Nurses as Second Victims of Medication Errors
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Background
- Medication administration is an inherent nursing task, placing nurses at significant risk for experiencing errors.
- A systematic literature review established nurses experience emotional, physical, and psychological distress following medication errors.
- Positions nurses as second victims to the error.
- Often, the second victim seeks support from peers and supervisors, yet there is current understanding whether their distress is mitigated by these means.

Purpose
- To evaluate pediatric oncology direct-care nurses’ experiences with medication errors in order to understand the impact of errors on nurses’ personal/professional selves and whether they have unmet post-event support needs as second victims of medications errors.

Methods
- Descriptive, non-experimental, mixed methods survey instrument:
  - Nine categories of medication error;
  - Nurses’ perceptions of fear, shame, and guilt per error category;
  - Preferred support interventions following error experiences.
- Data analyzed through descriptive and correlational statistics.

Sample demographics
- Oncology department within a Rocky Mountain region pediatric tertiary care facility
- 115 eligible nurses
- 82 surveys distributed, 66 completed survey
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Error events have impacted nurses personally and professionally, as evidenced by:
- 86% of nurses = 8.33 yrs, SD = 6.48 yrs
- 1 yr – 30 yrs (M = 8.33 yrs, SD = 6.48 yrs)
- Department experience
- < 1 yr – 16 yrs (M = 4.38 yrs, SD = 3.47 yrs)

Medication administration is an inherent part of the third victim phenomenon is present in the clinical facility.

Results

<table>
<thead>
<tr>
<th>Medication Error Index(\text{category and definition})</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Circumstances or events that have the capacity to cause error</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>B An error occurred but the error did not reach the patient</td>
<td>6</td>
<td>9%</td>
</tr>
<tr>
<td>C An error occurred that reached the patient but did not cause patient harm</td>
<td>10</td>
<td>15%</td>
</tr>
<tr>
<td>D An error occurred that reached the patient and required monitoring to confirm that it resulted in no harm to the patient and/or required intervention to preclude harm</td>
<td>40</td>
<td>61%</td>
</tr>
<tr>
<td>E An error occurred that may have contributed to or resulted in temporary harm to the patient and required intervention</td>
<td>52</td>
<td>79%</td>
</tr>
<tr>
<td>F An error occurred that may have contributed to or resulted in temporary harm to the patient and required initial or prolonged hospitalization</td>
<td>57</td>
<td>86%</td>
</tr>
<tr>
<td>G An error occurred that may have contributed to or resulted in permanent patient harm</td>
<td>60</td>
<td>91%</td>
</tr>
<tr>
<td>H An error occurred that required intervention necessary to sustain life</td>
<td>63</td>
<td>93%</td>
</tr>
<tr>
<td>I An error occurred that may have contributed to or resulted in the patient’s death</td>
<td>61</td>
<td>92%</td>
</tr>
</tbody>
</table>

Nurses’ perceptions of fear, shame, and guilt
- Effects of fear, shame, and guilt per medication error category on personal/professional self using 10-point Likert scale
- Fear: Category A (M = 6.28, SD = 2.53), Category I (M = 9.24, SD = 2.24)
- Shame: Category A (M = 4.70, SD = 2.78), Category I (M = 8.98, SD = 2.88)
- Guilt: Category A (M = 5.42, SD = 2.88), Category I (M = 9.36, SD = 2.14)

Correlations between fear, shame, and guilt per medication error category (\(p < .001\))

<table>
<thead>
<tr>
<th>Medication error category</th>
<th>Fear</th>
<th>Shame</th>
<th>Guilt</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.40 (n = 64)</td>
<td>.39 (n = 65)</td>
<td>.50 (n = 64)</td>
</tr>
<tr>
<td>B</td>
<td>.44 (n = 63)</td>
<td>.45 (n = 63)</td>
<td>.55 (n = 63)</td>
</tr>
<tr>
<td>C</td>
<td>.67 (n = 64)</td>
<td>.69 (n = 64)</td>
<td>.82 (n = 64)</td>
</tr>
<tr>
<td>D</td>
<td>.74 (n = 54)</td>
<td>.76 (n = 54)</td>
<td>.82 (n = 54)</td>
</tr>
<tr>
<td>E</td>
<td>.85 (n = 47)</td>
<td>.84 (n = 47)</td>
<td>.93 (n = 47)</td>
</tr>
<tr>
<td>F</td>
<td>.74 (n = 45)</td>
<td>.81 (n = 45)</td>
<td>.96 (n = 45)</td>
</tr>
<tr>
<td>G</td>
<td>.82 (n = 45)</td>
<td>.86 (n = 45)</td>
<td>.97 (n = 45)</td>
</tr>
<tr>
<td>H</td>
<td>.79 (n = 44)</td>
<td>.87 (n = 44)</td>
<td>.92 (n = 44)</td>
</tr>
<tr>
<td>I</td>
<td>.72 (n = 45)</td>
<td>.88 (n = 45)</td>
<td>.83 (n = 45)</td>
</tr>
</tbody>
</table>

Preferred support interventions
- Choice of ten options currently available in clinical facility
  - Talk about it with peers at work (n = 47, 71%)
  - Talk about it with my supervisor (n = 38, 58%)
  - Talk about it with my family (n = 17, 26%)
  - Not talk about it at work at all (n = 1, 1.5%)
  - Helpful versus harmful key phrases.
  - Open discussion, validation, reassurance;
  - All nurses in the study (\(N = 66\)) have experienced some form of medication error.
  - Increase staff awareness and understanding of second victim phenomenon and methods nurses use to reconcile their errors.
  - Educate nursing leadership and staff on effective communication techniques:
    - With appreciation to C. Finn PhD, RN and A. Jackson PhD, RN for their helpfulness.

Discussion

References

Acknowledgements

With appreciation to C. Finn PhD, RN and A. Jackson PhD, RN for their mentoring and guidance.

Implications

Financial impacts due to staff turnover and additional patient harm.

Available upon request.