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

<table>
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<th>Aim:</th>
<th>To explore OR nurses NTS outside CRM</th>
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<td>Design:</td>
<td>Delphi technique</td>
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<td>Data:</td>
<td>Qualitative data from round 2 of Delphi survey (n=96)</td>
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<td>Data analysis:</td>
<td>Inductive thematic analysis</td>
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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)
Crew resource management

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

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

Traditional adaptation of CRM

Alternative approach

Pilot

ORN

Pilot

ORN
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
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

Results:
Professional accountability

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


Thank you for your attention