■ Article

Using Tools and Technology to Promote Education and Adherence to Oral Agents for Cancer

Peggy S. Burhenn, MS, CNS, AOCNS®, and Josephine Smudde, RN-BC, MS, OCN®

Downloaded on 04-28-2024. Single-user license only. Copyright 2024 by the Oncology Nursing Society. For permission to post online, reprint, adapt, or reuse, please email pubpermissions@ons.org. ONS reserves all rights.

© WW5/iStock/Thinkstock

Background: The use of oral agents for cancer (OACs) is increasing, and oncology nurses are in an ideal position to educate patients about them and suggest methods to improve adherence. Once an OAC is ordered, the administration is the responsibility of the patient. Oncology nurses can use tools and technology to assist with education, which may promote adherence, and suggest reminder tools that can be used. Many electronic tools have been developed, such as smartphone applications, text messaging, electronic alarms, and glowing pill bottles.

Objectives: The researchers reviewed electronic devices, as well as traditional methods such as calendars and pillboxes, that can assist patients in remembering to take the medication they are administering at home.

Methods: A literature search was compiled and websites were searched for patient education tools, reminder tools (electronic and manual), and smartphone applications. The project was part of the Oncology Nursing Society Putting Evidence Into Practice effort on oral adherence.

Findings: Education alone is insufficient to promote adherence to oral medication regimens. Multicomponent interventions have demonstrated improved adherence, and tools and technology directed at improving adherence to oral agents can be used. The researchers found multiple reminder aids to assist patients in adhering to an oral regimen. They are highlighted in this article.

Peggy S. Burhenn, MS, CNS, AOCNS®, is a professional practice leader at City of Hope National Medical Center in Duarte, CA, and Josephine Smudde, RN-BC, MS, OCN®, is a coordinator of cancer services data at Northwest Community Hospital in Arlington Heights, IL. The authors take full responsibility for the content of the article. The authors did not receive honoraria for this work. The content of this article has been reviewed by independent peer reviewers to ensure that it is balanced, objective, and free from commercial bias. No financial relationships relevant to the content of this article have been disclosed by the authors, planners, independent peer reviewers, or editorial staff. Burhenn can be reached at pburhenn@coh.org, with copy to editor at CJONEditor@ons.org. (Submitted December 2014. Revision submitted January 2015. Accepted for publication January 10, 2015.)

Key words: oral chemotherapy; oral agents for cancer; adherence; tools; technology; patient education

Digital Object Identifier: 10.1188/15.S1.CJON.53-59

About 25% of new antineoplastic agents in development are estimated to be oral drugs (Weingart et al., 2008). New drug development, patient preference, perceived easier administration, and Medicare Part D coverage for oral therapeutics have contributed to the increase in oral drugs for cancer (Weingart et al., 2008). In some cases, cost-related nonadherence has been reduced by the Medicare Part D benefit (Donohue, 2014). Patient preference to avoid IV therapy also may be a factor in the increase in oral agents. Oral agents for cancer (OACs) are reportedly more convenient for patients because they result in fewer office visits and less time spent receiving treatment compared to IV chemotherapy. With that convenience, however, comes a lack of professional oversight to know whether patients are properly taking the medication, as prescribed, at home. In addition, oral regimens may come with complicated dosing schedules or multiple food and drug interactions that makes adherence difficult.

The evidence suggests that patient education, as part of a multicomponent intervention, can affect adherence (Spoelstra & Sansoucie, 2015). Nurses, as frontline caregivers, will need multiple interventions to aid patients in OAC adherence. This article will focus on tools and technology that foster patient education and those that can be used to promote adherence.

Patient Education

Once an OAC has been recommended for a patient, the education required typically is delivered by the oncology nurse. In busy clinics, patients may be given written materials about the new medication, but little time may be available for one-on-one