

A nation in pain: high-quality local research as a crucial step to improve pain prevention and care

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About 20% of South African adults have chronic pain, with women and the elderly being the worst affected; the prevalence of chronic pain is 20% greater in women than in men, and 30% of people over 65 years have chronic pain.¹ However, beyond basic epidemiological data, fundamental information on the biological, psychological, and social factors that predispose individuals to the development and chronification of pain is missing for South Africa (and other low- to middle-income countries).

Without these data, what we know about the determinants of pain, its impact, and what we apply in management practices are taken directly from high-income countries. But can we afford to continue to blindly apply information from high-income countries to the unique conditions found in South Africa? In South Africa, there are extraordinarily high levels of unemployment and poverty, poor access to quality healthcare for most of the population, a unique disease burden, and a unique disability burden that includes high levels of mental health concerns and physical trauma.²⁻⁹ Given these exceptional circumstances, we believe there is a great need to generate relevant, local information on pain to inform health policy at the population level and pain management practices at the individual level.

We have already learned important lessons about contextualising “best practice”. For example, we know there is cultural diversity in the language of pain in South Africa and that language can be a barrier to pain assessment when using English-language assessment tools developed in high-income countries.¹⁰⁻¹² We have also learned that using peers to deliver behaviour change interventions improves feasibility and simultaneously provides valued, meaningful support to people working to recover from disabling pain.¹³ Moreover, people with pain in South Africa particularly value a person-centred approach to care.¹⁴ Finally, using local expertise, we have shown that it is feasible to deliver a telemedicine-based programme for pain management in a resource-poor setting.¹⁵

The way forward

Although there has been some excellent pain research in South Africa, it lacks the structure and critical mass of resources needed

to answer more significant questions. In the case of pain, these questions often need to be addressed from multiple sides (e.g. pathophysiology, psychology, sociology, economic, clinical care). We believe that, whatever the scale and focus, the research should follow three basic principles to clarify the pain problem in South Africa and inform high-quality clinical care. The research must be:

1. **Rigorous.** High-quality data requires high-quality research. Indeed, studies that are not designed and executed to the highest standards can be regarded as wasteful: wasteful in generating data that are informative and actionable, wasteful in training future scientists, wasteful in the effective use of limited financial resources, and especially wasteful to individuals living with pain.¹⁶
2. **Relevant.** Research must deal with questions pertinent to the society in which the research is being conducted.¹⁶ The research must address the causes of pain and clinical management strategies relevant to the people of South Africa. Unfortunately, the pain that matters to South Africans, or the extent to which that pain matters in their lives, remains largely unexplored.
3. **Responsive.** We live in a dynamic and diverse society, and research priorities on pain must consider the changing needs of the society in which the research is embedded. For example, for almost two decades, painful human immunodeficiency virus (HIV)-associated sensory neuropathy was a research focus in this country. Thankfully, with better and earlier treatment of HIV, the incidence of painful neuropathy is now low, and the focus of research must adjust to respond to the new reality (e.g. less research on risk factors and more research on treatment).¹⁷

By conducting research that fulfils these three criteria, our understanding of pain in South Africa will improve, thereby improving the detection, assessment, and management of pain in our population. While this improved understanding already has great value, pain research done in the South African context is also likely to have a broader influence. The social, cultural, and

economic milieu in South Africa positions our research to also shed light on pain and pain burden in low- to middle-income countries. Consequently, it brings a richer understanding of pain than is currently available through the bias of a Global North lens. The questions then arise: what research questions should South African pain researchers prioritise? What information is needed? How can this research be funded? How do we ensure the findings of this research are rapidly translated into the clinical setting?

The first step is to develop a national strategy that will serve as an overarching roadmap to guide research and care for people with pain in South Africa. To develop a South African National Pain Strategy: we recognise the importance of drawing on the expertise of a wide range of interested parties to ensure that such a strategy is beneficial. The process should include clinical and research leaders in the field of pain, people with lived experience of pain, and other stakeholders, such as policy leaders, educators, systems experts, and medical and disability insurance representatives. We believe that such broad consultation has the potential to identify shared priorities, shared goals, complementary expertise, and resources, thus fostering improved collaboration and coherence for the next decade of pain research.

With a collaboratively developed roadmap in hand alongside interinstitutional and interdisciplinary (e.g. between pain clinics and basic research laboratories) collaboration, pain investigators are more likely to achieve the level of funding and sophistication required to generate internationally competitive research. This research will answer the questions we need to answer to improve pain care in South Africa, and for the country to become a research and clinical leader in pain in low- to middle-income countries.¹⁸

Conflict of interest

P Kamerman is the sole proprietor of Blueprint Analytics and a consultant for Partners in Research. VJ Madden is an associate director, and R Parker is a director of the Train Pain Academy, a non-profit organisation. VJ Madden, R Parker, and GJ Bedwell receive personal payments for lectures on pain and rehabilitation.

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