

## Impact, challenges, and future directions



Mouth cancer and its treatments have a major impact on fundamental functions (such as eating and speaking) as well as on the quality of life (QoL) and psychological well-being of its patients<sup>1,2</sup>



Oral squamous cell carcinoma is the most common cancer of the mouth and over 55% of patients are diagnosed in advanced stages<sup>3</sup>

Early-stage detection is, therefore, key to reducing the disease burden and improving patient survival and QoL<sup>3,4</sup>



Management of mouth cancer requires a multimodal approach, and clinical decision-making can be complex<sup>1,5</sup>

### Treatment considerations<sup>1,4,5</sup>



Clinical presentation



Cosmetic impact—lowered self-esteem due to appearance



Presence of a care giver



Patient symptoms



Psychological impact



Dental care for regular dental assessment



Treatment-related side effects



Treatment intolerance and discontinuation



Dietary advice



Post-operative care  
• Oral rehabilitation



QoL



Appropriate use of hygienist/therapist services



Physical or functional outcomes—difficulties in eating, chewing, speaking, and swallowing



Patient's social conditions



Access to a dental professional either in a hospital setting or practice



A multidisciplinary team (MDT), which comprises various experts who meet weekly, is an important part of patient care in mouth cancer<sup>4</sup>

It combines the expertise, knowledge, and skills of multiple specialists<sup>1,4,5</sup>



Offers patient-centric care and addresses patient concerns



Monitors disease progression and treatment response



Improves patient's treatment adherence, compliance, and outcomes



Revises treatment plan in case of recurrence



Conducts disease evaluation prior to commencement of treatment



Improves clinical trial screening and patient recruitment



Devises an optimum treatment plan

# Components of an MDT<sup>1,4</sup>

## Core team



**Surgeons—head and neck, reconstructive, and oral and maxillofacial**

- Perform removal and reconstruction of cancer-affected regions



**Clinical oncologists**

- Involved in disease staging, treatment planning, and disease monitoring



**Pathologists**

- Contribute to the staging of the patient, assist surgeons in demarcating tumour margins, and assess the margin of the surgical specimen



**Radiologists**

- Offer assistance in image analysis



**Radiotherapists**

- Plan and perform radiotherapy when indicated



**Oral medicine specialists**

- Contribute to disease staging, treatment planning, and disease monitoring



**Meeting coordinators**

- Organise MDT meetings and ensure patient documentation



**Dieticians**

- Management of nutrition and support in eating and swallowing



**Speech and language therapists**

- Vocal rehabilitation and assistance in readjustment



**Prosthodontists\***

- Oral rehabilitation, use of prosthetics and implants
- Prosthodontist services in the pre-operative planning phase of dental assessment prior to surgery, radiotherapy, or combined therapy



**Data managers**

- Offer clerical support

## Extended team and ancillary specialist services



**Dental hygienists/therapists**

- Offer long-term support in maintaining oral hygiene and help to prevent gum diseases and dental decay



**Clinical psychologists**

- Help patients with psychological distress management post-treatment



**Anaesthetists**

- Assist in complex surgical procedures



**Pain management specialists**

- Advise on pain management during treatment



**Palliative care**

- Support advanced and terminally ill patients



**Benefits advisors**

- Offer advice regarding financial assistance



**Dermatologists**

- Advise on skin cancer



**Physiotherapists**

- Support patients with head and neck mobility



**Social workers**

- Help patients with psychological stress management



**Specialist nurses**

- Work with nursing staff to provide direct patient care



**Gastroenterologists and geriatric specialists**

- Offer assistance to patients who need a prophylactic feeding tube, particularly older, high-risk patients



**Dental technicians**

- Assist the prosthodontist team
- Create surgical cutting guides using computer-aided-design and computer-aided-manufacturing and custom 3D printed reconstruction plates, incorporating implant placement guides



**Counsellors**

- Offer support to mitigate the physical and psychological impact of cancer on patients and caregivers
- Arrange social gatherings, support groups, and funding for travel and speech provision\*\*
- Develop self-help and cookery books suited for post-radiotherapy effects\*\*

\*Also referred to as restorative dental specialists | \*\*May not be applicable to all centres, but some head and neck cancer charities may offer these provisions

# Impact of MDTs on the management of patients with mouth cancer<sup>1,4-6</sup>



Holistic assessment of patients' needs



Improve survival and patient outcomes following MDT discussion



Reduce the time between diagnosis and treatment



Clear and concise decision-making with patient involvement



Improve patient-centric care coordination



Account for the multifactorial nature of mouth cancer



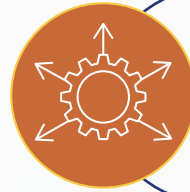
Better adherence to clinical guidelines



Improve patient's QoL



Collaborative evaluation of staging, treatment planning, management, and long-term support



Distribution of responsibilities across various medical personnel



Comprehensive treatment plan based on patient's disease, comorbidities, and treatment goals



Knowledge exchange across multiple domains



**A large proportion of newly diagnosed patients with mouth cancer are managed using standard care without MDTs, resulting in<sup>7</sup>:**



Perceived high costs



Perceived inefficiency



Lack of standardisation



Lack of institutional implementation

## **Future directions to improve the role of MDTs in the management of patients with mouth cancer<sup>1,4,5</sup>**



Standardise the implementation of MDT groups across various healthcare institutions



Devise an individualised treatment approach based on clinical evidence and updated guidelines



Hold regional meetings every 5 years to discuss and confirm standardisation across units, as well as peer-review processes to help maintain care standards\*



Promote mouth cancer-specific training programs, given the limited number of head and neck medical oncologists



Integrate clinical and translational research into MDT discussions



Decentralisation of patients with mouth cancer care through virtual platforms to help patients in regions with limited resources

\*This may not be applicable to all units but only to units that lie in close proximity to each other

### **Key messages**

Mouth cancer is a multifactorial disease that can significantly impair patients' normal functions, psychological state, and QoL

Management of mouth cancer requires a multidisciplinary approach through the cooperation of multiple medical and non-medical specialists

Implementation of MDTs in the management of patients with mouth cancer can significantly improve patient care, survival, long-term outcomes, and QoL

### **References**

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