

# Postoperative pain management in planned lumbar spine surgery

## Implementing structural changes in a complex health care setting

### Akademisk avhandling

Som för avläggande av medicine doktorexamen vid Sahlgrenska akademien, Göteborgs universitet kommer att offentligen försvaras i R-husets Aula, Sahlgrenska Universitetssjukhuset Mölndal, Göteborgsvägen 31

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av **Eva Angelini**, leg. sjuksköterska

Fakultetsopponent:

**Professor Boel Andersson Gäre**

Jönköpings universitet, Sverige

### Avhandlingen baseras på följande delarbeten

- I. Angelini, E., Wijk, H., Brisby, H., Baranto, A. (2018). Patients' experiences of pain have an impact on their pain management attitudes and strategies. *Pain Management Nursing*, 19(5), 464-473.
- II. Angelini, E., Baranto, A., Brisby, H., Wijk, H. (2020). Healthcare practitioners' experiences of postoperative pain management in lumbar spine surgery care—A qualitative study. *Journal of Clinical Nursing*, 29(9-10), 1662-1672.
- III. Angelini, E., Wolf, A., Wijk, H., Brisby, H., Baranto, A. The impact of a person-centred pain management intervention on resistance to change and organizational culture: A quantitative study in an orthopaedic surgery ward. [submitted]
- IV. Angelini, E., Wolf, A., Wijk, H., Brisby, H., Baranto, A. The impact of a person-centred postoperative pain management intervention on pain intensity, patient participation and satisfaction: A multi-method study in an orthopaedic surgery ward. [manuscript]

**SAHLGRENSKA AKADEMIN**  
**INSTITUTIONEN FÖR KLINISKA VETENSKAPER**



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## Implementing structural changes in a complex health care setting

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### **Abstract**

Poorly managed postoperative pain continues to cause suffering and prolong hospital care. Health care is currently shifting toward a more person-centred care (PCC). Organizations in which change is to be implemented should be explored since resistance to change and organizational culture are essential factors to consider in change management in health care settings. There is a lack of studies providing information on the impact of implementation of interventions in the challenging field of postoperative pain management in a complex health care setting.

The overall aim of this thesis was to design and evaluate a change management intervention for postoperative pain and pain management for lumbar spine surgery patients. Studies I and II were interview studies of patients and health care practitioners (HCP) to understand their underlying attitudes and strategies with regard to postoperative pain management in order to enhance knowledge of the patient-HCP relationship, but also to inform and evaluate a change management intervention in that setting. Data analysis took the form of latent content analysis and thematic analysis. Studies III and IV were based on an intervention whereby PCC structures were implemented in the unit, and where questionnaire, interviews, observations and medical journal review were analysed.

Studies I and II demonstrate that the know-how, capability and vulnerability of both patients and HCPs comprise the basis for the patient-HCP relationship in a complex setting with the many-sided subject of postoperative pain. Studies III and IV affirm the intricacies of healthcare organizations and the intervention resulted in an essentially neutral result regarding patient-reported outcome measures (PROM), aside from patient participation in pain management which decreased during the intervention. Moreover, while the organization initially presented agreeable prerequisite characteristics for change, during the implantation of the intervention the organization came under pressure due to the unrelated complete relocation of the unit. The impact of organizational strain, the partial implementation of person-centred care and lack of fidelity to the intervention are the most likely factors to explain the findings of decreased patient participation. This suggests that PCC needs to be implemented completely to achieve its potential.

**Key words:** lumbar spine surgery, postoperative pain management, health care organization, organizational culture, resistance to change, person-centred care, implementation science

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