

Aspects of teamwork and intraoperative factors in the operating room

Akademisk avhandling

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Avhandlingen baseras på följande delarbeten

- I. The surgical teams' perception of the effects of a routine intraoperative pause.**
Erestam S, Angenete E, Derwinger K.
World J Surg. 2016 Dec;40(12):2875-2880.
- II. Changes in safety climate and teamwork in the operating room after implementation of a revised WHO checklist: a prospective interventional study.**
Erestam S, Haglind E, Bock D, Andersson AE, Angenete E.
Patient Saf Surg. 2017 Jan 31;11:4.
- III. Associations between intraoperative factors and surgeons' self-assessed operative satisfaction**
Erestam S, Bock D, Erichsen Andersson A, Bjartell A, Carlsson S, Stinesen Kollberg K, Sjöberg D, Steineck G, Stranne J, Thorsteinsdóttir T, Tyriztis S, Wallerstedt Lantz A, Wiklund P, Angenete E, Haglind E.
Surg Endosc. 2019 Mar 18. doi: 10.1007/s00464-019-06731-z.
- IV. Stress assessment among surgeons during simulated operations with or without an intraoperative pause – a randomized controlled trial**
Erestam S, Bock, D, Erichsen Andersson A, Haglind E, Park J, Angenete E.
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Aspects of teamwork and intraoperative factors in the operating room

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ABSTRACT

The work in high-risk environments like an operating room is complex. The operating team consist of many professions with different tasks cooperating towards a common goal, the performance of safe surgery. The operating teams' technical and non-technical skills may affect the surgical outcome. The aim of this thesis was to explore some of the factors that may influence safe surgery.

Study I evaluated the operating team's perceptions of an implemented intraoperative pause routine. The operating team felt positive about the implementation, many perceived that communication and teamwork was enhanced and some of the surgeons stated that a pause made them feel refreshed and sometimes contributed to changes of surgical strategy.

Study II was an interventional study to evaluate teamwork and safety climate in the operating room after an intervention with education on safety climate and teamwork, and the introduction of a revised WHO Surgical Safety Checklist. We found deficiencies in communication and teamwork in the operating team. The intervention did not change teamwork or safety climate.

Study III evaluated surgeons' self-assessed satisfaction with the performance of prostatectomies in a large clinical trial. There was a strong correlation between surgeons' satisfaction and intraoperative difficulties or complications, which became stronger with every additional difficulty or complication.

Study IV was a randomized controlled trial to assess if surgeons' stress levels were affected by an intraoperative pause during simulated operations. There were no significant differences in stress levels but the surgeons' perception of the intraoperative pause was positive.

In conclusion, to study non-technical skills in the operating team is complex as surgical outcome and patient safety are multi-factorial. Many among the operating team members believed that improved teamwork and communication could benefit patient safety. Thus, one way to enhance patient safety could be to introduce intraoperative pauses as they were perceived to be beneficial for teamwork and communication.

Keywords: operating room, non-technical skills, teamwork, intraoperative stress