

# **Assessing the Need for Improved Strategies and Medication-Related Education to Increase Adherence for Oral Anticancer Medications in the Young Adult (YA) Oncology Population**

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## Background

Oral anticancer medication (OAM) adherence is a critical factor in optimizing treatment outcomes and minimizing toxicity. Though potential adherence barriers exist, it is not well understood how these factors impact adherence. This study seeks to describe medication education and adherence monitoring institutional practices as perceived by young adult (YA) patients and the consistency of these practices as compared to the 2013 ASCO/ONS Chemotherapy Administration Safety Standards. Furthermore, this study seeks to describe patient reported medication adherence and facilitators and barriers to adherence in the YA population, to aid in future development and implementation of interventions aimed at improving medication adherence.

## Methods

The current study is a prospective, single center, patient survey-based study conducted at The University of Maryland Greenebaum Cancer Center (UMGCC) including all patients between the ages of 18-39 who have been actively taking an oral anticancer medication for at least one month from April 1, 2013 to April 1, 2016. It consists of questions that relate to medication education and adherence monitoring practices at the UMGCC, as well as questions about adherence to oral chemotherapy, and facilitators and barriers to adherence. The primary objective of this study is to describe medication education and adherence monitoring practices as perceived by young adults at the UMGCC and to describe practice consistency with recommendations from ASCO/ONS. The secondary objectives include describing the level of adherence as determined by the Morisky Medication Adherence Scale (MMAS-8) score and patient reported facilitators and barriers to OAM adherence.

## Results

Seventeen patients completed the survey. 29% (n=5) of patients were between the ages for 20-29; 53% (n=9) of patients were between the ages of 30-39. 41% (n=7) of patients were male. Most common OAMs that were being taken included: methotrexate [6 (35%)], mercaptopurine [4 (24%)], and tamoxifen [3 (18%)]. Most patients [11 (65%)] took OAMs that warranted once daily administration. Out of 19 questions that corresponded to the ASCO/ONS standards, 12% (n=2) of patients felt they received all the components of education and monitoring. 24% (n=4) denied receiving information about what to do in case of a missed dose. The MMAS-8 scores ranged from 4.75 to 8, with a mean of 6, median of 5.75, and mode of 4.75. 88% (n=15) of patients reported that understanding of disease treatment is a facilitator of their adherence. In addition, 82% (n=14) of patients reported that perceived severity of illness and the use of oral chemotherapy agents were also facilitators. Side effects, reported by 59% (n=10) of patients, were perceived to be a barrier to adherence.

## Conclusion

After data analysis, the majority of patients at the UMGCC report not receiving components of care recommended by ASCO/ONS. Because many of these components are medication related, this highlights an important role for pharmacists in the comprehensive management of patients taking oral chemotherapy. The average MMAS-8 score indicates medium adherence. The most common facilitators of adherence include understanding of disease and treatment, perceived severity of illness, and use of oral anticancer medications. The most common barriers to adherence are side effects, forgetfulness, and depressive symptoms.