Impact of Prior ICU Experience on ICU Patient Family Members’ Psychological Distress

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Psychological Distress

Well-documented phenomenon across numerous countries (including, but not limited to):

- Brazil, China, Greece, France, Italy, United States

Lifetime prevalence in United States’ general population

- Anxiety: 28.8%
- Depression: 20.8%

During an ICU admission, family members experience:

- Anxiety: 35% to 73%
- Depression: 16% to 56%
- PTSD: 14% to 69%

(Anderson et al., 2008; Azoulay et al., 2005; Bailey et al., 2010; Chiang et al., 2016; Davidson et al., 2012; Fumis & Deheinzelin, 2009; Fumis et al., 2015; Gries et al., 2010; Jones et al., 2004; Kessler et al., 2005; Konstanti et al., 2016; Lautrette et al., 2007; Marutli et al., 2008; Mistráletti et al., 2016; Pochard et al., 2001; Pochard et al., 2005)
Clinical Example of Impact

Inability to understand simple concept: time

Decision makers

Reflection of neurobiology:

- Reduced recall capacity and recognition under stress (Schwabe & Wolf, 2010)
Acute Stress Disorder Symptoms

Development of PTSD documented (Sundararajan, Martin, Rajagopala, & Chapman, 2014)

Upon a relative’s admission to an ICU (Auerbach et al., 2005)

- average ASD score of 44.65;

- an ASD score of 44.93 was criteria for admittance to a PTSD unit
Post Intensive Care Syndrome - Family

Persistent psychological distress experienced by family members of ICU patients (Davidson, Jones, & Bienvenu, 2012).

Characterized by:

• Difficulty coping with ICU experience

• Psychological and social consequences r/t exposure to critical illness

• Anxiety, Depression, PTSD

• Remains for many years (Davidson & Harvey, 2016)
No known research on prior ICU experience & psychological distress in families.

Jamerson et al. (1996) recommended nurses to assess families’ prior ICU experiences.
Research Aim

Determine if current levels of anxiety, depression, and acute stress disorder symptoms differ significantly among family members of ICU patients, depending upon previous ICU experience.

- Part of a larger study investigating ICU family members’ psychological distress.
Methods

Design: prospective, descriptive design


Setting: Medium-sized urban, community medical center in the Southeastern United States

Family members (n = 127) recruited from waiting rooms:
  • MICU
  • CVICU
  • SICU
  • Neuro ICU

IRB approved as expedited review
Instrumentation

- Hospital Anxiety and Depression Scale (HADS)
- Acute Stress Disorder Scale (ASDS)
- The Impact of Events Scale – Revised (IES-R)
- Demographic Questionnaire
## Results - MANOVA

<table>
<thead>
<tr>
<th>Previous ICU Experience (n = 54)</th>
<th>$\Lambda = .92$</th>
<th>$F [4,122] = 2.70$</th>
<th>$p = .034$</th>
<th>Partial $\eta^2$</th>
<th>Observed Power</th>
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<tbody>
<tr>
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<td>.08</td>
<td>.74</td>
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Results

Significant multivariate between-group main effect found for previous ICU experience

- Conducted follow-up univariate ANOVAs

<table>
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<tr>
<th></th>
<th>F (df)</th>
<th>Significance</th>
<th>Partial $\eta^2$</th>
<th>Observed Power</th>
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</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>F(1, 125) = 11.03</td>
<td>$p &lt; .001$</td>
<td>.08</td>
<td>.91</td>
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<tr>
<td>Depression</td>
<td>F(1, 125) = 4.16</td>
<td>$p = .044$</td>
<td>.03</td>
<td>.53</td>
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<tr>
<td>ASD (ASDS)</td>
<td>F(1, 125) = 5.39</td>
<td>$p = .022$</td>
<td>.04</td>
<td>.63</td>
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<tr>
<td>ASD (IES-R)</td>
<td>F(1, 125) = 4.99</td>
<td>$p = .027$</td>
<td>.04</td>
<td>.60</td>
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Implications for Nursing: Prior ICU Experience

Contrary to nursing instinct

Nursing’s seeming disregard of Jameson et al., (1996) recommendation to assess for previous ICU experience

Realize the ICU encounter has enduring implications for family members
Implication for Nursing Science and Practice

ICU RNs should assess for anxiety, depression & ASD symptoms in family members

ICU RNs should assess for prior ICU experience in families of ICU patients

ICU RNs should be aware previous ICU experience may increase anxiety, depression & ASD symptoms

Family members of ICU pts may have difficulty comprehending information

Determine how family wants to be supported
Implications for Interdisciplinary Collaboration

Collaborate with:
- Chaplain services
- Social services
- Counseling services
- Patient advocates

Address how prior ICU experience is impacting current psychological distress

Collaboration encourages families to openly and honestly experiences with other healthcare professionals so as to not burden patient with their feelings of psychological distress

Support groups for families
Recommendations for Future Research

Explore previous ICU experiences

New diagnostic criteria for ASD & PTSD exclude witnessing illness or natural death

Use open visitation hours in ICU instead of closed visiting hours
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Questions?

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