

# The methodology behind the research papers (& the PhD)

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The two papers I will present:

Høyland, S., Aase, K. & Hollund, J. G.  
(2010). "Understanding the system in  
relation to safe medical work practices"

+

Høyland, S., Aase, K. & Hollund, J. G.  
(2010). "Exploring varieties of knowledge  
in safe medical work practices"

# The study & papers

- The study is part of an ethnographic PhD- work concerning the influence of knowledge and system factors on interdisciplinary operations and safe work practices in a norwegian hospital section and setting
- The knowledge factors include the relations between team skills & patient outcome and expertise & distributed responsibility, and the awareness of individuals (using experience to anticipate teammate reactions) ← *Paper 1*
- The system factors include the local surroundings (staff & supply shortage, distractions, equipment difficulties, etc) & the outer structures (OR-schedule & size, up-to-date policies and procedures, high workloads, conflicting/competing organizational demands, etc) ← *Paper 2*

# The focus of the presentation

*The themes:* Patient safety + an "across countries" - perspective

+ *The setting:* The workshop/roundtable discussions

+ *The question:* How to cover both papers + trigger discussions?

= *The solution:* To make the methodology behind the papers the focus of the presentation

# Why an emphasis on methodology in the papers?

- *It started with my personal experiences* that suggest the way qualitative research is conducted and presented has a direct impact on the receptiveness among managers and journals
- *Based on this reflection*, I created a research protocol that replicates and builds on existing methodological elements (Smith, Goodwin, et al 2003). This ensures structure and transparency to textual presentations (Miles & Huberman 1994)

# The elements of the research protocol

*The research protocol covers:*

- A clarification of the overall methodology
- The particular practical steps taken during observations, interviews and conversations
- The concern for field-blindness, by detailing the "on and off in the field" system
- The analysis process, emphasizing the triangulation and identification of trends/episodes

# Concerning presentation & balancing

*The result presentations* in both papers emphasize:

- Trends in the data material, supporting transparent descriptions
  - Episodes in the data material, supporting detailed rich descriptions
- = Overall, the focus on trends and episodes contribute to balance the presentations

# The balancing, in practice - Example A

- *(4.1) Trend 1 – Various combinations of system factors contribute to disrupt the “operational flow”, but the particular operation continues and completes normally...*
- *(4.1.1) Episode 1 – “The operation schedule triggers discussions”  
.... followed by rich descriptions....*
- *(4.1.2) Episode 2 – “Lack of equipment, inexperience... and mobile phones”  
.... followed by rich descriptions....*
- *(4.1.3) Episode 3 – “X-ray trouble”  
.... followed by rich descriptions....*
- *(4.1.4) Episode 4 – “Missing the check points”  
.... followed by rich descriptions....*

# The balancing, in practice - Example B

- (4.1) *Trend 1 – The processing of multiple sources of information – a requisite in decision making*
- (4.1.1) *Episode 1 – “Problem solving kicks in”  
.... followed by rich descriptions....*
- (4.1.2) *Episode 2 – “The operator’s decision making”  
.... followed by rich descriptions....*
- (4.1.3) *Episode 3 – “Nothing is left to chance...”  
.... followed by rich descriptions....*

## The balancing, in practice - Example C

- (4.2) *Trend 2 – Various system factors compensate for the vulnerabilities and disruptions that arise during operations*
- (4.2.1) *Conversation 1 – “On becoming one section”  
.... followed by rich descriptions....*
- (4.2.2) *Conversation 2 – “More on becoming one section – specialization and staffing”  
.... followed by rich descriptions....*

# As a final methodological step...

- ...the main findings in the two papers were linked to existing health care safety research and findings, during discussions, to encourage future "bridging" of previous and present research efforts ...
- For example, Patel et al (2000) identify the ability a team demonstrates in distributing responsibility for a particular patient problem according to expertise. This ability allows the team to process large amounts of patient information. The finding by Patel et al (2000) can be compared to our findings in the "knowledge-paper", and specifically the different ways individuals demonstrate in handling multiple sources of information, before reaching a particular decision (trend 1, episodes 1-3).
- In another example, from the "system-paper", our findings support the findings in Catchpole et al (2007) related to factors in the local surroundings, such as distracting mobile phones and difficulty with equipment. In addition, we find that the mood of team members plays a role. In terms of outer structural factors, however, our findings do not support the relevance of conflicting demands on team members from others parts of the hospital in Catchpole et al (2007). Instead, relevant outers system factors in our findings include (1) changes in the operating schedules, (2) lack of planning in preparing operational equipment, (3) less ideal ad-hoc team compositions, (4) delays in equipment arrivals, and (5) lapses in individual control checks at different organizational levels.

# Summary & thoughts (for discussion?)

- I build on an existing methodology (Smith, Goodwin, et al 2003) to make my findings transparent – in practice I strive for balance between trends (“overall picture”) and episodes (details/richness). I also relate my findings to previous findings, adding to the transparency concern
- My angle of attack is supported by health care literature that points to weaknesses in the focus on research and development of scientifically grounded models that can integrate existing findings (Manser, 2009)
- Thus the question becomes: **should more efforts be put into the continuation of findings and methods, also within qualitative research?**

Thank you kindly for Your attention!

**Stay Safe!**

