LEADERSHIP COLUMN

Medication errors and shift to a culture of patient safety and high reliability

by Janice Chobanuk

Medication errors with antineoplastic drugs can be disastrous to patients due to the drugs’ high toxicity and limited therapeutic index. Cancer patients often require numerous complex and often toxic therapies for treatment, which requires careful coordination of care. In a study involving 6,607 antineoplastic prescriptions, the researchers found an error rate of 5.2% (449). The highest errors were prescription errors (91%), followed with pharmaceutical (8%) and administration errors (1%). The researchers estimated that 13.4% of these errors would have resulted in a patient injury, 2.6% in permanent damage, and 2.6% would have affected the prognosis of the cancer patient. Gandhi et al. (2005) found the chemotherapy error rate was 3% in 3,200 chemotherapy orders for adult and pediatric patients. In a study involving pediatric and adult oncology patients, the authors found chemotherapy errors were 0.3 to 5.8 per 100 visits (Walsh et al., 2009).

Many oncology-nursing leaders are recognizing the importance of treating chemotherapy as a high-risk activity. Nursing leaders are actively promoting transition to a patient safety and high-reliability culture in order to enhance patient safety in oncology settings (Ranchon et al., 2012). This paradigm shift requires strong leadership support, the use of principles of high reliability and a patient-centric focus, as well as continuous quality improvement initiatives. The strategy involves leaders addressing issues such as inherent weaknesses in processes in the cancer setting, clinical designs of buildings, the impact of computer programs, staffing levels, equipment issues, and other factors that influence the local working conditions. A focus on safety requires oncology leaders to move away from reactive responses to error reports, and reviewing individual actions and the error, to embrace a proactive system-wide preventative approach. Globally, leaders in health care facilities are starting to incorporate the expertise and lessons learned from high-risk groups with low failure rates, such as aviation and nuclear power plants, into their safety strategic approach (Ranchon et al., 2012). These organizations have developed an array of tools for assessing organizational factors that have the potential to lead to a failure or error. The tools address issues such as supervision, planning, communication, training, and maintenance. Instead of a retrospective analysis of adverse events, these tools enable oncology leaders to transition to a more proactive culture of patient safety and monitor safety trends in the organization on a continual basis.

Chemotherapy management is a hazardous and challenging procedure that oncology leaders need to recognize as a high-risk activity. Mistakes can occur any time and at any stage in the process—from the prescription, preparation, and dispensing to the administration. The increasing number of oral chemotherapy agents adds a new challenge for oncology facilities. Shah et al. (2016) reported that 22 interventions (35%) were required to prevent potential errors in 63 oral medication orders over a seven-month period. Most of the errors were related to dosage adjustment, the identification of interacting drugs, and additional drug monitoring.

Oncology nursing leaders are well positioned to drive a culture shift to patient safety and high reliability. This change involves tactical strategies such as education, safety committees, safety protocols and procedures, use of technology, a no blame atmosphere, and a focus on zero medication errors (Ranchon, McEachan, Giles, Sirriyeh, Watt, & Wright, 2012). Other examples of initiatives include independent double checks, bar codes, electronic order-entry systems with decision support, and smart pump technology. Oncology nursing leaders need to be actively engaged in patient safety improvement to impact on patients, employees, physicians, and other clinicians in the organization.

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REFERENCES