The EfCCNa Delphi study: intensive care nursing research priorities

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Aim & methods

• To identify, prioritize, and reach consensus on intensive care nursing research priorities in Europe (funded by EfCCNa)

• Three round Delphi technique using:
  – Expert panel
  – online questionnaires
Expert panel

• 6 experts from each association within EfCCNa
  – 2 involved within the national board of their association
  – 2 clinical experts
  – 2 involved in critical care research

• Inclusion criteria
  – deemed an expert by their national association,
  – have email and internet access.

• Exclusion criteria
  – paediatric and/or neonatal critical care
What do you consider to be the top research priorities for nursing in the care of adult intensive care patients?

- minimum of 3 to maximum 5 topics.

Results

Participants = 110
Suggestions = 420
Categorised into 52 items in 12 domains for round 2

Round 1 - questionnaire by email
## Round 2 - online electronic questionnaire

### Research Topics

Look at each topic, and then rank every topic according to its importance from 1 to 12 (1 = most important - 12 = most unimportant).

Put a '1' in the box beside the topic that you think is **most important**, put a '2' in the box as the second most important, put a '3' in the box as the third most important, and so on until you have ranked all 12 topics. Of course, number **12** is considered as the **most unimportant** topic. Every number, from 1 to 12, should only be used once.

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<th>Topic</th>
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<td>ICU nurse characteristics</td>
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<td>Relating to research/ERP</td>
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**12 domains**
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<tr>
<th>Issues relating to ICU patient’s wellbeing</th>
<th>Not important</th>
<th>Ranked 1 to 6</th>
<th>Extremely important</th>
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<tr>
<td>Patient’s experiences during and after ICU admission</td>
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<td>Psychological outcomes of ICU patients</td>
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<td>Exploration of the extent of, and strategies to reduce anxiety, fear, stress of ICU patients</td>
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<td>Communication strategies to ensure patient’s information</td>
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<td>Strategies to reduce anxiety and stress</td>
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<td>Identify mental health of ICU patients</td>
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<td>Prevalence and treatment for Post-Traumatic Stress Disorders of ICU patients</td>
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<td>Prevalence and prevention of psychosis and delirium of ICU patients</td>
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<td>Pain management and pain assessment</td>
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<td>Effects of sedation management</td>
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<td>Influence of noise on patients in ICU</td>
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<td>Prevalence and prevention of critical incidents in ICU (medicinal errors; adverse events)</td>
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<td>Strategies to optimize nutritional status of the ICU patient</td>
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<td>Effect of complementary therapies</td>
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Round 3

• For each item (ranked 1 to 6) we calculated the mean value in Round 2
• Round 3, same online questionnaire, we added the mean value for each item for the group to see
• We asked them to rank each item again
• 58 responses to round 3 (53% of Round 1)
Characteristics of expert panel

- Female 76%; average age 40 years; ICU experience 15 years

Area of work
Top 10 research priorities

Priorities
1. Interventions to reduce nosocomial infections in ICU
2. Pain management and pain assessment
3. Exploration of the extent of, and strategies to reduce, anxiety, fear, stress of ICU patients
4. Prevalence and prevention of critical incidents in ICU, including medicinal errors; adverse events
5. Impact of ICU nurse to patient ratios on patient outcomes

Mean scores
- 5.61
- 5.57
- 5.43
- 5.41
- 5.40
Top 10 research priorities

6. Outcome measures for sepsis preventions
7. Nursing workload and its impact on patient outcomes
8. Development and use of evidence based protocols on patient outcome
9. Impact of specialized ICU nursing qualifications on patient outcomes
10. Interventions to prevent and decrease Ventilator Associated Pneumonia

Mean scores

- 5.39
- 5.37
- 5.37
- 5.33
- 5.29
Discussion
Dominance of 3 key areas

1. Improving patient safety
   - Infection/sepsis (1, 6, 10)
   - Medication errors (4)

2. Impact of nursing on patient outcomes
   - Workload (5, 7)
   - Qualifications (9)

3. Patient wellbeing
   - Physical – pain (2)
   - Psychological (3)

• Areas 1 and 2 are also high on EU policy agenda. Projects funded by EU Commission include:

• Area 3 focuses on the unique sensitivity of ICU nurses to patient distress
Conclusion

• Only European study showing experts’ consensus on ICU nursing research priorities.

• Results are combined for Europe (not on country level, too small sample for national conclusions).

• Results direct the research agenda of the EfCCNa R&D Committee.
The research team extend a big thank you to the council of representatives for their valued help and cooperation in recruiting the expert panel, assisting with translation, and maintaining the momentum of participation with their experts.