Increasing education for healthcare professionals on managing pain in older people

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Barriers to effective pain management

Pain is a colossal global health problem with massive socioeconomic impact and reduces quality of life for millions.[1] Pain may be experienced as acute, chronic, or intermittent, or as a combination of the three. The largest underlying causes of pain can be extracted from the global burden of pain surveys where diseases ranking highest in years lived with disability are in the field of musculoskeletal pain (e.g., low back pain, neck pain, osteoarthritis), all with pain as a symptom.[2] The aetiology of pain is complex, and may lead to various sequelae such as depression, inability to work, disrupted social relationships and suicidal thoughts. It is estimated that 10% of the global adult population is diagnosed with chronic pain each year. The median time of living with chronic pain is 7 years,[1] and it is known that chronic pain increases mortality.[3]

Barriers to optimal pain management can be viewed as either system-, staff-, nurse-, physician-, or patient-related. System-related barriers may include poorly defined standards and pain management protocols, and/or limited access to analgesics and pain specialists, whereas staff-, nurse- and physician-related barriers can be due to inadequate training and poorly functioning interdisciplinary teamwork, and too little focus on patients in pain as compared to many other life threatening diseases. Patient-specific barriers may include reluctance to take analgesics, fear of side effects, and fear of addiction to pain medication[4] and in the elder patients it is also related to their self-esteem and acceptance of their chronic pain with stoicism.[5]

Although chronic pain is highly prevalent among older adults, pharmaceutical management of chronic pain in older adults is often under-prioritised, and pharmacological interventions cause adverse events such as constipation, urinary retention, sedation, increased risk of falls, and cognitive impairment. It should be noted that no analgesics have been developed specifically for the elderly and current medications are seldom tested adequately in the elderly. Notoriously, older adults are underrepresented in clinical trials in general, and in particular in trials evaluating chronic pain treatments.[6,7]

As the elderly often have more comorbidities and impaired organ functions (e.g., hepatic clearance), testing analgesics is a demanding, time consuming and costly task – although it will be needed to ensure optimal personalised treatment options in the elderly. Furthermore, pharmaceutical management of pain in older adults is limited by the potential risks caused by polypharmacy and frailty, as the effectiveness and safety profiles of pain medication have been poorly evaluated in older adults taking multiple different medications, or that suffer from frailty.[6,8]

The chronic pain experienced across the general elderly population is often described as intense, disabling and in need of treatment, and it is frequently under-reported.[9,10]

Tools for quantitative pain assessment are needed for adequate pain management planning in this vulnerable group, and should ideally include an evaluation of the intensity, location, affect, cognition, behaviour, and social aspects of a patient's pain. However, many pain patients with dementia, for example, present with cognitive and linguistic barriers that prevent them from reporting these aspects. Consequently, healthcare professionals must often rely on one-sided, limited assessments about the intensity of pain in dementia patients, and this may result in inadequate management of the patient's pain.[11]

Although the clinical gold standard in pain assessment is self-reporting, it is often not a realistic option for assessing pain in pain patients with dementia. To overcome this limitation, several observational pain scales, such as Doloplus-2, PACSLAC (Pain Assessment Checklist for Seniors with Limited Ability to Communicate), PAINAD (Pain Assessment in Advanced Dementia), and others, have been developed[11-15] but these tools should be used more systematically in routine clinical evaluations.

There is a need for more information, education, and training of healthcare professionals to be able to better evaluate pain in the elderly, and the impact of pain on their daily living. Evidence-based guidelines for the management and assessment of pain in older adults are therefore important.[16]

The importance of utilising guidelines for the management of pain in the elderly

Sub-optimal outcomes in the management of chronic pain are partly due to the general lack of adherence to evidence-based guidelines, their translation, and acceptance in different countries. Translation of chronic pain management guidelines to languages other than English, such as those provided by the International Association for the Study of Pain (IASP)[17] are therefore

of utmost importance to facilitate the dissemination of diagnostic and management guidelines for chronic pain in the elderly. Many leading professional bodies such as the British Geriatric Society and the American Geriatric Society have published management guidelines.[18,19]

Many factors need to be taken into consideration when managing chronic pain in older adults where the physiological changes caused by the ageing process, dosing adaptation of the analgesic drug, and replacement with alternate medicines are all important aspects.[20]Compared to younger adults, older adults therefore often report more frequent side effects of a given drug therapy, especially in conjunction with co-morbidities and polypharmacy, and this needs to be carefully considered as it may increase the risk of detrimental drug/disease and drug/drug interactions in older patients.[20] The route of administration is another factor. Although the oral route is often preferred, topical treatments may have similar effectiveness and may cause fewer adverse events, as the systemic exposure to topical drugs is often lower compared to the oral route. Combination therapy (e.g., the combination of lower doses of two different drugs) may be beneficial for effective pain management, as drugs with complementary mechanisms of action may provide synergistic effects and lead to greater pain relief with fewer side effects than would higher doses of monotherapy.[20] Current guidelines for the treatment of pain in older adults likewise emphasise the use of non-pharmacological strategies such as acupuncture, cognitive behavioural approaches, physiotherapy, and transcutaneous electrical nerve stimulation (TENS) to reduce or eliminate the need for medicines[20] although like pharmacological therapies randomised clinical trials are lacking. These alternative approaches may be tried in patients that already take several medications for other medical conditions or in patients that are at elevated risk of side effects from pain medication.

Is improved pain research and education for healthcare professionals the answer?

Although pain is a substantial societal and financial burden,[1] particularly so for older adults already burdened by age-related health conditions, the physiology, diagnosis and management of pain remains poorly represented, and highly variable, in many undergraduate healthcare programmes.[21,22] Educational gaps include pain not being taught as a dedicated subject, poor documentation of pain topics in the undergraduate medical curriculum, and the use of teaching and assessment methods (e.g., lectures) with low uptake of practical methodologies. However, recent progress, such as national guidelines mandating the inclusion of pain in the curriculum, is encouraging.[21-23]

Importantly, better pain management education, with more training hours dedicated to the treatment of pain, must not be limited to only physicians, but must be extended to the other key members of the multidisciplinary pain management team, including nurses, pharmacists, and physiotherapists.[24] In addition to improved education on the management of pain per se, more in-depth education on how to best manage the relationship between healthcare professionals and older adult patients suffering from chronic pain would also be beneficial, as the relationship between the healthcare professional and caregiver is important for effective pain management for older adults. With improved education and improved awareness and adherence to treatment guidelines, existing resources can be leveraged to reduce the suffering and social and financial burden of what might be the most widely recognised, yet one of the least well understood, conditions of human existence – pain. Furthermore, more focused, and dedicated research programmes targeting basic and clinical pain research are needed to pave the way for better awareness, education and management of older adults suffering from pain.

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