

Vaught's Single Story and Health Care's Culture of Safety

To *Err is Human: Building a Safer Health System*, the Institute of Medicine's consequential 2000 report, focused attention on medical errors, championing preventive strategies to improve patient safety in hospitals. In the context of all medical errors, the report emphasized that medication-related errors occur frequently. The findings from a 2020 systematic review and meta-analysis showed that the proportion of mild to moderate preventable medication errors ranged from 39% to 40%, with clinically severe preventable errors accounting for 26% (Hodkinson et al., 2020). Of the cited sources, cytotoxic agents had one of the highest prevalences of preventable medication harm (Hodkinson et al., 2020). Historically in oncology settings, 7.1% and 18.8% of adults and children with cancer, respectively, are exposed to chemotherapy errors, which can be harmful or fatal (Walsh et al., 2009). These errors are rising because of an uptake in chemotherapy use (Dorothy et al., 2021).

Because of the multilayered complexities of cancer care delivery, patients with cancer are optimally primed for medication errors. Chemotherapy, a well-established, potent treatment modality, can lead to significant adverse effects, even in the absence of an error. The potential for preventable errors increases because of the narrow therapeutic window and errors in total dose and route, among other factors; these errors have been fatal in some cases (Rodziewicz et al., 2022).

An established culture in nursing practice requires that individual nurses meet immense clinical demands and critical patient care responsibilities. In this lens, RaDonda Vaught's conviction in 2022 for negligent homicide and abuse of an impaired adult—an unintentional medication error that occurred in 2017—struck a chord, in particular, for nurses (Good, 2022). For patients exposed to unsafe care as a result of medication errors, the pursuit of justice is understood and justified. However, criminalizing Vaught creates a looming threat to health care's culture of safety, where nurses are even more likely to underreport medication errors. Importantly, Vaught's conviction does not offer a solution but raises many questions. In an environment of criminalization, nurses may be reluctant to disclose medication errors because of fear of job loss, toxic work environment, and work-related ridicule. Of note, public knowledge of medication errors often jeopardizes institutional reputation, intensifies work-related stress,

and, arguably, increases the likelihood of more medication errors (Rodziewicz et al., 2022).

Stress, burnout, poor patient-to-nurse ratios, and nursing shortages are some cited predictors of medication errors (Zaree et al., 2018). Work-related stressors may trigger psychological distress symptoms, including moral distress, in nurses that may lead to impairments in professional quality of life (Eche, Phillips, et al., 2022). Nurses face psychological distress in the context

"Because of the multilayered complexities of cancer care delivery, patients with cancer are optimally primed for medication errors."

of perceived medication errors or even real medication errors. Compounding this degree of stress would be impending legal action similar to what Vaught encountered.

As specialty nurses who administer chemotherapy, oncology nurses can be particularly prone to making chemotherapy errors. Coupled with work-related stressors, patients with cancer can become vulnerable to chemotherapy-related harm (Dorothy et al., 2021). In addition, because preventable errors occur at various stages of prescribing, transcribing, dispensing, and administering chemotherapy, patients assume even greater risk of harm (Rodziewicz et al., 2022).

National and global healthcare systems are under siege with the evolving and continuing COVID-19 pandemic. With the pandemic, the incidence of work-related stressors is higher (Eche, Eche, & Aronowitz, 2022). This matters because, if unaddressed, these stressors jeopardize quality care and patient safety. The retaliative precedence of Vaught's single case can endanger nurses who practice in an already fragile system. The criminalization of nurses—pointing fingers at nurses and not at

systems that promote medication errors—impedes opportunities for long-term solutions to prevent medication errors (Car et al., 2017).

To reduce chemotherapy errors and improve patient safety, strategies to reduce chemotherapy errors should be system-focused and sustainable. Those strategies include the following: (a) independent chemotherapy double checks; (b) interprofessional structured patient and family rounding; (c) alerts when dose, rate, or frequency are out of range; (d) nonpunitive anonymous electronic voluntary safety reporting system; (e) chemotherapy safety huddle; and (f) chemotherapy ordering safety zones (Rodziewicz et al., 2022).

In summary, the Vaught case—as tragic as it is—reminds us that safe oncology nursing practice requires professional and personal responsibility along with exquisite clinical acumen, fierce advocacy, and dedication. To provide excellent oncology care, nurses' vigilance goes a long way to promote a culture of safety required for healthcare systems to thrive.



Ijeoma Julie Eche, PhD, MPH, FNP-BC, AOCNP®, CPHON®, BMTCN®, is a nurse scientist in the Phyllis F. Cantor Center for Research in Nursing and Patient Care at the Dana Farber Cancer Institute in Boston, MA. Eche can be reached at ijeomaj_eche@dfci.harvard.edu.

REFERENCES

- Car, L.T., Papachristou, N., Urch, C., Majeed, A., Atun, R., Car, J., & Vincent, C. (2017). Prioritizing medication safety in care of people with cancer: Clinicians' views on main problems and solutions. *Journal of Global Health, 7*(1), 011001. <https://doi.org/10.7189/jogh.07.011001>
- Dorothy, A., Yadesa, T.M., & Atukunda, E. (2021). Prevalence of medication errors and the

associated factors: A prospective observational study among cancer patients at Mbarara Regional Referral Hospital. *Cancer Management and Research, 13*, 3739–3748. <https://doi.org/10.2147/CMAR.S307001>

- Eche, I.J., Eche, I., & Aronowitz, T. (2022). Psychological distress and work-related quality of life among oncology nurses during the COVID-19 pandemic: A cross-sectional study. *Clinical Journal of Oncology Nursing, 26*(3), 268–274. <https://doi.org/10.1188/22.CJON.268-274>
- Eche, I.J., Phillips, C.S., Alcindor, N., & Mazzola, E. (2022). A systematic review and meta-analytic evaluation of moral distress in oncology nursing. *Cancer Nursing*. Advance online publication. <https://doi.org/10.1097/NCC.0000000000001075>
- Good, V. (2022). A step forward or backward for nurses and patient safety? *Critical Care Nurse, 42*(4), 9–11. <https://doi.org/10.4037/ccn2022804>
- Hodkinson, A., Tyler, N., Ashcroft, D.M., Keers, R.N., Khan, K., Phipps, D., . . . Panagioti, M. (2020). Preventable medication harm across health care settings: A systematic review and meta-analysis. *BMC Medicine, 18*(1), 313. <https://doi.org/10.1186/s12916-020-01774-9>
- Institute of Medicine. (2000). *To err is human: Building a safer health system*. National Academies Press.
- Rodziewicz, T.L., Houseman, B., & Hipskind, J.E. (2022). Medical error reduction and prevention. *StatPearls*. <https://www.ncbi.nlm.nih.gov/books/NBK499956>
- Walsh, K.E., Dodd, K.S., Seetharaman, K., Roblin, D.W., Herrinton, L.J., Von Worley, A., . . . Gurwitz, J.H. (2009). Medication errors among adults and children with cancer in the outpatient setting. *Journal of Clinical Oncology, 27*(6), 891–896. <https://doi.org/10.1200/JCO.2008.18.6072>
- Zaree, T.Y., Nazari, J., Asghary Jafarabadi, M., & Alinia, T. (2018). Impact of psychosocial factors on occurrence of medication errors among Tehran public hospitals nurses by evaluating the balance between effort and reward. *Safety and Health at Work, 9*(4), 447–453. <https://doi.org/10.1016/j.shaw.2017.12.005>

KEYWORDS

culture of safety; medical errors; medication-related errors; chemotherapy; work-related stressors; patient safety

DIGITAL OBJECT IDENTIFIER

10.1188/22.CJON.461-462