FACT SHEET

Setting up Pain Management Services in Low- and Middle-Income Settings

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Background

The Need for Pain Management Services in Low- and Middle-Income Settings

All kinds of pain – acute, chronic, and cancer pain – are under-treated globally,[9] despite data from the Global Burden of Disease showing the high non-fatal disease burden from low back pain and other pain-associated conditions.[12] In low- and middle-income countries, this burden is similar to that in high-income countries; in some settings, the pain burden is expected to rise with the aging of the population. Additionally, some low-and middle-income settings grapple with pain overdiagnosis and management with low-value care, further harming people living with pain and creating waste in the system.[13,15] As pain services are much less available in low- and middle-income settings, there is an urgent need for cost-effective, accessible pain services in these settings.

Types of Pain Management Services

1. Acute Pain Service: This service is usually run by anaesthesiologists and is mainly for acute postoperative pain. However, it may also be nurse-led and supervised by anaesthesiologists.
2. Cancer Pain Management: Usually part of a Palliative Care Service, which may be run by a pain specialist, anaesthesiologist, oncologist, physician, or surgeon.
3. Pain Clinic: Usually sees mainly patients with chronic non-cancer pain, but could also include outpatients with cancer pain; run by a pain specialist or any healthcare professional with an interest in pain management and appropriate training.

Ideally, all pain services should be interdisciplinary, i.e., "multimodal treatment provided by a multidisciplinary team collaborating in assessment and treatment using a shared biopsychosocial model and goals." (See IASP Terminology for definitions of "multimodal" and "multidisciplinary").

The interdisciplinary team should comprise physicians from various specialties (e.g., anesthesiology, pain medicine, neurology, neurosurgery, rheumatology, rehabilitation medicine, orthopedics, etc.), clinical psychologists or psychiatrists, physiotherapists, occupational therapists, nurses, pharmacists, and other relevant healthcare professionals.[10] Yet, in reality, many of the above groups of healthcare professionals may not even be available, let alone work in the same interdisciplinary team. This problem is found in many low- and middle-income countries, as well as some settings in high-income countries, such as rural and remote indigenous populations.

Challenges

Health Systems and Policy

Pain management is not a priority of most governments, and there are few or no resources allocated to support pain care services.[2] Additionally, there may be limited or no access to pain medications, including opioids, exacerbated by fear of opioids and their side effects, as well as cultural beliefs and attitudes towards pain and its management.[6]

National policies or strategies on pain management are almost non-existent in low- and middle-income countries. Pain services in limited-resource settings are often confined to specific types of pain or interventions and run by single clinicians, e.g., pain relief for acute postoperative pain, cancer pain management through palliative care services, nerve blocks, and other interventions.[4]

Limited Resources

There is an overall lack of resources – financial, space, and personnel – in low- and middle-income settings, and many healthcare professionals perform multiple roles; thus, setting up a pain service would have to be done over and above their "core" duties. Furthermore, specific members of the interdisciplinary team, e.g., clinical psychologists, especially those with appropriate training and experience in pain management, may be lacking or even absent in many low- and middle-income settings.[5]

Continued Use of the Biomedical Model for Pain Management

This is due to the lack of knowledge about the biopsychosocial understanding of pain and the need for broader interdisciplinary skills, especially for chronic non-cancer pain. In addition, healthcare professionals may lack the appropriate skills to implement this less-familiar model of care in routine clinical settings. Thus, treatment approaches are focused on passive physiotherapy, medications, and pain interventions (e.g., nerve blocks, epidural steroids, etc.) aimed at providing pain relief. While these may be appropriate for acute pain and some types of cancer pain, they are ineffective, and may even be harmful, for chronic non-cancer pain; furthermore, they also divert precious resources to futile treatments for many people with pain.[1] On the other hand, many studies have shown the effectiveness of the biopsychosocial approach delivered by an interdisciplinary team.[7]

Solutions

Lobbying and Advocacy

Lobbying for resource allocation for pain services can be supported by presenting the high non-fatal burden of disease from pain-associated conditions using data from the Global Burden of Disease. In addition, demonstrating the impact of good pain management at the local level (e.g., reduced postoperative complications with good acute pain management, early return to work for patients with chronic pain) is also important, and the voices of patients (people with lived experience) can be very powerful. It is also worthwhile to lobby at governmental levels for changes in health policy, e.g., advocating for the establishment of a National Policy on pain management, using examples of such policies from other countries[3,11] that are adapted for low- and middle-income settings. Healthcare administrators also need to be educated to make sure that available funding is directed towards effective interventions (high-value care) and not wasted on interventions that have limited outcomes (low-value care).[13]

Training and Education

Pioneering clinicians who have successfully set up pain services in low- and middle-income settings have been passionate, persistent, and innovative "champions"[5] who are willing to share their experiences; getting support from colleagues and healthcare professionals in other specialties is also helpful. When resources are limited, and pain management is an important component of the work, it is critical to create relevant training and education opportunities for healthcare providers working in clinical services where pain management is an important component of the work. This includes knowledge and understanding of the biopsychosocial model of pain and competency in applying evidence-based treatments for different kinds of pain. Treatment with medications, therapies targeting movement and function, and active pain self-management approaches are all important components of the training of those working in these contexts. This includes multi-skilling of all the healthcare providers involved in pain clinics (e.g., non-psychologists providing education to patients on psychological approaches to chronic pain management).[4]

Community-Based Pain Management

Community-based pain management is crucial as part of an integrated plan to address the rising inequities in access to pain services in low- and middle-income settings. Institution-based pain management services are expensive and often inaccessible to many individuals with pain in under-resourced settings.[4,14] Community-based pain management is cost-effective, fosters early intervention, provides opportunities to enhance continuity of care, and empowers people with the lived experience of pain and their communities, as it allows for pain management options in settings close to where they live. Hence, decentralizing pain management services and integrating them into community and primary care settings should be prioritized in under-resourced health systems. This approach leverages existing local resources and healthcare structures to extend care to underserved populations (e.g., rural and remote communities). As such, health systems in low- and middle-income settings should innovate strategies to leverage the existing workforce, such as community health workers, on essential pain management, including screening and referrals. Investment in community-based pain management approaches offers alternative solutions to address the increasing burden of pain conditions in low- and middle-income settings. The community-based pain management approach also aligns with global efforts to promote universal health coverage and equitable access to healthcare services.[8]

Practical Tips for Success

Examples of successful interdisciplinary pain services set up in low- and middle-income settings are available in Chapter 5 of the IASP Multidisciplinary Pain Center Manual.[10]

Some practical tips for those wishing to set up pain services in low-resource settings:

1. **Training is essential:** Those wishing to set up pain services should receive some foundational training based on the biopsychosocial model to appreciate the role of different specialties in the team and emphasize the comprehensive approach to pain management.
2. **Persistence and determination are key:** In many low- and middle-income settings, pain management has traditionally relied on single-modality treatments. Shifting to a multidisciplinary approach may be a cultural change, and this process requires significant time and effort to succeed.
3. **Having a team is crucial:** Due to chronic pain's multifaceted nature, its management needs contributions from different specialties. Also, setting up a multidisciplinary pain service requires a lot of time and effort, which cannot be done by a single person. Start building up the team by sharing what you are doing with colleagues, and let them come to you with a good understanding of what to expect and how they can contribute.
4. **Mentoring and support are needed:** In many low- and middle-income settings, pain management is not yet recognized as a specialized medical field, let alone an interdisciplinary service. Implementing such a service may require policy changes. Therefore, reaching out to individuals with local and international influence is crucial to advocating for your cause and amplifying your efforts.

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