

Pain prevalence and management in neurologic and neurosurgical inpatients – the PAINN Study

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Abstract

Background: Pain prevalence for specific neurological/neurosurgical groups has previously been estimated between 25% - 84% (Cragg et al 2018), but data is limited. Neurological and neurosurgical patients may have problems with communication and cognition, which can interfere with pain assessment. This project proposes several sub-studies to investigate the prevalence of acute pain in neurological and neurosurgical inpatient units, barriers and facilitators for pain assessment and management, and an educative intervention to health care professionals to improve pain management.

Aims: 1) to identify pain prevalence, intensity, and interference among neurologic and neurosurgical inpatients in a Danish highly specialized neurologic center (Study 1); 2) to illuminate healthcare professional's current knowledge and practice and identify barriers and enablers of good pain practice (Study 2); 3) to enhance healthcare teams' skills to assess and manage pain of neurologic and neurosurgical inpatients in a Danish highly specialized neurologic center after a pedagogical intervention (Study 3 + Study 4); 4) To evaluate the benefit of an educational pain intervention and illuminate active mechanisms influencing the outcomes of the intervention (Study 5).

Methods: This project is composed by both quantitative and qualitative data and consists of five studies: 1) a cross-sectional investigation to identify pain prevalence, intensity and interference in neurologic and neurosurgical adult inpatients; 2) focus group study with healthcare professionals to explore reflections on specific ward prevalence and on barriers and facilitators for praxis for good pain control in each department. Study 1 and 2 will inform the development of the educational pain intervention used in study 3; 3) a quasi-experimental study (before and after) to test an educational intervention to improve healthcare teams' skills to assess and manage pain in neurologic and neurosurgical adult inpatients; 4) a follow up focus group interview study with healthcare professionals will be conducted to evaluate the intervention and discuss local implementation possibilities; 5) a convergent mixed-methods study (Creswell, 2015; Creswell & Plano Clark, 2011) merging results from a quantitative (study 3) and a qualitative (study 4) to evaluate the benefits of the intervention.

Current status: a pilot for Study 1 will be conducted at Respirationscenter Øst in Oct-Dec 2023.