

## Developing a rheumatology team to meet a growing need in Africa: let's not forget to feed the cow

Backhouse MR<sup>1,2</sup>, Ndosì M<sup>3</sup>, Oliver S<sup>4</sup>

<sup>1</sup>*Leeds Institute of Rheumatic and Musculoskeletal Medicine, University of Leeds, Leeds*

<sup>2</sup>*NIHR Leeds Biomedical Research Unit, Leeds Teaching Hospitals Trust, Leeds*

<sup>3</sup>*Department of Nursing and Midwifery, University of the West of England Bristol, Bristol*

<sup>4</sup>*Susan Oliver, Independent Rheumatology Nurse Consultant, Devon, United Kingdom.*

In many African countries the burden of preventable communicable diseases such as HIV/AIDS, lower respiratory infections, malaria and diarrhoeal diseases is overwhelming [1]. It therefore is no surprise that moving rheumatic and musculoskeletal disease (RMDs) up the public health agenda is difficult. The health needs of the African continent are complex and diverse, but priority setting is challenging in an environment hampered by financial constraints and limited epidemiological data. This can be further complicated by lack of resources and donor-dependent economies [2].

Taking these factors into account, it is not an easy task to engage public health systems across Africa to include rheumatic and musculoskeletal disease (RMDs) on their list of health priorities. Yet, the burden of RMDs has shown a marked increase and now has a truly global impact. Although the epidemiology data in Africa are limited, RMDs have the fourth largest impact on the health of the world's population, when considering both death and disability (DALYs), and are the second most common cause of disability worldwide when measured by years lived with disability (YLDs)[3, 4]. As the world population ages and obesity is on the rise, this burden is set to increase further.

Onset of RMDs, however, often occurs in the working age population, so failing to effectively treat RMDs has a socioeconomic impact both at the individual and societal level. Losing employment through illness has a double effect on a family, who not only lose income but need to increase their expenditure to meet associated healthcare costs.

Data from the UK indicates that as many as a third of patients with rheumatoid arthritis (RA) become unemployed within the first five years of their diagnosis, with rates highest in those with higher level of physical disability or manual jobs [5]. The economic impact of losing experienced workers from RMDs should not be underestimated in Africa, where there are higher rates both of manual work and disability [6]. Failing to effectively treat RMDs now, or to develop a health workforce capable of dealing with a likely future increase in the number of people with RMDs, will further impede Africa's economic development over the coming years.

Although some of these challenges can be met by increasing health spending, where this is not possible, much can also be achieved by using the scarce health resources in new ways [2](WHO, 2014).

The growing burden of RMDs is juxtaposed with our increasing effectiveness in treating these conditions: we're now better able to influence patient outcomes than ever before. For example in rheumatoid arthritis (RA), treatment is now aimed at remission [7], once considered unachievable. Progress has been most pronounced in inflammatory arthritis and stems from the paradigm shift towards identifying patients early, initiating effective therapies within three months of symptom onset, regular disease assessment and maintaining tight disease control. Whilst few would disagree with the benefits of the current paradigm, there is a clear challenge for under-resourced health systems to deliver this model of care on a population level [6]. Indeed the challenge of finite resources, greater patient need, and rising treatment costs is one that faces health systems across the world. Yet, this is a challenge that we must all meet if we are to improve the quality of life for our patients and minimise the economic burden of RMDs.

Within the UK health system, care is free at the point of delivery but health spending; the healthcare workforce; and the healthcare system's architecture have struggled to meet the needs of a modern population. This problem is not new, and in the 1990s a growing shortage of doctors led to a corresponding gap in service delivery. This crisis signalled the start of an ongoing journey. The roles of nurses and allied health professionals (AHPs) had to expand to fill some of these gaps through new extended scope roles, to deliver tasks that were traditionally the preserve of doctors. This change did not occur overnight, and much work was required to change legislative frameworks to allow such roles to develop safely and effectively. Nurses were the first to pioneer advanced roles [8] and now highly trained nurse specialists have a range of skills such as joint injections and prescription rights [8, 9]. As care for people with RMDs evolves so do these roles and there is now evidence from high quality multicentre randomised controlled trials which demonstrates that nurse led care is cost effective, safe and patients report higher levels of satisfaction than they do in traditional medically led models of care [10]. Such has been the success of nurse specialists, that they are now an essential part of every rheumatology services in the UK and elsewhere in Europe [11-14], where they work collaboratively with rheumatologists, within the framework of a multidisciplinary team, rather than in competition.

In Europe, much has been achieved by offering early access, regular disease assessment and patient education using a strong team approach, with nurses and AHPs advancing their skills to enhance the care provided by the medical team. This allowed for a larger volume of patients to be seen and managed safely. This team approach has served to optimise the role of the rheumatologist and enable the services to deliver more cost effective care. For example, some clinics now use specialist nurses to coordinate care and undertake routine patient monitoring, freeing the rheumatologist's time to deal with new and more complex cases. Such an approach would represent a logical progression in Africa where non-physician providers such as medical assistants and assistant medical officers have been used effectively for many years within their healthcare systems with great effect [15].

Advanced nursing practice is established in the UK but in different stages of development across Europe [14]. In other parts of the world such as in Asia, nurses are now starting this journey and have recently endorsed rheumatology nurses as a specialist area of practice with appropriate training [16]. Each country must develop a solution to meet the specific challenges it faces utilising the differing resources at its disposal. By learning from the reality

of patients' experiences of seeking health, healthcare communities will learn where we can most effectively optimise care and reduce costs. Although a 'one size fits all' approach is unlikely to work, our experience has shown there are some common obstacles to overcome when starting this journey, and indeed many of these reoccur over time as administrations change. Training nurse and AHP workforces to meet this clinical need requires changes in legislation, investment, and a cultural change from all within healthcare so that clinical need and patients outcomes and safety come before traditional professional boundaries and personal interests.

Developing services in such a way does not happen overnight and needs to be managed in a stepwise approach and although individuals are key to the process, it cannot be achieved alone. National and continental bodies are vital with regards to the political agenda but individuals have a responsibility to foster a culture where development of nurses and AHPs is welcomed and encouraged in order to improve care. The wider healthcare workforce should be valued and developed in order to ensure sustainable health services. Similarly, individual nurses and AHPs have a responsibility to take ownership of their own development and maximise opportunities when they present. The global rheumatology community should work collaboratively to support each other in developing care for people with RMDs. One example of this has recently been afforded through the British Society of Rheumatology (BSR) who for the first time, provided two bursaries through the African League Against Rheumatism. These bursaries provide funding for one rheumatologist (Dr Joan Dellor bursary) and one nurse (The BSR Nursing Travel Bursary) to attend the annual BSR conference and to then spend time in a leading rheumatology unit. The annual conference not only contains highlights from world leading researchers, practical sessions, and a range of networking opportunities but also enables clinicians and researchers to discuss challenges in delivering care as well as sharing ideas on implementing the latest research findings. Sharing such opportunities internationally provides a vital link between the United Kingdom and Africa and it is hoped that the bursaries may make some small step towards stronger collaboration.

Addressing the growing burden of RMDs is a challenge that Africa must embrace and overcome in the coming years. As the saying goes: 'he who keeps a healthy cow will have plenty of milk', training the workforce is not a waste of resources. Some countries have already started down this journey and found great benefit in growing the nursing and AHP specialist workforce. This journey is achievable and likely to be rewarding. Although it may take many years, small steps are needed at the start. Could the new bursaries be the first step of your journey?

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