Holistic Needs Assessment in Brain Cancer Patients: A Systematic Review of Available Tools

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Introduction and Aim

Holistic Needs Assessment (HNA) is a widely used in cancer patients to determine supportive care needs

- Existing approaches to HNA includes:
  - generic HNA tools
  - cancer specific HNA tools
  - symptom assessment tools combined with problems checklists

- Brain cancer has a unique symptom profile which limits the usability of generic cancer HNA tools

- The aim of this study was to identify brain specific patient reported outcome measures and investigate the potential of these for HNA through:
  - assessing the psychometric properties
  - assessing usability as an HNA tool

Methods

- We searched four databases; Medline, CINAHL, BNI and Psychinfo
- We sought studies which reported the development of tools developed for use in a clinical setting in brain cancer patients, which assessed more than one domain of need.
- Inclusion and exclusion criteria - no date limit, published in English
- After review, eight studies which reported the development of four tools fulfilled our inclusion criteria
- COSMIN criteria, which have been developed through consultation with 57 experts, were used to assess the psychometric properties of the tools

Search Strategy Flow Chart

Results

This review reported the development of four tools.

Two symptom assessment tools
- MD Anderson Symptom Inventory – Brain Tumor Module (MDASI-BT)
- National Comprehensive Cancer Network/Functional Assessment of Cancer Therapy-Brain Symptom Index (NFbrSI-24)

Two HNA tools
- The Supportive Care Needs Survey 34 plus brain subscale (SCNS34-BS)
- Brain Patient Concern Inventory (PCI)
- MDASI-BT demonstrated evidence of good psychometric properties and the NFbrSI-24 fair psychometric properties but both would need further development to be used in HNA
- Brain-PCI and SCNS34-BS lacked evidence of psychometric testing with the Brain-PCI scoring better on HNA criteria

Conclusion

While some progress has been made in the development of tools, the results indicate that no tools are adequate. Options for development include:

- additional psychometric testing for the Brain PCI
- development of a problem checklist in conjunction with the MDASI-BT