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Making operating room nurses' non-technical skills visible

Co-authors:

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PhD Thesis:
A mixed-method based instrument development

Sub-study 1:

Delphi technique, 3 rounds
OR nurses > 2 years experience
N=106, 96, 81

Paper 1:

*A Delphi study
identifying operating
room nurses' non-
technical skills*

Paper 2:

*Expanding the non-
technical skills
vocabulary of operating
room nurses: A
qualitative study*

Sub-study 2:

Development and
content validation (CVI)
OR nurses/teachers/researchers
N = 25

Paper 3:

*Bilingual content
validation
(In progress)*

Paper 2: Expanding the non-technical skills vocabulary of operating room nurses: a qualitative study

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Aim:	To explore OR nurses NTS outside CRM
Design:	Delphi technique
Data:	Qualitative data from round 2 of Delphi survey (n=96)
Data analysis:	Inductive thematic analysis

Non-technical skills

Non-technical skills are ‘the cognitive, social, and personal recourse skills that complement technical skills and contribute to safe and efficient task performance.’

(Flin, O'Connor, & Crichton, 2008)



Photo: Elisabeth Tønnessen

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Crew resource management

- ▶ Situation awareness
- ▶ Decision making
- ▶ Communication
- ▶ Teamwork
- ▶ Leadership
- ▶ Managing stress
- ▶ Managing fatigue

(Flin, O'Connor, & Crichton, 2008)



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Background

Traditional adaptation of CRM



Alternative approach



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Method: Delphi technique

- ▶ Qualitative narratives from Round 2
- ▶ 96 operating room nurses
- ▶ 35000 words

(Keeney et al., 2011)

Inductive thematic analysis:

Professionalism

Ethical competence

Engaging in
respectful care and
practice

Being the patients'
guardian and
advocate in the OR

Professional accountability

Displaying tailored
professional
competence

Displaying
autonomy,
confidence, and
courage

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Results: Ethical competence

- Engaging in respectful care and practice
- Being the patients' guardian and advocate in the OR



Discussions: Ethical competence as NTS

- What is caring in operating room nursing?
- Caring when it is invisible for the patient
- Value conflicts in the OR
- The last line of defence in the OR



(Barnard and Sandelowski, 2001, Bull and FitzGerald, 2006, Nordström and Wihlborg, 2019, Voight, 2009, Yang et al., 2012)

Results: Professional accountability

- Displaying tailored professional competence
- Displaying autonomy, confidence, and courage



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Discussions: Professional accountability

- Sense of responsibility
- Verbalising OR nursing
- Making OR nursing visible

(Allen, 2015, Eriksson et al., 2020, Levesque et al., 2022, Nordström and Wihlborg, 2019)



Photo: Pixabay.com



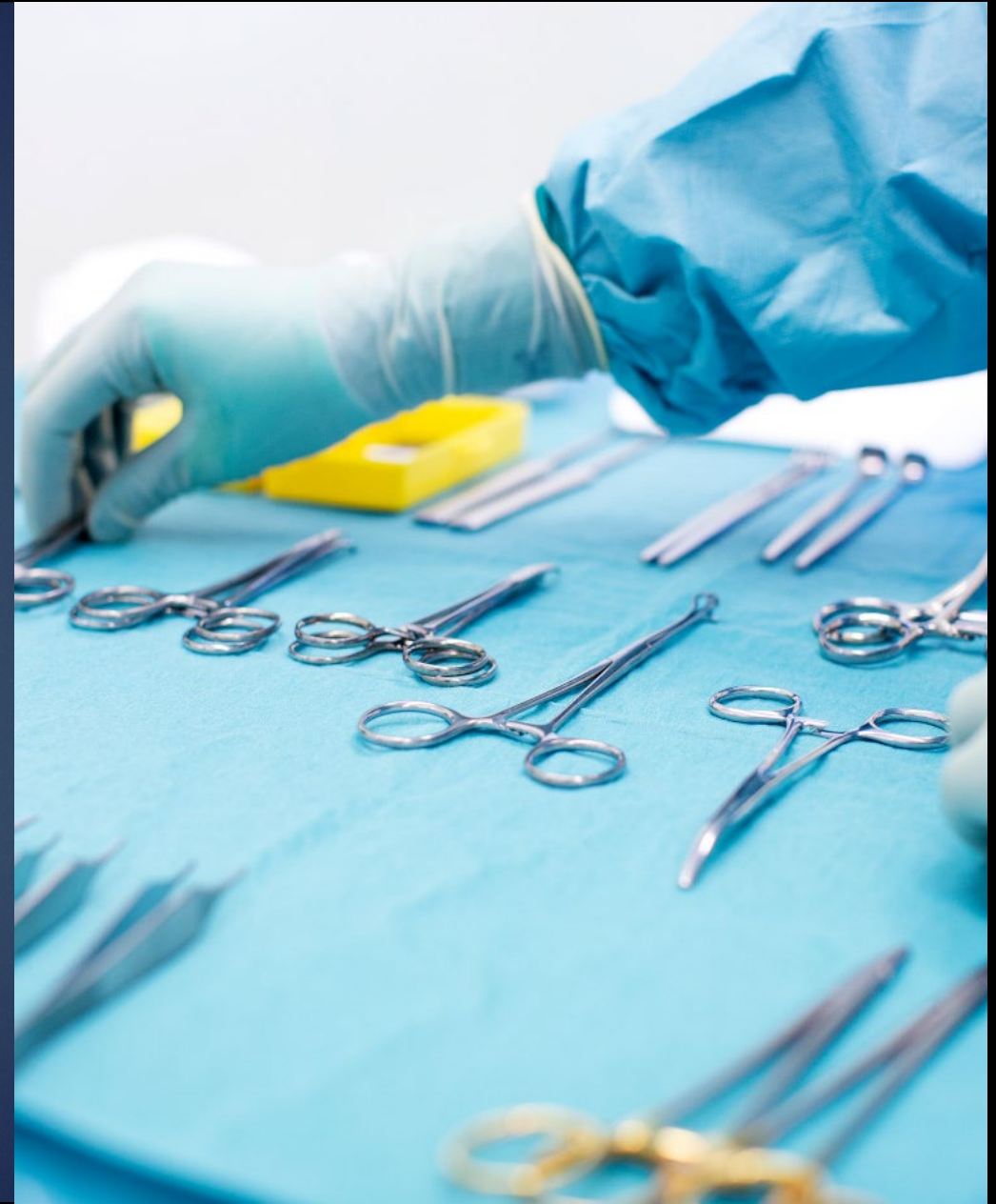
Conclusions

- ▶ A new approach to adapting crew resource management to health care
- ▶ New non-technical skills have been identified
- ▶ Informs the development of a new behavioural marker system for operating room nurses non-technical skills

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” Thank you for your attention

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