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 not 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.

Results

Sample demographics

- Oncology department within a Rocky Mountain region pediatric tertiary care facility
- 115 eligible nurses
- 82 surveys distributed, 66 completed survey
  - 80.5% response rate
- Professional experience
  < 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)

Nurses' experience in nine categories of medication error and associated patient harm

	Medication Error Index[1] category and definition	No *n*	No *f*	Yes *n*	Yes *f*
A	Circumstances or events that have the capacity to cause error	2	3%	60	91%
B	An error occurred but the error did not reach the patient	6	9%	56	85%
C	An error occurred that reached the patient but did not cause patient harm	10	15%	52	79%
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	40	61%	22	33%
E	An error occurred that may have contributed to or resulted in temporary harm to the patient and required intervention	52	79%	9	14%
F	An error occurred that may have contributed to or resulted in temporary harm to the patient and required initial or prolonged hospitalization	57	86%	3	4.5%
G	An error occurred that may have contributed to or resulted in permanent patient harm	60	91%	-	-
H	An error occurred that required intervention necessary to sustain life	63	96%	-	-
I	An error occurred that may have contributed to or resulted in the patient's death	61	92%	1	1.5%

Note. [1]National Coordinating Council for Medication Error Reporting and Prevention (2001).

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
  - 1 = "never", 10 = "always"
- Means increased as medication error category and associated level of patient harm escalated
  - 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* = 2.68)
  - 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)

Medication error category	Fear: Shame *r*	Fear: Guilt *r*	Shame: Guilt *r*
A	.40 (*n* = 64)	.39 (*n* = 65)	.90 (*n* = 64)
B	.44 (*n* = 63)	.45 (*n* = 63)	.85 (*n* = 63)
C	.67 (*n* = 64)	.69 (*n* = 64)	.82 (*n* = 64)
D	.74 (*n* = 54)	.76 (*n* = 54)	.82 (*n* = 54)
E	.85 (*n* = 47)	.84 (*n* = 47)	.93 (*n* = 47)
F	.74 (*n* = 45)	.81 (*n* = 45)	.96 (*n* = 45)
G	.82 (*n* = 45)	.86 (*n* = 45)	.97 (*n* = 45)
H	.79 (*n* = 44)	.87 (*n* = 44)	.92 (*n* = 44)
I	.72 (*n* = 45)	.88 (*n* = 45)	.83 (*n* = 45)

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%)
  - Enable me to take a break (*n* = 21, 32%)
  - Enable me to go home (*n* = 6, 9%)
  - Resilience Education Support Team (REST) emergent visit (*n* = 2, 3%)
  - Interprofessional post-event review (*n* = 10, 15%)
  - Talk with Wellness Team (*n* = 0)
  - Employee Assistance Program (*n* = 3, 4.5%)

Discussion

- All nurses in the study (*N* = 66) have experienced some form of medication error.
- Evidence demonstrates the second victim phenomenon is present in the clinical facility.
- Error events have impacted nurses personally and professionally, as evidenced by:
  - Elevated perceptions of fear, shame, and guilt in all medication error categories;
  - Nurses feeling shame after an error were more likely to report guilt as well (*r* = .82 - .97, *p* < .001).
- Nurses seek open, empathetic communication from family, peers, and supervisors as optimal sources of support following medication error experiences.

Implications

- Develop a formalized support process for nurses in distress following medication errors.
- 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:
  - Open discussion, validation, reassurance;
  - Helpful versus harmful key phrases.
- Organization at risk for being the third victim.
  - Financial impacts due to staff turnover and additional patient harm.

Acknowledgements

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

References

Available upon request.