Exploring the safety culture and second victim experiences of Romanian nurses after adverse events

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Background

**Impact on Professionals**
Adverse events can have a profound emotional impact on healthcare professionals, leading to burnout and reduced performance.

**Second Victim Phenomenon**
A second victim has been defined as "a healthcare provider involved in an unanticipated adverse patient event, medical error, and a patient-related injury who becomes victimized in the sense that the provider is traumatized by the event."

**Organizational Support**
Organizational support is crucial to help healthcare professionals move on after adverse events. Immediate support and institutional programs are crucial to facilitate recovery and prevent negative career consequences.
Addressing the Research Gap in Patient Safety in Romania

National Authority for Quality Management in Health
Established in 2015 to enhance patient safety and quality of care in Romania.

National Patient Safety Council
Created in 2021 to train healthcare professionals, encourage safety culture, and conduct research.

Exploring Nurses' Perspectives
This study aimed to explore nurses' perceptions of patient safety, adverse events, and second victims to propose solutions.
Methodology

**Study Overview**
This study examined adverse events in Romanian healthcare, focusing on nurses across all 42 counties.

**Survey Dissemination**
Through the Romanian Order of Nurses, Midwives, and Medical Assistants network.

**Data collection**
Occurred between April and June 2022, with a final sample of 1085 total responses

**Survey Adaptation**
This survey is based on a previous study to assess adverse events in Spanish healthcare professionals.

**Translation Process**
A Romanian version of the survey was created following the World Health Organization guidelines for translation and adaptation.
The questionnaire assessed different aspects:

- Impact of Safety culture on AEs, Professionals' experiences in informing patients about AEs, and common personal- and work-related problems among second victims.

Associations and Comparisons:

- Used statistical tests to analyze associations between department type, gender, age, and AE occurrence.

Department type:

- Participants were divided into three groups based on their department type: medical, surgical, and other specialties.

Predictive Modeling:

- Used logistic regression to analyze patient AE disclosure and second victim emotional problems. Explored demographic factors and safety culture scores as predictors.
Results

1. Diverse Age Range
   The nursing sample spanned ages from 31 to 70, with the majority (67.8%) between 31-50 years old.

2. Predominantly Female
   Female nurses made up 89.2% of the sample, while only 10.5% were male.

3. Experienced Workforce
   The vast majority (92.6%) had over 3 years of professional experience, with a small percentage (4.8% and 2.4%) having 1-3 years or less than 1 year, respectively.

4. Departmental Representation
   The sample was distributed across medical (29.7%), surgical (21.5%), and other (47.4%) departments.

5. Awareness of Near-miss Incidents
   More than half (57.9%) reported witnessing or hearing about near-miss incidents.

6. Awareness of Serious Adverse Events
   Approximately one third (30.8%) were aware of serious adverse events affecting patients.
Patient Safety Culture

1. **Patient safety culture**
   The mean score on the safety culture subscale was 20.59 (SD=2.64, 95% CI=20.39-20.80).

2. **Stronger Safety Culture in Older Nurses**
   Nurses over 50 years old had higher scores on the safety culture subscale.

3. **Effective Incident Reporting in Surgical Departments**
   Surgical departments scored higher on having an anonymous incident reporting system.

4. **Thorough Adverse Event Analysis in Medical Departments**
   Nurses from medical departments had higher agreement on undertaking systematic analysis after serious adverse events.
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<td><strong>5</strong></td>
<td><strong>The annual training plan is effective</strong></td>
<td><strong>6</strong></td>
<td><strong>Organizational failures are more to blame than human error</strong></td>
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<tr>
<td>The annual training plan is effective and there is agreement across all departments.</td>
<td>Organizational failures are often responsible for adverse events in Surgical Departments.</td>
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<td><strong>7</strong></td>
<td><strong>Preventable measures are important</strong></td>
<td><strong>8</strong></td>
<td><strong>Low risk of adverse events perceived by most nurses</strong></td>
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<td>Adverse events can be prevented, and everyone agrees on the importance of taking measures to prevent them.</td>
<td>Most nurses perceived low risk of serious adverse events in the next 12 months, regardless of safety culture or department.</td>
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1. Nurses in surgical departments reported:
   - Highest frequency of near misses, serious adverse events, and emotional impact on professionals
   - Significantly higher incidence of work-related problems due to adverse events

2. Formal patient complaints were significantly higher in "other" departments
   - Many nurses across departments indicated patients may respond negatively to being informed about adverse events, potentially affecting future relationships

3. Nearly 90% of nurses were interested in training on:
   - Coping with adverse event consequences
   - Communicating them to patients, regardless of department

4. Only 12.5% of nurses informed patients about adverse events, and:
   - This was less likely among those with stronger safety culture scores

5. Stronger safety culture was associated with:
   - Lower likelihood of reporting near misses and serious adverse events

6. Nurses with more experience (over 3 years):
   - More likely to report serious adverse events
Second Victim Experience

1 Second Victims
In the past 5 years, nurses in different departments (medical: 20.6%, surgical: 21.0%, other: 23.8%) reported second-victim situations. There were statistically significant differences between the departments (p=0.038).

2 Consequences
Almost 20% of nurses reported second victims needing time off after an adverse event, and 2.3% left the profession entirely. Work-related consequences varied across department categories.

3 Emotional Responses
Nurses commonly experience tiredness (68.5%), guilt (59.2%), anxiety (53.3%), insomnia (53.0%), confusion (52.1%), and pessimism (45.7%) after adverse events. Guilt is more common in medical departments, while insomnia is more prevalent in surgical departments.

4 Patient Safety Culture
Strong patient safety culture reduces negative emotional responses.

5 Professional Consequences
Apologizing to patients, informing them about the event, and fear of damaging their reputation, higher levels of legal and reputation-related fears.

6 Positive Safety Culture
Positive safety culture was linked to improved communication, reduced fear, and increased accountability.
Implications and Recommendations for Improving Patient Safety Culture

1. Impact of Adverse Events on Nurses
   Adverse events have significant emotional and psychological impact on nurses in Romania.
   Comprehensive support systems and regulatory measures are urgently needed within the healthcare sector.

2. Strengths of Patient Safety Culture
   Nurses over 50 have a positive perception of patient safety culture.
   Specific strengths, such as anonymous incident reporting systems and systematic analyses, provide valuable insights for enhancing safety culture across all healthcare settings.

3. Prevalence of Near-Miss Incidents and Adverse Events
   Near-miss incidents and adverse events with potentially serious consequences are widespread, particularly within surgical departments.

4. Emotional and professional consequences experienced by nurses
   Feelings of guilt, anxiety, and insomnia, as well as the risk of leaving the profession, emphasize the need for standardized support systems and targeted interventions to promote the well-being of healthcare workers.
Recommendations for Strengthening Patient Safety Culture

1. **Key Recommendations**
   - Enhance training opportunities
   - Develop robust patient safety policies
   - Establish a legal framework to protect healthcare professionals and foster a blame-free culture

2. **Targeted Training Programs**
   - Prepare staff to respond to complex situations
   - Cultivate a culture of open dialogue with patients

3. **Evidence-based Clinical Practice Guidelines**
   - Develop and implement guidelines to uphold medical standards
   - Ensure patient safety

4. **Legal Framework for Adverse Events and Second Victims**
   - Provide clarity on responsibilities, liabilities, and procedures
   - Offer protection and appropriate support for healthcare professionals
Thank you

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