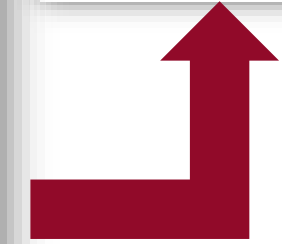


A SCOPING REVIEW OF THE USE OF THE MASCC ORAL AGENT TEACHING TOOL (MOATT®) WORLDWIDE



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RESULTS

- 60 articles identified.
- 17 met inclusion criteria.
- From 9 countries, 4 continents.
- 15 research studies, 2 quality improvement projects.
- All studies were in adults with one focused on older adults.
- Most of the studies included a mixed sample of cancer diagnoses.
- The MOATT was used as part of education or to guide clinical processes.
- Adherence outcomes, when reported, were positive.

CONCLUSION

- Supporting people who are taking oral treatments for cancer is a priority for the oncology clinical team.
- All teams praise the benefits of using the MOATT.
- The MOATT is an evidence-based tool available as part of a supportive care approach, yet published reports lack specifics on its use and outcomes.

FUTURE DIRECTIONS

- Additional research on the implementation and outcomes of adherence programs is needed.
- The use of the MOATT in practice is promising and should be promoted more widely.
- Systematic validation in different populations (children, caregivers, seniors).

INTRODUCTION

- The MASCC Oral Agent Teaching Tool (MOATT) assists healthcare providers in assessing & teaching patients about oral cancer treatment.
- **Purpose:** describe the contexts in published literature in which the MOATT has been used, the advantages & disadvantages for the patient or the clinical team & identify needs for a potential update.

METHODS

- Review was conducted following Joanna Briggs Institute scoping review guidelines.
- Searches in /-CINAHL, Embase, PsychInfo, Web of Science, PubMed.
- Inclusion criteria: cancer population, use of the MOATT in clinical practice or research, published from 2010 (any language).
- Two reviewers screened titles & abstracts to assess eligibility.
- Extracted data: demographics, patient population, setting, how the MOATT was utilized, & medication adherence outcomes.

SUMMARY OF STUDIES

Author, Year & Country	Population & Sample Size	Oral anticancer agents	Use of MOATT				Outcomes & Comments
			Initial Teaching	Follow-up	Full/Part	Trans-lation	
Campbell, 2014; Canada	Mixed, 20	Mixed	✓	✓	P		Increased knowledge; decrease in grade 3/4 adverse events.
Boucher et al, 2015; USA	Lung cancer, 29	Erlotinib	✓	✓	F		Resulted in high scores for patient knowledge and adherence.
Bellomo, 2016; USA	Mixed, 24	Oral CT agents	✓		F		The patient-centered assessment, education protocol & the tailored nurse follow-up telephone call protocol were effective in promoting symptom management & adherence. Become a standard of practice for oral chemotherapy patients at the Hospital.
Tokdemir & Kav, 2017; Turkey	Mixed; 41	Mixed	✓	✓	F	Turkish	Individual education with the MOATT and follow-up for patients receiving oral agents for cancer treatment increased patient medication adherence self-efficacy.
Riese et al, 2017; Germany	Mixed; 165	Mixed	✓	✓	F		The patients of the intervention group reported fewer side effects (skin rash, pain, fatigue, nausea, vomiting) and reduced unplanned therapy interruptions.
Byrne et al, 2018; Australia	Mixed; 29	Mixed	✓		F		Improved patient understanding; pharmacist-led OAM management clinic was a valuable service.
Newman, 2018; USA	Mixed, 10	Mixed	✓	✓	F		Improved medication adherence; fostered and improved healthcare provider relationships; supporting & increasing the use of positive self care strategies.
Roberts et al, 2018; USA	Mixed; 31	Mixed	✓	✓	F		Improvement in safe handling/storage, drug-drug and food interactions, and plan for missed doses.
He et al, 2019; China	NSLC; 44	Gefitinib	✓	✓	F		MOATT was not only beneficial to the patients in terms of QoL and psychological wellbeing, but also effective for reducing side effects.
Hartwell et al, 2019; USA	Mixed; 56	Mixed	✓		F		Safe handling/storage, drug-drug and food-drug interactions and plan for missed doses all improved
Tadic et al, 2020; Serbia	Breast; 142	Capecitabine	✓		F	Serbian	Depression, anxiety and stress decreased significantly in the experimental group.
Dürr et al, 2021; Germany	Mixed, 202	Mixed	✓	✓	F		Intensified clinical pharmacological/ pharmaceutical care has considerable effects on the number of medications errors (-34%), patient treatment satisfaction & severe side effects (-45%).
Tolotti et al, 2021; Switzerland	Mixed; 142	Mixed		✓	F	Italian	The survey questionnaire & interview questions were prepared based on MOATT to understand adherence. Overall, patients were satisfied with the education.
Lin et al, 2021; Germany	Mixed; 58	Oral CT agents	✓	✓	F		Most participants found the intervention to be very beneficial. MOATT adapted with awareness of potentially lower health literacy and language barriers.
Gallagher, 2021; USA	Multiple myeloma; 11	Oral CT agents	✓	✓	F		Decrease in ASK-12 medication adherence scores from pre (M=18.64, SD=3.85) to post (M=18.27, SD=3.66). Although the change in medication adherence was not statistically significant, the intervention decreased barriers & problems with adherence.
Wang et al, 2022; China	Lung cancer; 95	Mixed	✓	✓	P		Adherence and QoL increased in the intervention group.
Fariya et al, 2022; India	Mixed; 186	Mixed	✓	✓	P		Patients had initial teaching followed by follow up telephone calls.

