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Palliative Assessment Tool - computerized - PAT-C

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Background

- Palliative care patients have various subjective symptoms: often more than five at the time
- We want to assess the maximum of symptoms and minimize the burden of the patients
- Little consistency on how to measure subjective symptoms make comparisons difficult
- An international tool for symptom assessment will advance clinical care and research
- Hand-held bedside computer technology and item response theory (IRT) might facilitate this

International collaboration

The EAPC Research Network expert group: **Carl Johan Fürst, Franco De Conno, Philippe Poulain, Augusto Caraceni, Lukas Radbruch, Geoffrey Hanks**

Item response theory (IRT) and Computer adaptive testing (CAT)

IRT is a mathematical model for item calibration
A calibrated item pool allows for the prediction of answers to items not even asked
This yields individually tailored questionnaires with better sensitivity and precision
A computer is programmed to select and present the most appropriate items on a touch screen monitor
The score will be calculated and presented immediately

A systematic approach

I. Determination of the content of the measure within each symptom area

II. Generation of specific item pools, with individual research protocols

Methodology

I. Literature searches, interviews with health care workers, expert panel and patients defining relevant issues for the specific symptom area

II. Operationalization of these issues

III. Pilot testing of the preliminary set of items/dimensions followed by interviews to define problematic areas/issues

IV. When the preliminary version is approved by health care workers and the expert panel, it will be field tested in an international study

Overall PAT-C aims

The overall objective is to develop and field test a dynamic, international and computer-based tool for symptom assessment in palliative care:

- simple enough to be used frequently with high compliance
- comprehensive enough to gather the essential information in a standardized manner

PAT-C Pain module — Jacob Hølen

More than 70% of the palliative care patients report pain Pain assessment is crucial for pain management

Limitations with today's tools:

- Ceiling effects
- Missing data/missing items
- Burdensome to use for the patient
- Burdensome to calculate the score
- Difficult to interpret the score
- Lack of a standard to allow for meta-analyses
- PAT-C pain will be a multidimensional self-report tool. IRT and CAT can reduce the listed limitations

PAT-C Cognitive function module — Marianne Jensen Hjermstad

Loss of cognitive functions is frequent in palliative care

- Impact on quality of life (QOL), informed consent, decision making, treatment compliance

Delirium is prevalent in palliative care

- 28% to 52%, although overlooked, misdiagnosed
- Frequently untreated, but potentially reversible
- Improvement in diagnostics seems warranted

Valid and reliable assessment of cognitive function is of great relevance for practice and research in palliative care

PAT-C Physical function module — Marit Jordhøy

All palliative care patients experience deterioration in physical function

- reflects disease progression and symptom control
- impacts QOL, and is basic for treatment planning, incl. rehabilitation, and organization of care
- given little attention in assessment tools developed for palliative care, and methods from other setting shows considerable floor effect

A valid and reliable assessment of physical function is strongly needed for practice and research in palliative care