Examining the Context of Medication Errors

In March 2022, a registered nurse from Vanderbilt University Medical Center was found guilty of criminally negligent homicide and abuse felonies of an impaired adult after she made a medication error that resulted in a patient's death. Unfortunately, medication errors are extraordinarily common in inpatient and hospital-based settings. It is estimated that medication errors impact 7 million patients resulting in a cost of about \$40 billion annually across settings (Da Silva & Krishnamurthy, 2016; Lahue et al., 2012; Tariq et al., 2018). Annually, as many as 9,000 individuals in the United States die because of a medication error (Tariq et al., 2018). Medication errors first emerged as a public health issue over twenty years ago. They prompted the Institute of Medicine (IOM) landmark publication *To Err is Human: Building a Safer Healthcare System* (2000), which called for systems-level improvements to reduce the likelihood of medication errors and other patient safety issues.

The COVID-19 pandemic has exacerbated an already present shortage of bedside nursing professionals. To satiate the current nursing demand, there is a need for over 1 million new registered nurses (American Nurses Association, 2021). The current nursing shortage is best described as a crisis and ongoing issues with high rates of nurse turnover coupled with problems recruiting and retaining new nurses have made this crisis difficult to navigate (Harms, 2021; Kiel, 2020). Furthermore, the nursing shortage has resulted in problematic workplace environments with dangerous nurse-to-patient ratios, which has resulted in a reliance on transient, traveling nurses to fill the gap of seasoned, full-time staff (Lowman & Harms, 2022). In addition to high nurse-to-patient ratios and lack of experienced staff, other occupational stressors including lack of administrative support, patient acuity, and inadequate resources can result in burnout and increase the likelihood of workplace errors.

Since the onset of the COVID-19 pandemic, there have been calls to more adequately support nurses' wellbeing; the International Society of Psychiatric-Mental Health Nurses (ISPN) released a position statement on this subject in March 2021 (ISPN, 2021). A national study of over 1,500 nurses from nearly 20 health care systems found that inferior physical and mental health outcomes in nurses were related to a greater number of reported medical errors (Melnyk et al., 2018). This finding was replicated in a sample of critical care nurses (n = 771). Those who reported worse physical and mental health symptoms were 30% to 60% times more likely to make a medication error (Melnyk et al., 2021). Furthermore, nurses were likely to report better health outcomes when they perceived their work environment as "very supportive." These findings highlight the need for health care systems to prioritize nurse health and wellness by addressing system-based issues, fostering a culture of wellness, and utilizing evidence-based practices to develop wellness programs.

In 2017, a Vanderbilt registered nurse inadvertently administered vecuronium, a paralytic, rather than midazolam (Versed). She was terminated and her nursing license was revoked in 2019. This is a dangerous precedent for nurses who make medication errors and shifts full accountability for safe workplace environments from healthcare systems onto individual nurses. Criminalizing this type of error is unjust; it undermines faith the public has in nurses, and creates undue fear for all health workers. It is recommended that healthcare systems foster a "Just Culture," (ANA, 2022; Judge J. Smith, 2022) through which those who make medication errors can come forward without fear of retaliation to assure that systems-

based safeguards can be implemented with the ultimate result to improve quality of care and patient safety. Currently, nurses across the country may be fearful of reporting medication errors due to fear of criminal prosecution, and such criminalization may seriously impact future quality improvement or safety efforts.

In summary, it is recommended that healthcare systems foster environments where nurses' mental health and wellness can be supported, where safe nurse-to-patient ratios can be upheld, and where transparency surrounding errors is encouraged. We do not support criminalization of medication errors for nurses. We are gravely concerned about the consequences of this guilty verdict in the nursing community and the impact it will have on future patient quality and safety efforts.

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Adopted by: ISPN Board of Directors Date: April 5, 2022

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