Using a Simple Diary for Management of Nausea and Vomiting During Chemotherapy

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To help clinical staff make effective adjustments to patients' antiemetic therapy, the authors gave patients a nausea and vomiting diary to record their experiences. Use of the diary strengthened patients' sense of security, as well as trust between staff and patients, in addition to increasing the staff's sensitivity to cultural differences in their approach to cancer and chemotherapy. Most patients responded favorably to the opportunity to express their fears and anxieties in diary format.

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Nausea and vomiting (NV) are frequent complications following chemotherapy, even when taking 5-HT_3 or neurokinin-1 antagonists (Kris et al., 2006). The rate of NV is higher in women, particularly in those who have received prior chemotherapy, have experienced motion sickness, had NV during pregnancy, or are familiar with other people who had experienced chemotherapy-induced NV (Dando & Perry, 2004; Warr, Street, & Carides, 2010). The literature has documented the physical and emotional effects of chemotherapy-induced NV (Dando & Perry, 2004; Kris et al., 2005). Therefore, oncology units place great emphasis on prevention of postchemotherapy NV.

The authors of this article introduced an innovative technique in the Oncology Institute of the Barzalai Medical Center in Ashqelon, Israel, where patients used an NV diary following chemotherapy with the desire to improve patients' NV management. A very simple diary was developed to monitor patients' NV and establish additional ways for patients to express their fears and anxieties in their own language. The main objectives were to evaluate the effectiveness of an NV diary as a tool to ensure the nursing staffs' effective communication with patients, antiemetic therapy adjustment, and to involve patients in this process. An additional aim was to evaluate the association between NV during pregnancy and chemotherapy-induced NV. Previously, only Hermansen-Kobulnicky, Wiederholt, and Chewning (2004) used the Write Track personal health tracker to evaluate adverse effects in a randomized pretest/post-test experimental study of patients who were beginning chemotherapy (N = 74).

Methods

All new female patients with operable breast cancer (postsurgery) who were treated in the oncology unit with adjuvant chemotherapy containing doxorubicin were asked to participate in the study. Seventy-one patients agreed, but only 47 completed the study. Participants' mean age was 57 years (range = 36–78 years) with an average of two children (range = 0–8). All participants were chemotherapy naive and most received IV chemotherapy of a similar regimen for the treatment of their breast cancer. The Specialized Oncology Unit of the Barzilai Medical Center in Ashqelon, Israel, provides medical services to a population of 500,000 consisting of a high proportion of immigrants with a wide variety of languages, cultural backgrounds, and social and financial conditions—mostly immigrants from the former Union of Soviet Socialist Republics. Given that diversity, innovative approaches are required to ensure excellence of care. Oncology unit services include follow-up visits, chemotherapy treatments, pain evaluation and care, supportive and palliative care, psychosocial support, and nutritional evaluation.

Prior to initiating treatment, patients were asked to detail NV during their pregnancies or any other experiences with NV. Each patient received a seven-day postchemotherapy diary before treatment began. The diary was developed to answer the need for feedback about NV from the patient, particularly those who did not speak Hebrew, the local language. Each day, patients used a four-point Likert-type scale ranging from 1 (none) to 4 (severe) to score nausea and a similar four-point scale ranging from 1 (none) to 4 (severe) for vomiting.

At subsequent visits, the healthcare team (i.e., oncology nurse and physician) assessed the number of vomiting episodes since the last visit and the daily scores of NV using the categories weak (grade 1 and 2), moderate (grade 3), or severe (grade 4). Following the assessment, the physician made adjustments to the patient's antiemetic treatment, when warranted. Other symptoms such as