

A Systematic Review of Patient Reported Pain Measurements

Title

Can patient reported measurements of pain be used to alter cancer pain management behaviours by patients and professionals? A systematic literature review.

Review Question

Can patient-reported measurements of pain be used to improve cancer pain management behaviours by patients or health care professionals and what is the content of these interventions?

Objectives

- To undertake a systematic literature review of all published trials which have utilised patient reported pain measurements in order to improve pain management behaviours by patients or health care professionals.
- To establish whether patient reported pain measurements can be utilised to improve pain outcomes.
- To describe the interventions which have utilised patient reported measurements of pain to alter pain management behaviours.

Searches

Databases to be searched: Medline (1946 to present), EMBASE (1974 to present), and CINAHL.

The search strategy will combine three facets of terms:

1. Cancer pain
2. Self-report and measurement
3. Behavioural change relating to pain management

A manual search of reference lists from included studies will be undertaken, and the author's personal libraries will be searched for relevant papers. Three recent topical literature reviews will be assessed for relevant studies.[1-3]

Types of Study to be Included

Included studies will be randomised controlled trials and controlled clinical trials which utilise patient reported measurements of pain in order to improve cancer pain management behaviour.

Included:

Studies which include adult patients aged 18 years and over.

Studies which include patients with any type of active cancer, including all primary sites, grades, stages, and prognoses.

Studies which include patients who have pain at enrolment, or are at risk of pain arising directly from cancer or cancer treatments during the study.

Intervention studies in which the intervention includes the systematic collection of patient reports of cancer related pain.

Studies in which pain measurements have been collected alone or in combination with other patient-reported symptoms.

Randomised controlled trials and controlled trials.

Excluded

Studies of non-cancer pain.

Studies of cancer survivors who no longer have active disease.

Studies in which pain has been assessed only as part of a general quality of life assessment, for example the European Organization for Research and Treatment of Cancer (EORTC) Quality of Life Questionnaire, or as part of a general symptom distress score will be excluded.

Studies which include individuals who are less than 18 years of age.

Conference proceeding and academic theses.

Non-English language papers.

Condition or domain being studied

Cancer pain.

Cancer incidence and prevalence rates are rising in the UK and pain is the most frequent complication of cancer. The focus in cancer pain management is shifting from traditional physician generated summaries of patient's symptoms to routine use of patient generated measurements to inform clinical practice and optimal cancer pain management. This systematic review will synthesise current knowledge about how patient reported pain and analgesic adherence measures have been used to influence pain management behaviour by patients and professionals.

Participants/ population

Individuals with mixed cancer types and cancer-related pain who have generated self-reports of their pain.

Intervention(s), exposure(s)

Utilisation of patient reported pain measurements to alter pain management behaviour.

Comparator(s)/ control

We will consider any comparisons reported by appropriately designed studies which meet the inclusion and exclusion criteria.

Context/ Setting

All settings will be considered including inpatient, outpatient, and community settings.

Outcome(s)

Primary outcomes

- All pain outcome measurements.

Secondary outcomes

- Communication between patients and health care professionals, however measured.
- Pain assessment and reporting, however measured.
- Healthcare utilisation
- Adherence to the monitoring intervention
- Patient or health care professional satisfaction with the intervention

Data extraction (Selection and coding)

Titles and abstracts will be screened independently by two reviewers. Full text will be gained for any title or abstract deemed relevant by either reviewer. Full text will be screened independently by two reviewers and any disagreements will be resolved by discussion with a third reviewer if necessary.

The following data will be extracted from each study:

- First author
- Title
- Journal and year of publication
- Cancer type(s) included
- Study setting
- Method of recruitment
- Description of intervention, based upon the description given by the original authors
- Method of randomisation, sequence generation, and allocation concealment
- Blinding of participants, personnel, or outcome assessors
- Study numbers (at recruitment, eligibility screening, randomisation and follow-up, by intervention group)
- Details of power calculation

- Nature of control/ comparator group
- Nature of outcome measures
- Results (narrative description)
- Incomplete outcome data

Risk of bias assessment (quality assessment)

The Cochrane collaboration's risk of bias tool will be used to assess risk of bias in randomised trials.

Strategy for data synthesis

It is likely that a number of heterogeneous patient-reported pain measures will have been used to improve pain management behaviour. Outcome measures are also likely to be variable. A narrative synthesis will be performed, describing the nature of the interventions; the patient reported measurements collected, and the results of these interventions.

Analysis of subgroups or subsets

None planned.

Dissemination plans

Peer reviewed journal publication.
Doctoral research thesis.

Contact details for further information

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References

1. Chen J, Ou L, Hollis SJ. A systematic review of the impact of routine collection of patient reported outcome measures on patients, providers and health organisations in an oncologic setting. *BMC Health Serv Res* 2013;13:211-6963-13-211.
2. Kotronoulas G, Kearney N, Maguire R, et al. What is the value of the routine use of patient-reported outcome measures toward improvement of patient outcomes, processes of care, and health service outcomes in cancer care? A systematic review of controlled trials. *J Clin Oncol* 2014.10;32:1480-1501.
3. Allsop MJ, Taylor S, Mulvey MR, Bennett MI, Bewick BM. Information and communication technology for managing pain in palliative care: a review of the literature. *BMJ Support Palliat Care* 2014 Mar 11.