Guest Editorial

Oral Agents in Cancer Treatment: Meeting the Patients' Needs to Ensure Medication Adherence

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Cancer MASCC Oral Agents Teaching Tool (MOATT)[©]" and the MOATT[©] User Guide. She is the recipient of the 2010 ONS International Award for Contributions to Cancer Care; before this, she has received MASCC Young Investigator Award in 2004 and MASCC Best Young Investigator Award for her research study "Patient Education and Follow-up for Oral Chemotherapy Treatment in Turkey" in 2005.

ver the years, there has been an explosion in the number of available oral agents for cancer treatment. Today, one in four drugs used in cancer treatment can be administered orally. Adherence with oral agents for cancer treatment is essential for optimal outcomes; however, studies focused on oral chemotherapy showed adherence rates were ranging from 14% to 100%. [1] Adherence remains a major concern in the use of oral agents in order to maximize the benefit of the treatment.

Development of oral cancer agents has changed paradigms of both treatment and patient education. With the increasing use of oral agents, patients and families now are more responsibility for monitoring and reporting side effects to their health-care providers. As a result, health-care professionals need to develop services to meet this growing needs of patients to receive adequate, quality-assured, multiprofessional care. The aim of this special issue is to provide a forum for health professionals, researchers, educators, and clinicians to share their knowledge and to exchange expertise on issues related oral agents in cancer treatment.

In this issue, we are pleased to share two studies from the USA, and one each from Singapore and Turkey.

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Factors influencing adherence are numerous, as medication adherence is complex and involves patient, physician, and process components. Complexity of the issues on medication adherence as illustrated in an article by Given *et al.*^[2] reported that patients had 1–4 pills/day for oral cancer medications, besides taking 10–11 medications for their comorbid conditions (>3). In addition, patients had 3.7–5.9 symptoms and side effects. This study points out that patients taking oral agents have multiple medications for cancer and other comorbid conditions. The number of pills, times per day, and interruptions add to the medication burden that patients' experience.^[2]

The second article by Ali *et al.*^[3] reported the prevalence and determinants of adherence to oral adjuvant endocrine therapy among breast cancer patients in Singapore. Their study showed a low level of adherence; forgetfulness was cited as the main reason for nonadherence. The presence of one or more comorbidities was identified as the only independent predictor of high adherence in a multivariate logistic regression analysis.

Success with oral agents for cancer treatment requires a high level of self-management competence by the patient. A standardized patient education program provided by oncology nurses positively influences the management of the oral agents. A study from Turkey conducted by Tokdemir and Kav^[4] showed that individual education using the MASCC Oral Agents Teaching Tool (MOATT) with follow-up increased patient oral medication adherence self-efficacy.

As new oral agents in cancer treatment are developed, physicians, nurses, policy makers, and health-care managers are focusing on strategies to optimize adherence for the best possible outcomes. May *et al.*^[5] described a model to establishment of the Oral Chemotherapy Management Clinic; they write how it is run and give examples of interventions

Despite growing interest in issues related to oral agents for cancer treatment, little evidence exists for interventions to ensure safe administration and patient adherence.^[6,7] A recent systematic review^[7] on interventions to improve oral chemotherapy safety and quality revealed variation in measurement and definition of adherence and paucity of

data evaluating the prescribing and storage/disposal steps of oral chemotherapy management. Several studies in the review showed that telephone-based monitoring following initiation of therapy reduced toxic effects and suggests that a program should include initial education and monitoring with telephone contact to patients within the 1st week of treatment. It was concluded that a framework for the oral chemotherapy management process with standardized outcome definitions is needed to ensure constructive research. A monitoring program should include nurse or pharmacist contact with patients, possibly enhanced with technology, soon after treatment start.

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