Adherence to acute care national protocols: influencing factors explored

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Background

Paramedics
- Nurses at EMT level 4
- Solistic function without consultation of physician
  - Drug administration
  - Intubation

EMS physician
- Medical end-responsibility
- Not involved on site

Emergency nurses
- Highly trained nurses

Emergency physician
- Medical end-responsibility
Adherence

6%-96% [1-6]

38%-80% [7-9]
Research question

Which factors influence paramedics’ and emergency nurses’ adherence to the acute care national protocols?
Methods

Design
• Qualitative
• Semi-structured interviews

Sample (convenience and snowball)
• Paramedics (n=5)
• Emergency nurses (n=5)
• EMS physicians (n=5)
• Emergency physicians (n=5)

Topiclist [10]
• individual
• group
• organisational
• social
• protocol characteristics
## Methods

### Data-analysis [12]
- Transcriptions
- Segments
- Codes
- Categories

### Trustworthiness [12]
- Data saturation
- Triangulation
- Peer review
- Member check
### Results

#### Emergency department

<table>
<thead>
<tr>
<th>Individual</th>
<th>Organisational</th>
</tr>
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<tbody>
<tr>
<td>• Awareness (-)</td>
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<tr>
<td>• Preference of own hospital protocols (-)</td>
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<table>
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<tr>
<th>Social</th>
<th>Protocol</th>
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<tbody>
<tr>
<td>• Interest emergency physician (+/-)</td>
<td>• Integration ATLS (+)</td>
</tr>
<tr>
<td></td>
<td>• Content too general (-)</td>
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(-) barrier  (+) facilitator

European federation of Critical Care Nursing associations (EfCCNa) - Copenhagen
## Results

### Emergency department

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**Emergency Nurse**

“Most colleagues are working on the basis of their experience and don’t look at a protocol”
Results

Emergency department

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"School never mentioned that there was such thing as a national protocol"
Results

Emergency department

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Emergency Physician

“It’s important to know the content of the protocols colleagues work with”
### Results

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<td>• Integration ATLS (+)</td>
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<tr>
<td>(-) barrier</td>
<td>• Congruity with daily practice</td>
</tr>
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*HAN University of Applied Sciences*
Results

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Ambulance

Individual Organisational

• Individual experience (+)

• Justification of treatment (+/-)

• Embedment in training and education (+)

• Control of usage and adherence (-)

• Input in development (-)

Social Protocol

• Situation of providing care (-)

• Integration ATLS (+)

• Congruity with daily practice (-)

Paramedic

“Physicians who don’t have close contact with daily practice decide what I can and can’t do”

(-) barrier  (+) facilitator
Results

EMS physician

“Working with the ATLS is an essential condition for functioning as paramedic”

(+) facilitator

(-) barrier

• Congruity with daily practice (-)
**Results**

**Ambulance**

**Paramedic**

“And then you look and you start, but you keep thinking it isn’t right, the dosage prescribed isn’t present on the ambulance so I can’t give it”

- **(-) barrier**
- **(+) facilitator**

**Social Protocol**

- Situation of providing care (-)
- Integration ATLS (+)
  - Congruity with daily practice (-)

**Organisational**

- Individual experience (+)
- Justification of treatment (+/-)
- Embedment in training and education (+)
- Control of usage and adherence (-)
- Input in development (-)

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Consideration/Limitations

- Selection bias
- Transferability
- Local vs national protocols
Conclusion

- Influencing factors differ per setting
- Depending on setting a factor can be a barrier or facilitator
- Implementation strategies should be tailored per setting
- Results can be used for:
  - Adjustment protocols
  - Tailoring implementation strategies
  - Quantification of influencing factors
Publication is submitted

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