

# Opening the Dialogue: Herbal Supplementation and Chemotherapy

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**T**he National Institutes of Health's (NIH's) National Center for Complementary and Alternative Medicine (NCCAM) defined complementary and alternative medicine (CAM) as "practices that are not presently considered an integral part of conventional medicine and has categorized them into five major domains as follows: biologically based treatments, mind-body interventions, manipulative and body-based methods, alternative medical systems, and energy therapies" (Richardson, 2001, p. S3037).

One biologically based treatment that has been on the rise in popularity is herbal remedies. In 2004, herb sales were estimated at \$257 million (Blumenthal, 2005). Use of herbal supplements among patients with cancer is particularly high. Recent estimates suggest that many patients with pediatric cancer (84%), breast cancer (50%), or prostate cancer (37%) use some form of CAM (Richardson, 2001). Other sources state that the use of CAM in patients with cancer is 54%–77%, and those with breast cancer use more CAMs than people with other cancers (Sparreboom, Cox, Acharya, & Figg, 2004). For the purposes of this article, the definition of herbal supplements will include herbal preparations and vitamin and mineral supplements.

A major concern regarding the use of herbal supplementation is that the supplements are not required to undergo any federally regulated safety testing (American Cancer Society [ACS], 2001). Formulations for herbal supplements may contain

Presently, healthcare providers have little scientific evidence on which to base recommendations about use of herbal supplements with chemotherapy. Lack of product standardization and definitive knowledge about herb interaction with chemotherapy may expose patients with cancer to potentially serious side effects. Patients continue to use herbal supplements with their cancer treatments, often without informing their healthcare providers. Research currently is ongoing to study the effects of the concomitant administration of herbal supplements and chemotherapy.

4–12 different ingredients and are available in many different formats, including teas, powders, pills, tinctures, and syrups (ACS, 2003). The supplements are not tested for purity or consistency, so each sample may contain a different formulation or dosage. In addition, the U.S. Food and Drug Administration (FDA) passed legislation in 1994 allowing herbal supplements to be sold over the counter (Cassileth, 2000), as well as absolving doctors and pharmacists from having to report any potential side effects the supplements may cause (ACS, 2001).

Because of the lack of product standardization and drug interaction effects, some patients are experiencing negative side effects. ACS (2003) reported that herbal medicine has become the leading cause of hepatotoxicity. Liver damage related to herbal medicine may be from the lack of quality control of herbal supplements or from the use of supplements with prescribed medications, resulting in adverse drug interactions.

Patients continue to turn, in increasing numbers, to herbal supplements for relief from side effects they may experience as a result of their cancer treatment. Many patients do not tell their oncologists or nurses if they are using any supplements. As many as 72% of patients surveyed had not informed their physicians of their use of herbal supplements (Powell, Dibble, Dall'Era, & Cohen, 2002; Sparreboom et al., 2004).

The purpose of this article is to increase healthcare providers' awareness about the use

of herbal supplements by patients receiving cancer chemotherapy and to provide guidelines for accurate assessment of this phenomenon. Use of these or similar guidelines will enhance communication between patients and nurses and help to educate patients about reliable resources for information and guidance regarding their use of herbal supplements.

## Complementary and Alternative Medicine Information for Professionals

For physicians and nurses, the silence of patients with cancer regarding their use of herbal supplements presents a difficult

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