

The Challenges of Cancer Pain Assessment

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PREFACE

James Alexander Logan, a second-year medical student at the Barts and The London School of Medicine and Dentistry, died in February 2001 after a painful illness. A Trust was set up in his name in 2003 to promote education in the recognition and treatment of cancer pain and it provided funds for an annual essay prize, open to those undergraduate medical students of Queen's University, Belfast, who had completed their fourth year palliative care teaching. The first competition took place in 2010 and the winning entry appeared in the Ulster Medical Journal in 2011.

The Trust itself was dissolved in 2014 but the essay prize continues and the Trust's website can still be accessed at <http://www.jameslogantrust.org.uk/>

INTRODUCTION

For patients and their families, pain is a feared and distressing component of the cancer trajectory¹. The burden of cancer pain is widespread with a prevalence of greater than fifty percent in all cancer types². Pain can impair physical functioning and cause or amplify psychological suffering. Despite effective therapeutic options, it is acknowledged that cancer pain is frequently under treated^{2, 3}. One barrier to optimal cancer pain management is poor assessment of pain. A comprehensive pain assessment is an essential step in order to control cancer pain but it is not a straightforward task⁴. In this essay I will discuss the challenges of cancer pain assessment, with particular focus on the complex nature of cancer pain, pain assessment tools and populations at high risk of inadequate assessment.

CONCEPTUALISING A COMPLEX PHENOMENON

Cancer pain is complex. Often the product of multiple mechanisms at several sites, it can comprise neuropathic, inflammatory, ischaemic and direct compression effects^{3, 5}. It is temporally changing and when present is often at least moderate in severity^{2, 6}. Genetic factors, past history, culture and mood affect a patient's experience of cancer pain⁷.

Pain in cancer patients is most commonly tumour related but it may also arise subsequent to cancer treatment³. For example, oral mucositis is a painful side effect of chemotherapy as is skin erythema following radiotherapy⁸. Alternatively, pain may be linked to a concurrent disorder such as osteoarthritis.

The subjective and multifaceted nature of pain heightens

the challenge of pain assessment. Before assessment, the concept of pain should be understood by the health care professional. The term "total pain" is used to refer to the multidimensional nature of pain which encompasses the physical, psychological, social, and spiritual domains^{9, 10}.

Lame et al. indicate that the effect of pain on quality of life is linked more strongly with a patient's pain beliefs, than with the intensity of pain experienced^{10, 11}. At the end of life, concerns such as searching for purpose and leaving loved ones can intensify pain perception. Spiritual distress may reveal itself as physical or psychological symptoms¹⁰.

Viewing pain as a multidimensional entity, allows for pain to be addressed in its entirety and on an individual level. Assessment of pain which leans on pain as being an expression of "actual or potential tissue damage" falls too heavily on the physical trigger¹⁰. It is important to acknowledge that not all patients will experience pain in every domain, but that ideal assessment of cancer pain fully explores each one.

ASSESSMENT TOOLS

In general, history, physical examination and psychosocial assessment form the basis of patient assessment. There is often incongruity between the care-givers impression of a patient's pain and the patient's subjective experience of pain¹². Evidence suggests that tools such as the visual analogue scale, numerical rating scales and verbal rating scales can improve communication of pain characteristics and lead to enhanced management, particularly in patients with significant pain¹³. These tools are recommended for use by the European Association of Palliative Care. The Brief Pain Inventory and the McGill Pain Questionnaire are examples of multidimensional instruments which are more comprehensive than rating scales¹⁴.

A lack of documentation of assessment findings is a barrier to effective pain relief¹⁵. Pain assessment tools facilitate clear documentation and reassessment of employed management strategies. The extensive range of pain assessment tools in existence is an indication of the challenge of pain assessment. A more standardised approach comprising common, international pain assessment tools would be beneficial¹².

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Currently, the growing range of tools seems to be propelled by specific research interests as opposed to a collaborative effort to improve consistency of assessment⁴.

There is also need for development of an international pain classification system which is comprehensive, practical and prognostic¹⁶. Several standardised cancer pain classification systems exist but are not fully validated. Most widely used is The Edmonton Classification System for Cancer Pain (ECS-CP)⁴. After surveying a systematic review which focused on six cancer pain classification systems, The European Palliative Care Research Collaborative recommended ECS-CP for development with the view of it becoming an internationally recognised system¹⁷. It is currently the subject of international validation studies⁴. ECS-CP considers various factors which appear to be prognostic of complex cancer pain management. The system helps a less experienced clinician to anticipate when specialist advice is required¹⁸. Consensus on a classification system for cancer pain would provide a common language, comparable to the TNM cancer staging classification system,¹⁶ thereby enabling comparison of pain treatment results¹⁹.

COMMUNICATION BARRIERS AND CHALLENGING POPULATIONS

In 1968, Margo McCaffery formed a definition of pain: "Pain is what the experiencing person says it is, existing whenever he says it does²⁰." Pain assessment guidelines still respect the philosophy of her definition today. The nature of pain does not allow for objective assessment. As far as possible, the patient should have an active role in assessment of pain. Cancer patients should be encouraged to communicate their thoughts, fears and expectations about pain²¹.

Collaboration and communication between the patient, their family and clinicians aids cancer pain assessment. Good relationships facilitate reporting of concerns and accurate pain evaluation. If a patient feels their opinions will be ignored, they may hesitate to report pain. A patient may hesitate to report pain for a variety of reasons. For example, a study concluded that adolescents may refrain from reporting cancer pain if they believe it will compromise their social activities²².

Pain may hold a different meaning for a cancer patient relative to patients who experience pain from a non life threatening illness. For a patient with cancer, pain may induce fear if a patient believes pain to be a sign of failure of treatment or disease progression²³. Fear may subsequently deter a patient from revealing the full nature of their pain. Thus educating the patient about cancer pain and addressing fears and false beliefs is essential in order to ensure accurate pain assessment. From the point of diagnosis, patients should be made aware that cancer pain can be controlled. Fatalistic patient beliefs that cancer pain has to be accepted should be dissolved³.

Infants, elderly people, those with cognitive impairment or language difficulties, substance abusers and patients at the end of their lives are groups of people who are at higher risk of inadequate pain relief¹².

Screening for cognitive impairment is important as it can affect a patient's experience and expression of pain. Cognitive impairment may be a feature in cancer patients. Dementia or metabolic disturbances are frequent causes²⁴. Approximately 51% of patients with terminal illness experience pain during the last 48 hours of life^{25,26}. During this time, the frequency of delirium is reported as between 85% and 90%²⁷. Pain should always be considered when assessing the aetiology of delirium in a patient with cancer.

Every effort should be made to elicit self-reporting of cancer pain. If a patient is unable to comply with pain assessment tools or to explain their pain verbally other simple measures can be trialled. For instance, asking the patient to blink once to indicate if pain is present and twice if not. The finger span assessment is another simple method in which a patient is taught to signal pain severity by altering the distance between their thumb and forefinger^{12,28}.

Sensitivity to pain behaviours is particularly important in terminally ill patients who are unable to self-report their pain experience. Facial grimacing, bracing and moaning are typical pain behaviours. Other pain related behaviours include agitation, restlessness and confusion¹². A relative who knows the patient well may be able to enhance cancer pain assessment by detecting subtle changes in behaviour. Physiological signs such as elevated pulse and blood pressure are not sensitive indicators of pain¹². Specific pain behaviour assessment tools have been developed and can be helpful to assess cancer pain in non-verbal patients¹². However, behaviours often used to identify pain can be overshadowed by the sedative effects of opioid analgesics.

CONCLUSION

In conclusion, assessment of cancer pain requires a holistic approach. It necessitates acknowledgment of the multiple factors which contribute to an individual's pain experience. It must go beyond the physical trigger, taking account of psychological, spiritual and social dimensions of a patient's life course. Effective assessment of cancer pain prioritises the individual patient and works in association with family members and carers. Development of international consensus on how to classify and assess cancer pain is a current priority which must be rooted in the concept of "total pain." For a patient with cancer, comprehensive assessment of pain is a prerequisite for the appropriate selection of pain management modalities and optimal care and as such is a vital aspect of medical practice.

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