Oncology Nurses’ Perceptions About Involving Patients in the Prevention of Chemotherapy Administration Errors

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Medication errors are among the most serious class of errors and may cause considerable harm. Although any drug is susceptible to errors, chemotherapy presents special dangers because many agents have a narrow therapeutic index and are toxic even at therapeutic dosages, chemotherapy regimens are highly complex, and patients with cancer are a vulnerable population with little tolerance (Muller, 2003). Adverse event studies have reported that errors in administration of chemotherapy occur frequently (Gandhi et al., 2005; Lustig, 2000). Walsh et al. (2009) observed an error rate of 8.2 per 1,000 medication orders among adult patients with cancer in the outpatient setting. Five medication errors per 1,000 orders had the potential to cause harm, and one error per 1,000 orders resulted in injury (Walsh et al., 2009). Common errors included under- and overdosing, schedule and timing errors, and other incidents, such as infusion rate errors.

Analysis of the MEDMARX® database revealed that, of 310 pediatric chemotherapy errors reported, 85% reached patients and 16% required additional monitoring or intervention (Rinke, Shore, Morlock, Hicks, & Miller, 2007). Almost 50% of errors occurred in medication administration. The diffusion of oral and infusion chemotherapy to the outpatient setting introduces additional hazards. For example, parents have major difficulties in preparing, dispensing, and administering medication to their children (Taylor, Winter, Geyer, & Hawkins, 2006).

In addition to professional activities such as electronic prescribing and standardized ordering entry, involving patients in error prevention has been recommended widely by the Institute of Medicine (2000), the American Hospital Association, and oncology experts (Coulter, 2006; Kloth, 2002; Vincent & Coulter, 2002).