapies, help train more manpower, and ultimately alleviate the suffering of patients with rheumatic diseases from these regions.

**Key words:** Rheumatology, Rheumatology training, Rheumatology service development, Asia, Africa

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