



Tan Tock Seng
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Feasibility study of toxicities review and follow up monitoring by a lung cancer patient navigator during Chemoradiotherapy among patients with Stage III Non-Small Cell Lung Cancer

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1. Introduction

- Lung cancer is the third most common cancer in men and women in Singapore with Stage III locally advanced non-small cell cancers (NSCLC) patients are treated with definitive chemoradiation (CRT) followed by maintenance immunotherapy (durvalumab).¹
- Specialized multidisciplinary approach combining medical oncology management with symptom management, nutritional and emotional support in lung cancer patients are increasingly explored and shown to be beneficial.^{2,3} The use of patient navigators may help patients with the necessary support throughout their cancer journey to connect the patient with the necessary community and hospital resources.
- We conducted a pilot study to evaluate the role of a planned, phone-based nurse monitoring intervention between scheduled clinic visits to help monitor and manage CRT-related toxicities.
- Monitoring symptoms during treatment is crucial as patients experience adverse effects, requiring therapeutic modifications, supportive care, and education especially on initiation of therapy. Patient navigation provides individualized assistance, overcoming barriers to healthcare access for patients, families, and caregivers.

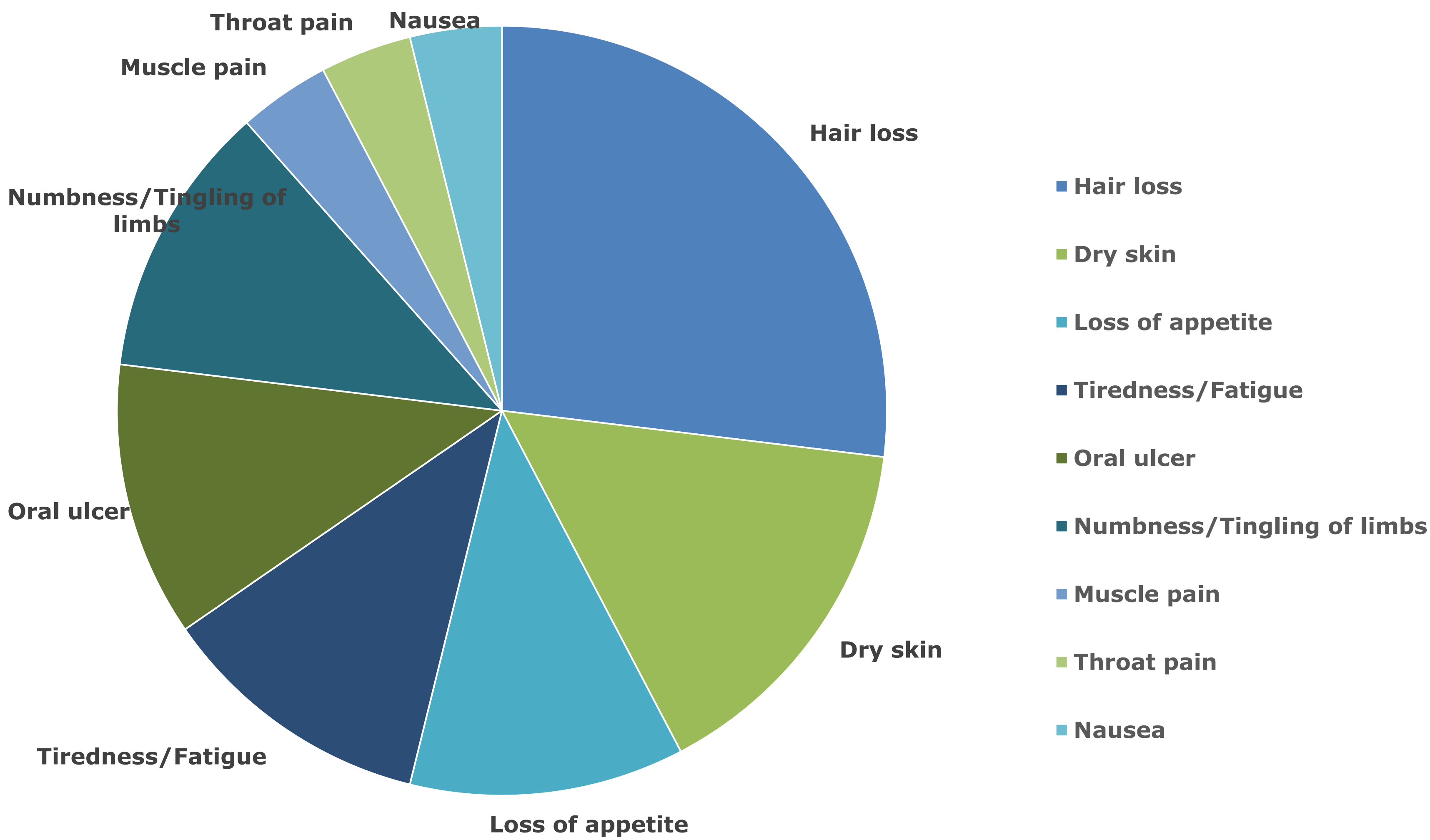
2. Methodology

- Patients ≥ 21 years old, diagnosed with stage III NSCLC who has been initiated on CRT at the institution’s medical oncology outpatient clinic between July 2025 to Mar 2026 were eligible.
- Acceptability was evaluated by semi-structured survey interviews with participants, nurse navigators, and carers at the end of the review period.
- These patients were monitored by nurse navigator at start of CRT (2-3 weeks post commencement), 1-2 months post-therapy and followed up accordingly to the level required depending on toxicities experienced.
- Interventions were categorized as home management (care provided at patient’s home), outpatient (referral to the treatment clinic), and hospital (referral to emergency care).
- All toxicities were graded according to the Common Terminology Criteria for Adverse Events 5.0.
- Evaluation of Cancer Patient Experiences and Satisfaction survey was done at the end of the service to assess patient’s response for the program and to help gauge feasibility for continuation of the program.

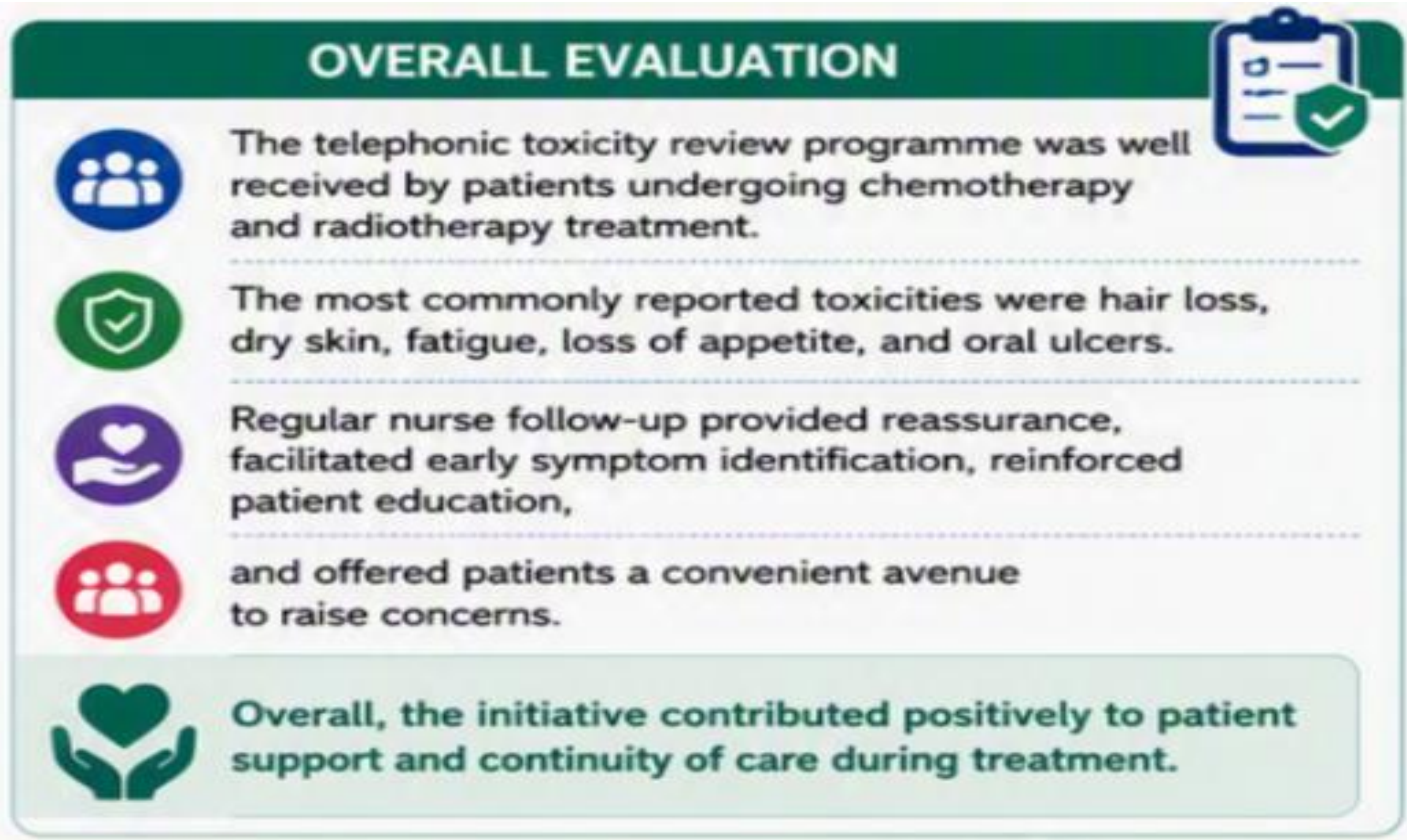
3. Results

- A total of 14 patients were enrolled into the CRT toxicities telephonic review. Of these, two patients discontinued follow-up.
- Telephonic reviews were conducted by Lung Cancer Navigator after every two cycles of chemotherapy, with a final review planned following the start of consolidative durvalumab.
- Among the patients who completed the review, commonly reported treatment-related toxicities included hair loss, oral ulceration, loss of appetite, fatigue, muscle pain, throat discomfort, dry skin, and peripheral numbness.
- Lung Cancer Navigator provided symptom-specific advice and interventions during each call to support symptom management and treatment adherence.
- All patients expressed satisfaction with the telephonic review process, noting the value of regular monitoring, the opportunity to clarify concerns, timely medication reminders, and reassurance through reinforcement of potential side effects.
- Overall, the telephonic review initiative was well-received and demonstrated effectiveness in offering supportive care, enhancing patient engagement, and ensuring continuity of symptom monitoring throughout the treatment period.

4. Chemoradiation side effects experienced by patients



5. Patient satisfaction survey for nurse navigator toxicities review



- Among the 14 patients who were enrolled into the chemotherapy and radiotherapy toxicity telephonic review programme, one patient discontinued due to being uncontactable despite multiple contact attempts.
- Telephonic reviews were conducted after every two cycles of chemotherapy, with a final review planned after one cycle of Durvalumab.
- Of the 10 patients successfully reviewed, the most commonly reported toxicity was hair loss, followed by dry skin. Loss of appetite, tiredness, mouth ulcers, and numbness or tingling of the limbs were each reported by 3 patients, while muscle pain, throat pain, and nausea were reported by 1 patient each.
- Two patients reported no treatment-related side effects. Nurses provided advice, symptom management strategies, and appropriate interventions based on the toxicities reported. Feedback from patients was overwhelmingly positive, with many expressing appreciation for the regular follow-up, reassurance, reminders regarding symptom management, and the opportunity to ask questions and clarify concerns

6. Conclusion and Future Directions

- Overall, the telephonic toxicity review programme was well received and provided valuable support, facilitating early identification and management of treatment-related toxicities while reinforcing patient education and continuity of care throughout treatment.
- These findings underscore the importance of this program in optimizing patient care and on improving the patient satisfaction. Further research and implementation of such programs may contribute to improved outcomes and patient satisfaction in oncological care.

References:
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