

Complementary and Alternative Therapies in Surgical Care

Akademisk avhandling

för avläggande av medicine doktorsexamen vid Sahlgrenska akademien,
Göteborgs Universitet

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av

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Avhandlingen baseras på följande delarbeten:

- I. Bjerså, K. Forsberg, A. Fagevik Olsén, M. Perceptions of complementary therapies among Swedish registered professions in surgical care. *Complementary Therapies in Clinical Practice* 2011;17:44-9.
- II. Bjerså, K. Stener Victorin, E. Fagevik Olsén, M. Knowledge about complementary, alternative and integrative medicine (CAM) among registered health care providers in Swedish surgical care: a national survey among university hospitals. *BMC Complementary and Alternative Medicine* 2012;12:42.
- III. Bjerså, K. Andersson, T. Stener Victorin, E. Hyltander A. Fagevik Olsén, M. High frequency TENS for pain relief in postoperative transition from epidural to general analgesia after pancreatic resection. Submitted.
- IV. Bjerså, K. Sachs, C. Hyltander A. Fagevik Olsén, M. Osteopathic intervention for chronic pain, remaining thoracic stiffness and breathing impairment after thoracoabdominal oesophagus resection: A single subject design study. Accepted for publication in *International Journal of Osteopathic Medicine* 2012.



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ABSTRACT

International and national use of complementary and alternative medicine (CAM) is high in the general population and among patients. Health care professions level of knowledge about CAM is low, but an interest in receiving education about this field has been observed. Concerning surgical care, previous studies indicate a wide range of CAM use among patients, but the level of knowledge among health care professions is poorly investigated, both internationally and in Sweden. Concerning CAM therapies in sign and symptom management in the surgical care, transcutaneous electric nerve stimulation (TENS) have been used with diverse effectiveness and osteopathic medicine poorly investigated in this context.

The overall objective of this thesis was to investigate CAM in the surgical context with focus on health care professions perceptions and understanding, and therapy usability in symptom management in clinical settings.

Both inductive (paper I; semi structured interviews, n=16) and deductive (paper II; questionnaire, n=737) methods were used to investigate perceptions and understanding of CAM among Swedish health care professions in surgical care. TENS as a pain relieving complement during transition from epidural analgesia (EDA) to general analgesia after major abdominal surgery was investigate with a randomized controlled trial design (paper III; n=20). Osteopathic intervention in management of chronic signs and symptoms after thoracotomy was investigated with single subject research design (paper IV; n=8).

The results reveal that surgical health care professions understand and perceived CAM as a wide range of therapies, remedies and system. Their self valued level of knowledge was low, both concerning CAM and CAM research, but a desire to gain knowledge about CAM was stated. A majority of the participant would consider learning a CAM therapy. Dialog about and referral to CAM happened, but in limited extent. Concerning therapy usability, TENS was not found to significantly relive pain, promote recovery or reduce analgesia consumption. In addition, comments from nurses and patients indicated that TENS treatment obstructed the postoperative care. Significant improvement was observed with osteopathic intervention towards stiffness and benefits towards pain, but not in breathing.

The comprehensive conclusion of the thesis is that Swedish health care professions recognized the concept CAM and some of its therapies, but their knowledge was in general low. Concerning therapy usability and effectiveness of CAM in surgical care, the context is essential; TENS after major abdominal surgery in EDA elimination is questionable concerning pain and clinical application, osteopathy may be beneficial in management of chronic signs and symptoms after thoracotomy.

Keywords: Complementary Medicine, Alternative Medicine, Integrative Care, CAM, Surgery, Surgical Care, Transcutaneous Electric Nerve Stimulation, Osteopathic Medicine, Perceptions, Knowledge, Epidural Analgesia, Post-thoracic symptoms.

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