

Survey on essential facilities for management of oral cancers at Oral and Maxillo-Facial Units, Sri Lanka - 2021



National Cancer Control Programme

Ministry of Health

Sri Lanka

2022



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Message from the Director - National Cancer Control Programme

The National Cancer Control Programme is the focal point in the Ministry of Health for cancer control activities in Sri Lanka. It is evident from the data of the National Cancer Registry; oral cancer has significantly contributed to the cancer burden over the years since it is the commonest cancer among males and the second most common cancer among all in Sri Lanka. The National Cancer Control Programme through the oral cancer unit works under several strategic directions to reduce the oral cancer burden in Sri Lanka. Improving diagnosis and treatment facilities is one of the key strategic directions identified by the programme.

Majority of oral cancer patients at some point are managed at Oral and Maxillo-Facial units (OMF) in Sri Lanka. Therefore, facilities available for patient management play a vital role on improving quality of care and the treatment outcomes. There were 32 functioning OMF units within the hospital network from base hospitals and above during the year 2021. However, the facilities available at OMF units have not been assessed. Furthermore, International Atomic Energy Agency (IAEA), World Health Organization (WHO), and the Ministry of Health carried out an *imPACT* review in 2019, and Sri Lanka College of Oncologists recommended conducting a facility survey to identify the available facilities at OMF units, in order to improve the management outcomes of patients with Oral Cancer and Oral Potentially Malignant Disorders. Hence, National Cancer Control Programme conducted a facility survey in all OMF Units during the year 2021 and generated the present report for future reference.

As the Director of the National Cancer Control Programme, I wish to place on record my sincere appreciation for the commitment provided by the partners and contributors of this project. My earnest thanks go to the College of Oral and Maxillofacial Surgeons for their guidance and support throughout the survey. I wish to thank Dr. A.H.T.S. Karunathilake for providing his expertise during the questionnaire development to identify the facilities in the OMF units. I also acknowledge the role played by all the OMF Surgeons and the staff of OMF units for participating in the survey. I wish to commend the services provided by Dr. U.S. Usgodaarachchi, Head of Oral Cancer Unit and his research team in this regard and completing this project on time.



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Executive summary

Oral cancer continues to be the second commonest cancer in Sri Lanka with a rising trend. Management of oral cancer is complex that requires different therapeutic approaches, involving multidisciplinary care. Therefore, continuous upgrading of facilities in hospitals for the management of oral cancer is essential to meet the rising oral cancer burden. In this regard, strengthening of facilities in Oral and Maxillo-Facial (OMF) units is important as surgery is the main treatment modality for oral cancer. Therefore, the aim of this survey was conducted to identify the facilities available for management of oral cancer at OMF units in Sri Lanka.

Thirty-two OMF units in 29 hospitals were included in the survey. Seven key dimensions were assessed to identify the existing facilities in OMF units. Data were collected in 2021 regarding the OMF unit performance of 2020 using a pre-tested self-administered questionnaire. Data were entered and analysed using the Microsoft Excel and SPSS (version22.0) software. The facility norms were developed for Government hospitals with the consultation of the College of OMF Surgeons after scrutinizing the results of the facility survey.

The key finding of the facility survey was the maldistribution of facilities for management of oral cancer in OMF units irrespective of the type of hospital. In addition, services related to provision of multidisciplinary care were underdeveloped in hospitals with OMF units. Despite the above weaknesses, majority of OMF units have managed to initiate surgical treatment of oral cancer within one month of initial registration of patients.

Improving deficiencies identified at OMF units and other supporting services in phase-out manner is needed for optimal oral cancer management. Initially, priority should be given for the provision of essential facilities in all the OMF units. The recommended list of facilities required for 2025 is given in the annexure 2.

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Abbreviations

| | |
|---------------|--|
| ASIR | Age standardized incidence rate |
| BH | Base Hospital |
| CNTH | Colombo North Teaching Hospital |
| CSTH | Colombo South Teaching Hospital |
| CT | Computed Tomography |
| CBCT | Cone Beam Computed Tomography |
| CoE | Centre of Excellence |
| DentH | Dental Hospital |
| DGH | District General Hospital |
| GH | General Hospital |
| HO | House Officer |
| ICU | ICU Intensive Care Unit |
| IAEA | International Atomic Energy Agency |
| IOPA | Intra Oral Peri-Apical |
| <i>ImPACT</i> | <i>Integration mission of Programme of Action for Cancer Therapy</i> |
| MoH | Ministry of Health |
| MDT | Multi-Disciplinary tumour Boards |
| NCCP | National Cancer Control Programme |
| NDHSL | National Dental Hospital Sri Lanka |
| NH | National Hospital |
| NO | Nursing Officers |
| OMF | Oral and Maxillo-Facial |
| OC | Oral Cancer |
| OPMD | Oral Potentially Malignant Disorders |
| OPG | Orthopantomagram |
| PGH | Provincial General Hospital |
| SKS | Saukya Karya Sahayaka |
| SHO | Senior House Officer |
| SPSS | Statistical Package for the Social Sciences |
| TH | Teaching Hospital |
| WHO | World Health Organization |

1. Introduction

1.1. Role of National Cancer Control Programme

National Cancer Control Programme (NCCP) is the national focal point for prevention and control of cancers in Sri Lanka. The NCCP coordinates a comprehensive programme for control of cancers by integrating evidence-based strategies and improving health systems, by focusing on primary prevention, early detection, diagnosis and treatment, rehabilitation, survivorship, and palliative care, taking into account the cancer morbidity and mortality pattern and the current health care infrastructure in the country.

Oral cancer unit of NCCP is responsible for the prevention, early detection, improving diagnostic services of oral cancer (OC) in Sri Lanka, with close liaison with all development actors, partners, and bi-lateral and multi-lateral donors in Sri Lanka. It also provides technical support, assistance, and guidance to provinces, districts and other organizations and agencies to improve quality, supply and access to prevention, early detection, & diagnostic services of oral cancers.

1.2. Burden of oral cancer

Cancer persists to be one of the leading causes of morbidity and mortality worldwide, exerting tremendous physical, emotional, and financial strain on individuals, families, communities, and health systems. Due to the demographic transition and the prevalence of risk factors, the cancer burden in Sri Lanka is on the rise. In Sri Lanka deaths due to cancers is the 2nd leading cause of deaths in government hospitals from 2010 and 2016. In 2019, it was ranked as the third leading cause of death¹. According to Global Cancer Observatory (GLOBOCAN), in the year 2020 there were 16691 deaths due to cancer in Sri Lanka².

Out of all cancers, OC continues to be a major public health problem in the Indian subcontinent where it ranks among the top three of all types of cancer. The incidence and pattern of the disease is mainly attributed to the combined effect of ageing of the population and the prevalence of disease-specific risk factors³. Therefore, oral cancer control is considered as a regional priority.

Cancers of lip, oral cavity ranks the second commonest type, of all cancers in Sri Lanka. It is the number one cancer in males with an Age Standardized Incidence Rate (ASIR) of 19.1 per 100,000 population and among the eighth among females with an ASIR of 4.3 per 100,000 population. It accounts for 2759 (8.7%) all cancers reported in the country and hence oral cancer control is quickly becoming a national health priority.

1.3. Oral and Maxillo-Facial Units

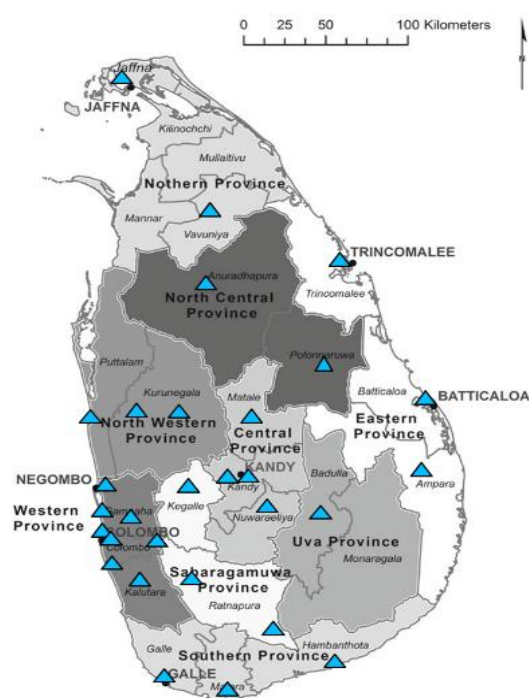
Oral and Maxillo-Facial (OMF) units are specialised units that provide comprehensive care to various pathological aspects of disease and conditions related to oral cavity, jaws and head and neck region which includes dealing with the burden of oral pre-cancer and cancer of oral cavity.

A Consultant OMF Surgeon, who is the clinical lead of the unit, heads each unit. He has a designated supporting staff of Senior House Officer (SHO), House Officer (HO), Nursing Officers (NO), and Attendants/SKS.

In the year 2019, a total number of 295,281 patients were treated in 32 OMF units in Sri Lanka. Total number of Oral Potentially Malignant Disorders (OPMD) cases treated in all the OMF units in Sri Lanka in 2019 was 3,553. Total number of biopsies confirmed oral cancer patients treated in all the OMF clinics in Sri Lanka was 1,967 in the year 2019⁴.

When a patient with OC is registered in the OMF unit, the initial management of the patient until the completion of treatment is carried out at the unit. Management of OC/OPMD is complex, which needs special attention on organizing review visits, multiple investigations, surgeries, and multidisciplinary approach in patient management to deliver quality patient care. Therefore, availability of adequate facilities in OMF units is of utmost importance to provide optimum care to the patients.

1.4. Distribution of Oral and Maxillo-Facial units by the year 2020



According to the Annual Health Bulletin of 2019, there were 643 curative care hospitals in the government health sector who is the main curative care provider in the country. The specialized care services are provided through Base (BH), District General (DGH), Provincial General (PGH), Teaching (TH), and some selected specialized hospitals¹.

There are 32 functioning OMF units in 29 hospitals, covering 21 Districts in Sri Lanka. Moneragala, Mullativu, Mannar and Kilinochchi districts did not have any OMF coverage in the year 2020 (Figure 1.1).

Figure 1.1. Distribution of OMF units in Sri Lanka 2020

There are 09 cancer treatment Centres of Excellence (CoE) in each Province of Sri Lanka. Of them, 08 CoEs have OMF units except in Apeksha Hospital.

National Dental Hospital of Sri Lanka (NDHSL) and Dental Hospital (DentH) Peradeniya which is jointly managed by TH Peradeniya and the Faculty of Dental Sciences, University of Peradeniya, are two specialized hospitals for dental care in Sri Lanka. Five OMF units are functioning at the two specialised hospitals for dentistry.

There are 11 OMF units placed in National Hospitals (NH)/Teaching Hospitals (TH) category, and 01 unit in one Provincial General Hospital (PGH). There are 15 OMF units placed in District General Hospitals (DGH) and Base Hospitals (BH). The distribution of OMF units according to the types of Institutions is presented in the table 1.2.

Table 1.1: The distribution of hospitals and OMF units - 2020

| Type of Institution | Total Number of Institutions | Institutions with OMF Units | Total no. of OMF units |
|------------------------------|-------------------------------------|------------------------------------|-------------------------------|
| Specialized Dental hospitals | 02 | 02 | 05 |
| National/Teaching Hospitals | 18 | 11 | 11 |
| Provincial General Hospitals | 02 | 01 | 01 |
| District General Hospitals | 19 | 14 | 14 |
| Base Hospitals | 77 | 01 | 01 |
| Total | 118 | 29 | 32 |

2. Methodology

2.1 Objectives

The management outcomes of oral cancers to a large extent dependant on the facilities available for management of oral cancers. The majority of oral cancers are treated at OMF units in the government hospitals of Sri Lanka.

Therefore, a facility survey was conducted to identify the available facilities at OMF units for management of OC and OPMD based on the recommendations made by *imPACT* review 2019, which was conducted by International Atomic Energy Agency (IAEA), & World Health Organization (WHO) and the Ministry of Health together with Sri Lanka College of Oncologists.

Primary objectives of the facility survey were,

- To identify the existing facilities at OMF units for management of OPMD/OC in Sri Lanka
- To identify the gaps of facilities in OMF units in Sri Lanka.
- To improve the quality of OMF units by improving the facilities in an organized manner

2.2 Data collection tool

A questionnaire was developed with the resource persons at the National Dental Hospital of Sri Lanka. The draft questionnaire was pretested at OMF unit - Teaching Hospital Kalubowila to standardize questionnaire to meet the national requirement of facilities at OMF units. The questionnaire was designed in the English language. The questionnaire is attached in Annexure 1.

2.3 Data collection method

The questionnaire was initially designed as an interviewer-administered questionnaire. However, due to COVID outbreak, all OMF units except the units in the Western Province, sent their responses by post.

2.4 Data entry, analysis and presentation

Data were entered and analysed using the Microsoft Excel and Statistical Package for the Social Sciences (SPSS) (version 22.0) software. The questions with less than 40% response rate were excluded from data analysis. Based on the results, facility norms were developed to manage the patients with OPMD and OC at OMF units in Government Hospitals with the consultation of the College of OMF Surgeons. Initial priority list was prepared to be completed in 2025 for the provision of essential facilities in a uniform manner.

3. Results

3.1. Average time taken to complete the management of oral cancer patient

During the facility survey time taken to complete different procedures during the management of OC patients were assessed. This was important to identify the delays in OC patient management due to the inadequacy of facilities at various levels. The results are given in table 3.1.

Table 3.1: Average time durations for OC management at OMF units

| Hospital category | Name of the hospital | Avg. time for histological confirmation (days) | Avg. time to complete investigations (days) | Avg. time to surgery from registration (days) | Perceived delay for OC management by OMF surgeon |
|-------------------|----------------------|--|---|---|--|
| Uni/TH | DentH Peradeniya | 14 | 14-21 | 30 | Ix, ORx, |
| NH | NDHSL | 14 | 7-14 | 21 | Ix |
| | NH Kandy | 7 | 7 | 7 | Ix, ICU |
| TH | TH Anuradhapura | 30 | 7 | 14 | - |
| | TH Batticaloa | 14 | 60-90 | 60 | - |
| | TH Jaffna | 14 | 30 | 60-90 | Ix, ORx, ICU, TH |
| | CSTH Kalubowila | 14 | 14 | 21 | TH |
| | TH Kalutara | 7 | 14 | 14 | ICU |
| | TH Karapitiya | 12-30 | 7-14 | 7-14 | - |
| | TH Kuliyaipitiya | 14 | 14 | 21 | - |
| | TH Kurunegala | 14 | 2 | 14 | - |
| | CNTH Ragama | 14-21 | 7 | 21 | ORx, ICU, TH |
| | TH Ratnapura | 10 | 14 | 15 | - |
| PGH | PGH Badulla | 28-42 | 21-28 | 21-28 | Ix, ORx, ICU, TH |
| DGH | DGH Ampara | 4-5 | 4-5 | <14 | - |
| | DGH Awissawella | 5-10 | 7 | 7 | - |
| | DGH Chilaw | 2-3 | >3 | 30 | - |
| | DGH Embilipitiya | 7 | 7 | 14 | ORx, TH, ICU |
| | DGH Gampaha | 3-5 | 5-7 | 7 | Ix, ORx, TH, ICU |
| | DGH Hambantota | 21 | 20 | 30 | Ix, ORx, TH |
| | DGH Kegalle | 7-14 | 7-14 | 7-14 | Ix, ICU |
| | DGH Matale | 14 | 7 | 30 | Ix, TH, |
| | DGH Matara | 2-3 | 2-3 | Case dependant | ORx |
| | DGH Negambo | 7 | 14 | 21 | - |
| | DGH Nuwara Eliya | 7 | 2-3 | 14 | - |
| | DGH Polonnaruwa | 7 | 3 | 10 | - |
| | DGH Trincomalee | 21 | 30 | 21 | Ix, ORx, TH, ICU |
| | DGH Vavuniya | 14 | 14 | 30 | Ix, TH, ICU |
| BH | BH Panadura | 7 | 14 | 10 | ICU- |

Ix delay in investigations, ORx: Obtaining Rx from other institutions, TH: difficulty of getting theatre time, ICU: difficulty of getting ICU bed

Time taken for histological confirmation

Histological confirmation is essential for OC cancer management since it determines the mode of treatment, extent of treatment including follow-up care. Average time for histological confirmation after initial registration of the patient in the OMF clinic was assessed in days. Eleven out of 32 OMF units received histological confirmation within 07 days, while 14 units completed within 7-14 days. However, TH Anuradhapura, CNTH Ragama, DGH Hambantota, and DGH Trincomalee took more than 14 days to confirm histological diagnosis of OC patients.

Time taken to complete investigations

Average time taken to complete investigations following the initial registration of patients in OMF units was assessed in days. All units completed the investigations of OC patients within 14 days except DentH Peradeniya, TH Batticaloa, DGH Hambantota, and DGH Trincomalee that took more than 14 days to complete investigations.

Time taken to undergo surgery

When average time to undergo surgery following the completion of investigations was assessed, all the units except TH Batticaloa, PGH Badulla have managed to initiate surgery within 07-21 days.

According to the OMF surgeons, the main perceived areas of delays for management of OC were, to complete investigation procedures, finding an Intensive Care Unit (ICU) and to reserve a theatre time.

3.2. Distribution of human resources at OMF units

The distribution of human resources in OMF units are presented in table 3.2.

Senior House Officers (SHO) /House Officers (HO)

When NH/TH/PGH hospitals are concerned, there were 11 units with 5 or more SHO/HOs, from a total of 14 units. The OMF units in TH Batticaloa, TH Kuliyaipitiya and TH Kalutara had 04 SHO/HOs each. OMF units in DGH Vavuniya and BH Panadura had 3 SHO/HOs, while DGH Polonnaruwa had 2 SHO/HOs and DGH Trincomalee had only one SHO/HO. It was noted that DGH Embilipitiya was functioning without a SHO/HO.

Nursing Officers

Eleven out of NH/TH/PGH hospitals had two designated NOs or more. The Csth Kalubowila, TH Kalutara and TH Kuliyaipitiya had one nursing officer. Eleven DGH/ BH units functioned with 2 NOs or more while, DGH Awissawella, DGH Gampaha, DGH Negambo, DGH Trincomalee functioned with only one NO.

Table 3.2: Availability of human resources at OMF units

| Hospital category | Name of the hospital | OMF Surgeon | SHO+HO | Nursing officers | Attendants +SKS |
|--------------------|----------------------|-------------|--------|------------------|-----------------|
| Uni/TH | DentH Peradeniya | 4 | 12 | 3 | 2 |
| National Hospitals | NDHSL | 5 | 28 | 8 | 16 |
| | NH Kandy | 2 | 7 | 4 | 3 |
| Teaching Hospitals | TH Anuradhapura | 1 | 7 | 4 | 3 |
| | TH Batticaloa | 1 | 4 | 3 | 2 |
| | TH Jaffna | 1 | 5 | 3 | 3 |
| | CSTH Kalubowila | 1 | 8 | 1 | 3 |
| | TH Kalutara | 1 | 4 | 1 | 5 |
| | TH Karapitiya | 2 | 5 | 4 | 5 |
| | TH Kuliyaipitiya | 1 | 4 | 1 | 1 |
| | TH Kurunegala | 1 | 9 | 3 | 3 |
| | CNTH Ragama | 1 | 8 | 2 | 3 |
| | TH Ratnapura | 1 | 7 | 2 | 3 |
| PGH | PGH Badulla | 1 | 6 | 3 | 4 |
| DGH | DGH Ampara | 1 | 4 | 2 | 3 |
| | DGH Awissawella | 1 | 6 | 2 | 1 |
| | DGH Chilaw | 1 | 4 | 1 | 2 |
| | DGH Embilipitiya | 1 | 0 | 2 | 1 |
| | DGH Gampaha | 1 | 4 | 2 | 1 |
| | DGH Hambantota | 1 | 5 | 2 | 7 |
| | DGH Kegalle | 1 | 5 | 3 | 3 |
| | DGH Matale | 1 | 5 | 3 | 2 |
| | DGH Matara | 1 | 4 | 3 | 2 |
| | DGH Negambo | 1 | 5 | 1 | 1 |
| | DGH Nuwara Eliya | 1 | 4 | 2 | 2 |
| | DGH Polonnaruwa | 1 | 2 | 2 | 2 |
| | DGH Trincomalee | 1 | 1 | 1 | 1 |
| | DGH Vavuniya | 1 | 3 | 1 | 2 |
| BH | BH Panadura | 1 | 3 | 2 | 2 |

Attendants/SKS

Ideally, there should be one Attendant or SKS per dental chair and considering the operative staff, at least 03 to be available for smooth functioning of an OMF unit. According to the table 3.2, two Attendant/SKS were available in 09 Units while 01 Attendant/SKS were available in 06 Units. When considering NH/TH/PGH, 02 Attendant/SKS were available in DentH Peradeniya and TH Batticaloa while 01 Attendant/SKS were available in TH Kuliyaipitiya. When DGH/BH were considered, DGHs Awissawella, Gampaha, Negambo, Trincomalee, Embilipitiya functioned with only 01 Attendant/SKS.

3.3. Availability of infrastructure facilities in OMF units for management of oral cancer

The dental chairs, straight hand-pieces, suction apparatus, diathermy apparatus (OMF Unit), and punch biopsy forceps in adequate quantities are mandatory for smooth functioning of units and care provision without delays. The availability of clinic facilities within the OMF unit for management of OC is presented in table 3.3.

Table 3.3: Clinic facilities available within OMF units for management of OC

| Hospital category | Name of the hospital | Dental Chair | Straight hand piece | Suction apparatus | Diathermy apparatus | Punch biopsy forceps |
|-------------------|----------------------|--------------|---------------------|-------------------|---------------------|----------------------|
| Uni/TH | DentH Peradeniya | 4 | 2 | 2 | 0 | 0 |
| NH | NDHSL | 20 | 20 | 8 | 0 | 0 |
| | NH Kandy | 3 | 5 | 2 | 1 | Y |
| TH | TH Anuradhapura | 3 | 4 | 3 | 0 | 0 |
| | TH Batticaloa | 2 | Y | Y | Y | 0 |
| | TH Jaffna | 3 | 2 | 2 | 1 | 0 |
| | CSTH Kalubowila | 3 | 5 | 1 | 0 | 0 |
| | TH Kalutara | 5 | 5 | 2 | 1 | 1 |
| | TH Karapitiya | 4 | 4 | 4 | 1 | 0 |
| | TH Kuliyaipitiya | 2 | 2 | 1 | 0 | 0 |
| | TH Kurunegala | 2 | 1 | 1 | 1 | 0 |
| | CNTH Ragama | 5 | 2 | 2 | 2 | 2 |
| | TH Ratnapura | 2 | 4 | 2 | 0 | 0 |
| PGH | PGH Badulla | 3 | 3 | 2 | 1 | 0 |
| DGH | DGH Ampara | 2 | 2 | 1 | 1 | 0 |
| | DGH Awissawella | 3 | 3 | 2 | 0 | 0 |
| | DGH Chilaw | 1 | 1 | 1 | 0 | 0 |
| | DGH Gampaha | 3 | 1 | 1 | 0 | 0 |
| | DGH Embilipitiya | 1 | 2 | 1 | 0 | 0 |
| | DGH Hambantota | 2 | 2 | 2 | 1 | 0 |
| | DGH Kegalle | 3 | 1 | 3 | 1 | 0 |
| | DGH Matale | 3 | 4 | 2 | 0 | 0 |
| | DGH Matara | 3 | 6 | 2 | 1 | 2 |
| | DGH Negambo | 3 | 3 | 1 | 0 | 0 |
| | DGH Nuwara Eliya | 3 | 2 | 1 | 1 | Y |
| | DGH Polonnaruwa | 3 | 3 | 2 | 1 | 0 |
| | DGH Trincomalee | 2 | 1 | 1 | 1 | 0 |
| | DGH Vavuniya | 2 | 2 | 1 | 1 | 2 |
| BH | BH Panadura | 4 | 2 | 2 | 0 | 0 |

Y: Available

Dental chairs

There were 10 OMF units functioning with less than three dental chairs. TH Batticaloa, TH Kurunegala, TH Ratnapura, TH Kuliypitiya and DGH Ampara, DGH Chilaw, DGH Embilipitiya, DGH Hambantota, DGH Trincomalee, DGH Vavuniya were the institutes with less than 3 dental chairs in Sri Lanka.

Straight hand-pieces

During the facility survey, it was revealed that 5 units had Less than 2 straight hand-pieces: TH Kurunegala, DGH Chilaw, DGH Gampaha, DGH Kegalle and DGH Trincomalee.

Suction apparatus

Twelve units were functioning with only one suction apparatus. They are TH Batticaloa, TH Kurunegala, Csth Kalubowila, TH Kuliypitiya and DGH Ampara, DGH Chilaw, DGH Gampaha, DGH Embilipitiya, DGH Negambo, DGH Nuwara Eliya, DGH Trincomalee, DGH Vavuniya.

Diathermy facilities

There were 13 OMF units functioning without chair-side diathermy facilities. The two specialised hospitals Denth Peradeniya, NDHSL were among them. In addition, TH Anuradhapura, TH Ratnapura, Csth Kalubowila, TH Kurunegala and DGH Awissawella, DGH Chilaw, DGH Gampaha, DGH Embilipitiya, DGH Matale, DGH Negambo, DGH Panadura did not have any diathermy facilities at the clinic.

Punch biopsy forceps

Only 5 OMF units from the total 32 units had Punch-biopsy forceps.

3.4. Availability of investigative facilities for diagnosis of oral cancer

The investigative facilities for diagnosis and management of OC patients are given in table 3.4.

Table 3.4: Facilities available for diagnosis of OC by OMF units

| Hospital category | Name of the hospital | Dental IOPA | OPG | CBCT | Oral Pathology | Ultrasound (clinic) |
|-------------------|----------------------|-------------|---------|---------|----------------|---------------------|
| Uni/TH | DentH Peradeniya | √ | √ | √ | √ | X |
| NH | NDHSL | √ | √ | √ | √ | X |
| | NH Kandy | √ | DHP | DHP | DTHP | X |
| TH | TH Anuradhapura | √ | √ | DHP | DTHP | X |
| | TH Batticaloa | Private | Private | X | Gen. Path | X |
| | TH Jaffna | √ | √ | √ | NDHSL/DHP | X |
| | CSTH Kalubowila | √ | Private | NDH | NDHSL | X |
| | TH Kalutara | √ | √ | NDH | DTHP | X |
| | TH Karapitiya | √ | √ | √ | √ | X |
| | TH Kuliapitiya | √ | X | NDH | X | X |
| | TH Kurunegala | √ | √ | √ | √ | X |
| | CNTH Ragama | √ | √ | NDH | NDHSL | X |
| | TH Ratnapura | √ | THP/DHP | THP/DHP | DTHP | X |
| PGH | PGH Badulla | √ | X | X | X | X |
| DGH | DGH Ampara | √ | X | X | X | - |
| | DGH Awissawella | √ | Private | Private | X | - |
| | DGH Chilaw | √ | X | X | X | - |
| | DGH Embilipitiya | √ | X | X | X | - |
| | DGH Gampaha | X* | √ | DHP | NDHSL/DTHP | - |
| | DGH Hambantota | √ | THK | DHP | - | - |
| | DGH Kegalle | √ | Private | DHP | √ | - |
| | DGH Matale | √ | DHP | NDH | DTHP | - |
| | DGH Matara | √ | THK | THK | THK | - |
| | DGH Negambo | √ | NHSL | NHSL | NDHSL | - |
| | DGH Nuwara Eliya | √ | DHP | DHP | DTHP | - |
| | DGH Polonnaruwa | √ | DHP | DHP | DTHP | - |
| | DGH Trincomalee | √ | √ | X | X | - |
| | DGH Vavuniya | √ | X | Private | X | - |
| BH | BH Panadura | X* | X | X | X | - |

√: Available

X: Not available

X*: Not functioning

- Data not submitted

Radiological facilities

IOPA and OPG are two main radiological investigations needed for patient care in the Maxillo-Facial region. During the facility survey, it was found that there were 03 institutions without IOPA facilities namely TH Batticaloa, DGH Gampaha and BH Panadura. There were 18 institutions without OPG facilities including some hospitals in NH/TH/PGH category. They were NH Kandy, TH Batticaloa, Csth Kalubowila, TH Kuliyaipitiya and PGH Badulla.

It was noted that facilities for CT, Ultrasound, Haematology, and Histopathology was available in all institutions. However, some investigative facilities that were specific to management of dental patients were found to be lacking in many institutions.

The CBCT facilities were absent in 8 out of 13 NH/TH hospitals and CAD/CAM were not available in 05 out of 13 designated institutions.

Oral pathology

The facility of oral pathology was not available in 05 provinces namely Sabaragamuwa, North Central Northern, Eastern, North Western, and Uva provinces.

3.5. Availability of in-ward and theatre facilities for management of oral cancer patients

It was agreed that bed strength in National and Teaching Hospitals were 20 for males and 20 for females. For PGH it was 18 beds each for males and females; for DGH: 15 beds each for males and females and for BH: 10 beds each for males and females (either designated or shared). Facilities available at theatre and wards for management of OC patients at OMF units are presented in table 3.5.

Table 3.5: Facilities available at theatre and wards for management of OC patients at OMF units

| Hospital category | Name of the hospital | No. of beds - male | No. of beds - female | Theatre time full days | Theatre time hours per week |
|-------------------|----------------------|--------------------|----------------------|------------------------|-----------------------------|
| Uni/TH | DentH Peradeniya | 25* | 25* | 7 | 24x7 |
| NH | NDHSL | 18* | 18* | 7 | 24x7 |
| | NH Kandy | 14* | 14* | 2 | 16 |
| TH | TH Anuradhapura | 16 | 12 | 1 | 11 |
| | TH Batticaloa | 5 | 5 | 0.5 | 6 |
| | TH Jaffna | 1 | 1 | 1 | 8 |
| | CSTH Kalubowila | 8* | 5* | 2 | 16 |
| | TH Kalutara | 14 | 8 | 1 | 12 |
| | TH Karapitiya | 10* | 10* | 2 | 42 |
| | TH Kuliypitiya | 6* | 6* | 2 | 12 |
| | TH Kurunegala | 18* | 12* | 2 | 16 |
| | CNTH Ragama | 21* | 21* | 2 | 12 |
| | TH Ratnapura | 10* | 10* | 2 | 64 |
| PGH | PGH Badulla | 15* | 15* | 1 | 12 |
| DGH | DGH Ampara | 6* | 6* | 2 | 16 |
| | DGH Awissawella | 12 | 12 | 1 | 6 |
| | DGH Chilaw | 4 | 3 | 2 | 16 |
| | DGH Embilipitiya | 7 | 9 | 1 | 8 |
| | DGH Gampaha | 4 | 3 | 1 | 8 |
| | DGH Hambantota | 12* | 12* | 1 | 12 |
| | DGH Kegalle | 13* | - | 1 | 8 |
| | DGH Matale | - | - | 1 | 8 |
| | DGH Matara | 12 | 12 | 2 | 34 |
| | DGH Negambo | 12 | 12 | 1 | 10 |
| | DGH Nuwara Eliya | 4 | - | 1 | 8 |
| | DGH Polonnaruwa | 12 | 10 | 2 | 16 |
| | DGH Trincomalee | 7 | 7 | 1 | 8 |
| | DGH Vavuniya | 10 | 11 | 1 | 8 |
| BH | BH Panadura | 6 | - | 1 | 12 |

*Beds shared with other wards

- Not available

In-ward management for pre-surgical preparations and post-operative care are needed for OC patients. Therefore, adequate number of beds in identified wards are needed for smooth management of surgical patients. In many institutions, wards are shared with Eye, ENT, General Surgery, Rheumatology, and Dermatology disciplines etc. However, where NH/TH/PGH are concerned 04 hospitals namely TH Batticaloa, TH Jaffna, CSTD Kalubowila, TH Kuliyapitiya have less than 10 beds designated for OMF units.

A considerable theatre time is needed for management of OC patients. Therefore, available theatre time was assessed in OMF units. All units had theatre time of one full day or more per week except in TH Batticaloa and PGH Badulla.

3.6. Availability of facilities at theatre for management of oral cancer

Maxillo-Facial surgery for OC management is complex. The following instruments that are mandatory to carry out OMF surgeries were not available in many OMF units. Facilities available at theatre for management of OC patients in hospitals are given in table 3.6

Surgical drill and saws

The Surgical-drill and Saws were absent in TH Batticaloa, PGH Badulla, DGH Gampaha, DGH Embilipitiya and BH Panadura. The Osteosynthesis kits were not available in 17 out of 32 units including 3 NH/TH/PGH hospitals NH Kandy, TH Kurunegala, and TH Ratnapura. The Operating loops and head light were not available in 18 out of 32 Units, including TH Anuradhapura, TH Batticaloa, TH Jaffna, TH Kurunegala, CSTD Kalubowila, TH Kuliyapitiya, CNTH Ragama and PGH Badulla. The Laser facilities were not available in TH Jaffna, TH Anuradhapura, TH Ratnapura, TH Kurunegala, and PGH Badulla.

Operating microscopes

The Operating microscopes were only available DentH Peradeniya, NH Kandy, TH Ratnapura, DGH Vavuniya and DGH Trincomalee. Theatre facilities for frozen sections were available in DentH Peradeniya, NDHSL and DGH Chilaw.

Facilities for cryotherapy

The facilities for cryotherapy were available in DentH Peradeniya, NDHSL and DGH Negambo.

Digital reconstruction facilities

Digital reconstruction facilities were only available in DentH Peradeniya and NDHSL.

Doppler facilities

The hand-held Doppler were available in DentH Peradeniya and TH Anuradhapura.

Table 3.6: Facilities available at theatre for management of OC patients in hospitals

| Hospital category | Name of the hospital | Surgical drill and saws | Operating loops & head lights | Laser | Osteosynthesis kits | Operating microscope | Cryotherapy | Hand-held Doppler | Digital reconstruction facilities | Facilities for frozen sections | Piezo knife |
|-------------------|----------------------|-------------------------|-------------------------------|-------|---------------------|----------------------|-------------|-------------------|-----------------------------------|--------------------------------|-------------|
| Uni/TH | DentH Peradeniya | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| NH | NDHSL | ✓ | ✓ | ✓ | ✓ | X | ✓ | X | ✓ | ✓ | X |
| | NH Kandy | ✓ | ✓ | ✓ | X | ✓ | X | X | X | X | X |
| TH | TH Anuradhapura | ✓ | X | X | ✓ | X | X | ✓ | X | X | X |
| | TH Batticaloa | X | X | ✓ | ✓ | X | X | X | X | X | X |
| | TH Jaffna | ✓ | X | X | X | X | X | X | X | X | X |
| | CSTH Kalubowila | ✓ | X | ✓ | ✓ | X | X | X | X | X | X |
| | TH Kalutara | ✓ | ✓ | X | ✓ | X | X | X | X | X | X |
| | TH Karapitiya | ✓ | ✓ | ✓ | ✓ | X | X | X | X | X | ✓ |
| | TH Kuliyaipitiya | ✓ | X | X | ✓ | X | X | X | X | X | - |
| | TH Kurunegala | ✓ | X | X | X | X | X | X | X | X | X |
| | CNTH Ragama | ✓ | X | X | ✓ | X | X | X | X | ✓ | X |
| | TH Ratnapura | ✓ | ✓ | X | X | ✓ | X | X | X | X | ✓ |
| PDH | PGH Badulla | X | X | X | ✓ | X | X | X | X | X | X |
| DGH | DGH Ampara | ✓ | X | X | ✓ | X | X | X | X | X | X |
| | DGH Awissawella | ✓ | X | X | X | X | X | X | X | X | X |
| | DGH Chilaw | ✓ | ✓ | X | X | X | X | X | X | X | X |
| | DGH Embilipitiya | X | X | X | ✓ | X | X | X | X | X | X |
| | DGH Gampaha | X | X | X | X | X | X | X | X | X | X |
| | DGH Hambantota | ✓ | ✓ | X | X | X | X | X | X | X | X |
| | DGH Kegalle | ✓ | X | X | X | X | X | X | X | X | X |
| | DGH Matale | ✓ | ✓ | X | X | X | X | X | X | X | X |
| | DGH Matara | ✓ | X | X | X | X | X | X | X | X | X |
| | DGH Negambo | ✓ | ✓ | X | ✓ | X | ✓ | X | X | ✓ | X |
| | DGH Nuwara Eliya | ✓ | X | X | X | X | X | X | X | X | X |
| | DGH Polonnaruwa | ✓ | X | ✓ | X | - | X | X | X | X | X |
| | DGH Trincomalee | ✓ | X | X | X | ✓ | X | X | X | X | X |
| | DGH Vavuniya | ✓ | ✓ | ✓ | X | ✓ | X | X | X | X | X |
| BH | BH Panadura | X | X | X | X | X | X | X | X | X | X |

✓: Available X: Not available - Not submitted

3.7. Availability of other treatment modalities and supplementary services for management of oral cancer

Supportive services are important for overall management of the OC patients. Therefore, supportive services should be strengthened to improve overall patient care. In order to assess the available supportive services facility survey results were analysed. Results are given in table 3.7

Table 3.7: Other treatment modalities and supplementary services available for management of OC in hospitals

| Hospital category | Name of the hospital | Counselling services | MDTA/Tumour boards | Rehabilitation care | Prosthetic reconstruction services using dental lab facilities | Speech therapy | Nutrition support therapy | Link with Social services Dept. | Radiotherapy | Chemotherapy | Palliative care |
|-------------------|----------------------|----------------------|--------------------|---------------------|--|----------------|---------------------------|---------------------------------|--------------|--------------|-----------------|
| Uni/TH | DentH Peradeniya | ✓ | ✓ | X | ✓ | ✓ | X | X | X | X | X |
| NH | NDHSL | X | ✓ | X | ✓ | X | X | X | X | X | X |
| | NH Kandy | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| TH | TH Anuradhapura | X | X | X | X | ✓ | ✓ | X | ✓ | ✓ | ✓ |
| | TH Batticaloa | X | X | ✓ | X | ✓ | ✓ | X | ✓ | ✓ | X |
| | TH Jaffna | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | X* | X* | X |
| | CSTH Kalubowila | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | X | X | X | X |
| | TH Kalutara | ✓ | ✓ | ✓ | X | ✓ | ✓ | ✓ | X | ✓ | ✓ |
| | TH Karapitiya | X | ✓ | X | ✓ | ✓ | ✓ | X | ✓ | ✓ | ✓ |
| | TH Kuliyaipitiya | ✓ | X | ✓ | X | ✓ | X | X | X | X | X |
| | TH Kurunegala | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | X | ✓ | ✓ |
| | CNTH Ragama | X | X | X | X | ✓ | ✓ | X | X | ✓ | ✓ |
| | TH Ratnapura | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | X | ✓ | ✓ |
| PGH | PGH Badulla | X | ✓ | X | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| DGH | DGH Ampara | X | X | X | X | ✓ | X | X | X | X | X |
| | DGH Awissawella | ✓ | X | X | X | ✓ | ✓ | - | X | ✓ | ✓ |
| | DGH Chilaw | ✓ | ✓ | X | X | ✓ | ✓ | X | X | ✓ | X |
| | DGH Embilipitiya | X | X | X | X | ✓ | X | X | X | X | X |
| | DGH Gampaha | X | X | X | X | X | X | X | X | X | X |
| | DGH Hambantota | ✓ | ✓ | ✓ | X | ✓ | ✓ | X | X | ✓ | ✓ |
| | DGH Kegalle | ✓ | ✓ | ✓ | X | ✓ | ✓ | ✓ | X | X | ✓ |
| | DGH Matale | ✓ | X | ✓ | X | ✓ | ✓ | X | X | X | ✓ |
| | DGH Matara | ✓ | ✓ | ✓ | X | ✓ | ✓ | X | X | ✓ | X |
| | DGH Negambo | ✓ | - | ✓ | X | ✓ | ✓ | - | X | X | X |
| | DGH Nuwara Eliya | X | ✓ | X | X | X | ✓ | ✓ | X | ✓ | ✓ |
| | DGH Polonnaruwa | X | X | - | X | ✓ | - | - | X | ✓ | ✓ |
| | DGH Trincomalee | X | X | X | X | ✓ | ✓ | X | X | ✓ | ✓ |
| | DGH Vavuniya | ✓ | ✓ | X | X | ✓ | X | X | X | ✓ | ✓ |
| BH | BH Panadura | ✓ | ✓ | X | X | ✓ | ✓ | ✓ | X | X | X |

✓: Available X: Not available - Not submitted

The counselling services were not available in 18 out of 29 institutions with OMF units; Multi-Disciplinary Teams (MDT) and Tumour-boards were not available in 9 out of 29 institutions with OMF units. Rehabilitation care was not available in 15 institutions and prosthetic reconstruction facilities were not available in 19 institutions including 4 NH/TH/PDH hospitals. The speech therapy facilities were not available at 3 institutions namely NDHSL and DGH Gampaha and DGH Nuwara Eliya. The nutrition support therapy facilities were not available in 07 institutions. Link with social services department was not present in 17 OMF institutions. Radiotherapy services were not available in TH Ratnapura and TH Kurunegala. However, chemotherapy services were available in all OMF units attached to CoE for Cancer Treatment. Palliative care services were not available in 13/29 institutes with OMF units.

3.8. Facilities for oral cancer surveillance and data dissemination

Timely data collection, compilation, and reporting on new cancers reported to OMF units are one of the key necessities for timely OC surveillance.

All OMF units in the country maintain a written database for OC surveillance. Many institutions do not have facilities to maintain electronic data base. Designated desktops/laptops were not available in 17 OMF units and Internet facilities were not available in 22 institutions. The main mode of data dissemination was done via post. There were no assigned officers for management of OC data in 23 out of 32 OMF units. Facilities for OC surveillance and data dissemination at OMF units are given in table 3.8.

Table 3.8: Facilities for OC surveillance and data dissemination at OMF units

| Hospital category | Name of the hospital | Desktop/laptop designated to OMF unit | Internet facilities available for the unit | Assigned officer for oral cancer data management | Availability of paper based (Oral cancer register) or Electronic database | Data dissemination -By post/E-mail | Analyze oral cancer data of the unit? | Presented the oral cancer data recorded in the clinic |
|-------------------|----------------------|---------------------------------------|--|--|---|------------------------------------|---------------------------------------|---|
| Uni/TH | DentH Peradeniya | X | √ | X | W | P/E | √ | √ |
| NH | NDHSL | D/L | √ | √ | W/E | P | X | X |
| | NH Kandy | D | √ | √ | W/E | P | √ | √ |
| TH | TH Anuradhapura | D | X | X | W | P | X | X |
| | TH Batticaloa | X | X | X | W | P | √ | X |
| | TH Jaffna | D | √ | X | W/E | P | - | - |
| | CSTH Kalubowila | X | X | √ | W | P | X | X |
| | TH Kalutara | D | X | X | W/E | P | √ | √ |
| | TH Karapitiya | X | X | √ | W | P/E | √ | X |
| | TH Kuliyapitiya | X | X | X | W | P | - | - |
| | TH Kurunegala | D | √ | X | W | P | √ | √ |
| | CNTH Ragama | X | X | X | W | P | √ | √ |
| | TH Ratnapura | X | X | X | W | P | √ | X |
| PGH | PGH Badulla | D | X | X | W | P | √ | X |
| DGH | DGH Ampara | D | X | X | W | P | - | - |
| | DGH Awissawella | D | X | X | W/E | P | √ | √ |
| | DGH Chilaw | X | √ | X | W | P/E | X | X |
| | DGH Embilipitiya | X | X | X | W | P | - | X |
| | DGH Gampaha | X | X | X | W | P | X | - |
| | DGH Hambantota | X | X | X | W | P | √ | X |
| | DGH Kegalle | D | X | X | W | P | √ | √ |
| | DGH Matale | X | X | X | W | P | X | X |
| | DGH Matara | X | X | √ | W | P | X | X |
| | DGH Negambo | X | X | √ | W | P/E | √ | X |
| | DGH Nuwara Eliya | X | X | X | W | P | X | X |
| | DGH Polonnaruwa | X | X | X | W | P | √ | X |
| | DGH Trincomalee | D | X | X | W | P | √ | X |
| | DGH Vavuniya | D | X | X | W | P | √ | √ |
| BH | BH Panadura | D | √ | X | W/E | P | X | X |

D: Desktop L: Laptop W: Written E: Electronic P: Posted √: Available X: Not available

4. Conclusions

According to the survey conducted to identify the facility in OMF units in Sri Lanka, following conclusions were made.

- There was maldistribution of oral cancer care facilities in all OMF units.
- When oral cancer care facilities present at each hospital category was analysed, it was noted that there were some Teaching Hospitals, with lesser facilities than District General Hospitals. Therefore, it seems that the distribution of oral cancer care facilities is independent of the hospital category.
- When considering the supportive services, there were deficiencies of services such as, MDT/tumour boards, counselling services, prosthetic reconstruction care facilities, services for rehabilitation care and link with social services.

5. Recommendations

5.1. Recommendations to improve the facilities for diagnosis of oral cancer

The recommendations were based on the findings of the facility survey. When finalizing the facilities for OC management, other services provided by the units were also considered. The recommendations are given below. The decisions to prioritise the required facilities were made with the consultation of the College of OMF surgeons. The details of recommendations and the priority list are presented in table 7.1 in the annexure 2

IOPA facilities

IOPA, which is a basic radiological investigation facility, needed for management of dental diseases and associated alveolar bone pathologies should be present in all the hospitals with OMF units. Therefore, installation of IOPA facilities at TH Batticaloa is recommended. Moreover, the IOPA services at DGH Gampaha and BH Panadura should be made available by addressing the underline issues for non-functional status.

OPG facilities

OPG is also a special dental radiograph needed to manage patients. It is recommended to be available in all hospitals with OMF units. Therefore, OPG facilities should be provided to following hospitals.

| | | | | | |
|---------------|----|-----------------|----|--------------|----|
| NH Kandy | 01 | CSTH Kalubowila | 01 | TH Ratnapura | 01 |
| TH Batticaloa | 01 | TH Kuliypitiya | 01 | PGH Badulla | 01 |

CBCT scan facilities

CBCT scan facilities are also identified as essential radiographic investigations needed for management of OC. It is recommended to provide the facility to all National and Teaching hospitals with OMF units, at the first stage.

| | | | | | |
|-----------------|----|-----------------|----|--------------|----|
| NH Kandy | 01 | CSTH Kalubowila | 01 | TH Ratnapura | 01 |
| TH Anuradhapura | 01 | TH Kalutara | 01 | CNTH Ragama | 01 |
| TH Batticaloa | 01 | TH Kuliypitiya | 01 | | |

Oral Pathology facilities

It is recommended to expand the oral pathology facilities to all provinces. Therefore 5 units for oral pathology is recommended to be established in the following provinces

| | |
|------------------------|------------------|
| Sabaragamuwa Province | Eastern Province |
| North Central Province | Uva Province |
| Northern Province | |

5.2. Recommendations to improve the facilities with in the OMF units for management of oral cancer

Dental chairs

As the initial stage it was identified that all OMF units should be equipped with 3 dental chairs to avoid congestion and waiting time. Therefore, it is recommended to distribute 12 dental chairs in following OMF Units.

| | | | | | |
|------------------|----|------------------|----|-----------------|----|
| TH Batticaloa | 01 | DGH Ampara | 01 | DGH Trincomalee | 01 |
| TH Kuliyaipitiya | 01 | DGH Chilaw | 02 | DGH Vavuniya | 01 |
| TH Kurunegala | 01 | DGH Embilipitiya | 02 | | |
| TH Ratnapura | 01 | DGH Hambantota | 01 | | |

Straight hand-piece

Straight hand pieces are highly utilised in OMF units for local surgical procedures. They have a high turnover and should be functional and available in all OMF units. Therefore, it is recommended provide a minimum of 3 straight hand-pieces to all units. Based on this criteria, 21 hand pieces are recommended to be purchased for following units.

| | | | | | |
|------------------|----|------------------|----|------------------|----|
| DentH Peradeniya | 01 | DGH Ampara | 01 | DGH Trincomalee | 02 |
| TH Batticaloa | 01 | DGH Chilaw | 02 | DGH Nuwara Eliya | 01 |
| TH Jaffna | 01 | DGH Embilipitiya | 01 | DGH Vavuniya | 01 |
| TH Kuliyaipitiya | 01 | DGH Gampaha | 02 | BH Panadura | 01 |
| TH Kurunegala | 02 | DGH Hambantota | 01 | | |
| CNTH Ragama | 01 | DGH Kegalle | 02 | | |

Suction apparatus

Although it is ideal to have one suction apparatus to each dental chair, as the first stage it is recommended to provide 2 suction apparatus for each OMF unit. Therefore, 12 suction apparatuses should be distributed among following OMF units.

| | | | | | |
|------------------|----|------------------|----|------------------|----|
| TH Batticaloa | 01 | DGH Ampara | 01 | DGH Negambo | 01 |
| CSTH Kalubowila | 01 | DGH Chilaw | 01 | DGH Nuwara Eliya | 01 |
| TH Kuliyaipitiya | 01 | DGH Gampaha | 01 | DGH Trincomalee | 01 |
| TH Kurunegala | 01 | DGH Embilipitiya | 01 | DGH Vavuniya | 01 |

Diathermy apparatus

OMF units perform minor oral surgeries and biopsy procedures. Therefore, it is recommended to equip all OMF units with a diathermy apparatus for ideal management of minor oral surgeries at chair side. Accordingly, it is recommended to distribute 13 apparatus in following units.

| | | | | | |
|------------------|----|------------------|----|-------------|----|
| DentH Peradeniya | 01 | TH Ratnapura | 01 | DGH Matale | 01 |
| NDHSL | 01 | DGH Awissawella | 01 | DGH Negambo | 01 |
| TH Anuradhapura | 01 | DGH Chilaw | 01 | BH Panadura | 01 |
| CSTH Kalubowila | 01 | DGH Gampaha | 01 | | |
| TH Kurunegala | 01 | DGH Embilipitiya | 01 | | |

Punch biopsy forceps

Punch biopsies are a minimum invasive biopsy procedure. Therefore, it is recommended to provide 23 punch biopsy apparatus to all OMF units.

| | | | | | |
|------------------|----|------------------|----|-----------------|----|
| DentH Peradeniya | 01 | TH Kuliyaipitiya | 01 | DGH Hambantota | 01 |
| NDHSL | 01 | TH Ratnapura | 01 | DGH Kegalle | 01 |
| TH Anuradhapura | 01 | PGH Badulla | 01 | DGH Matara | 01 |
| TH Batticaloa | 01 | DGH Ampara | 01 | DGH Negambo | 01 |
| TH Jaffna | 01 | DGH Awissawella | 01 | DGH Polonnaruwa | 01 |
| CSTH Kalubowila | 01 | DGH Chilaw | 01 | DGH Trincomalee | 01 |
| TH Karapitiya | 01 | DGH Gampaha | 01 | BH Panadura | 01 |
| TH Kurunegala | 01 | DGH Embilipitiya | 01 | | |

5.3. Recommendations to improve the human resources at OMF units for management of oral cancer

SHO+HO

As agreed by the college of OMF surgeons, the ideal number of SHO/HO should be present in each category of hospital is decided as follows.

| | | |
|---|---|-------------|
| National Hospital (NH)/Teaching Hospital (TH) | - | 07 per unit |
| Provincial General Hospital (PGH) | - | 06 per unit |
| District General Hospital (DGH) | - | 05 per unit |
| Base Hospital (BH) | - | 04 per unit |

To ensure smooth functioning of OMF units it is recommended to have a minimum of 5 SHO/HO to a unit. The following units should be manned with at least 5 SHO/HOs.

| | | |
|------------------|------------------|-----------------|
| TH Batticaloa | DGH Gampaha | DGH Trincomalee |
| TH Kalutara | DGH Embilipitiya | DGH Vavuniya |
| TH Kuliyaipitiya | DGH Matara | BH Panadura |
| DGH Ampara | DGH Nuwara-Eliya | |
| DGH Chilaw | DGH Polonnaruwa | |

Nursing Officers

The suggested norm for nursing officers was 01 per dental chair. However, The College of OMF surgeons suggested at least 03 nurses per unit, in NH/TH and a minimum of 02 nurses per unit.

A minimum number of three nursing officers are recommended for the following OMF units.

| | | |
|------------------|--------------|-----------------|
| CSTH Kalubowila | CNTH Ragama | DGH Negambo |
| TH Kalutara | TH Ratnapura | DGH Trincomalee |
| TH Kuliyaipitiya | DGH Chilaw | DGH Vavuniya |

Attendants/SKS

It is recommended to allocate at least 03 Attendants/SKS per unit. Therefore, following units should be allocated Attendants/SKS to meet the recommendation.

| | | |
|------------------|------------------|------------------|
| DentH Peradeniya | DGH Gampaha | DGH Nuwara-Eliya |
| TH Batticaloa | DGH Embilipitiya | DGH Polonnaruwa |
| TH Kuliyaipitiya | DGH Matale | DGH Trincomalee |
| DGH Awissawella | DGH Matara | DGH Vavuniya |
| DGH Chilaw | DGH Negambo | BH Panadura |

5.4. Recommendations to improve the theatre facilities for management of oral cancer

Surgical drill and saws

One surgical drill and saw is recommended to be available at each unit to be used at theatre for management of OC patients. Therefore, 5 units should be distributed to following OMF units.

| | | | | | |
|---------------|----|------------------|----|-------------|----|
| TH Batticaloa | 01 | DGH Gampaha | 01 | BH Panadura | 01 |
| PGH Badulla | 01 | DGH Embilipitiya | 01 | | |

Operating loops & head lights

This facility is suggested minimum one unit per NH, TH and PGH.

| | | | | | |
|-----------------|----|------------------|----|-------------|----|
| TH Anuradhapura | 01 | CSTH Kalubowila | 01 | CNTH Ragama | 01 |
| TH Batticaloa | 01 | TH Kuliyaipitiya | 01 | PGH Badulla | 01 |
| TH Jaffna | 01 | TH Kurunegala | 01 | | |

Laser facilities

Laser facilities are recommended to be available one OMF unit per each province. Therefore, Laser facilities are recommended to following Provinces.

Northern Province (TH Jaffna)

North Central Province (TH Anuradhapura)

Sabaragamuwa (TH Ratnapura)

Osteosynthesis kits

Osteosynthesis kits should be available in all units for surgical management of OC patients. Sixteen Osteosynthesis kits are recommended for following units.

| | | | | | |
|-----------------|----|------------------|----|-----------------|----|
| NH Kandy | 01 | DGH Gampaha | 01 | DGH Polonnaruwa | 01 |
| TH Jaffna | 01 | DGH Hambantota | 01 | DGH Trincomalee | 01 |
| TH Kurunegala | 01 | DGH Kegalle | 01 | DGH Vavuniya | 01 |
| TH Ratnapura | 01 | DGH Matale | 01 | BH Panadura | 01 |
| DGH Awissawella | 01 | DGH Matara | 01 | | |
| DGH Chilaw | 01 | DGH Nuwara-Eliya | 01 | | |

Operating microscope

It is recommended to have one operating microscope each for National and Teaching Hospitals.

Therefore, seven units are recommended for following units.

| | | | | | |
|-----------------|----|------------------|----|---------------|----|
| NDHSL | 01 | CSTH Kalubowila | 01 | TH Kurunegala | 01 |
| TH Anuradhapura | 01 | TH Kalutara | 01 | CNTH Ragama | 01 |
| TH Batticaloa | 01 | TH Karapitiya | 01 | | |
| TH Jaffna | 01 | TH Kuliyaipitiya | 01 | | |

Facilities for cryotherapy

The above facility should be provided to following hospitals

| | | | | | |
|-----------------|----|------------------|----|---------------|----|
| NH Kandy | 01 | CSTH Kalubowila | 01 | TH Kurunegala | 01 |
| TH Anuradhapura | 01 | TH Kalutara | 01 | CNTH Ragama | 01 |
| TH Batticaloa | 01 | TH Karapitiya | 01 | TH Ratnapura | 01 |
| TH Jaffna | 01 | TH Kuliyaipitiya | 01 | | |

Hand-held Doppler

It was recommended to provide hand-held Doppler for National and Teaching Hospitals. Therefore, following units are recommended for hand-held Doppler.

| | | | | | |
|---------------|----|------------------|----|---------------|----|
| NDHSL | 01 | CSTH Kalubowila | 01 | TH Kurunegala | 01 |
| NH Kandy | 01 | TH Kalutara | 01 | CNTH Ragama | 01 |
| TH Batticaloa | 01 | TH Karapitiya | 01 | TH Ratnapura | 01 |
| TH Jaffna | 01 | TH Kuliyaipitiya | 01 | | |

Digital reconstruction facilities

Digital reconstruction facilities are recommended for only for DentH Peradeniya & all National and Teaching Hospitals. Accordingly, these facilities are recommended for following institutions.

| | | | | | |
|-----------------|----|------------------|----|---------------|----|
| NH Kandy | 01 | CSTH Kalubowila | 01 | TH Kurunegala | 01 |
| TH Anuradhapura | 01 | TH Kalutara | 01 | CNTH Ragama | 01 |
| TH Batticaloa | 01 | TH Karapitiya | 01 | TH Ratnapura | 01 |
| TH Jaffna | 01 | TH Kuliyaipitiya | 01 | | |

Facilities for frozen sections

Facilities for frozen sections are recommended for only for DentH Peradeniya and all National and Teaching Hospitals. Accordingly, these facilities are recommended for following institutions.

| | | | | | |
|-----------------|----|------------------|----|---------------|----|
| NH Kandy | 01 | CSTH Kalubowila | 01 | TH Kurunegala | 01 |
| TH Anuradhapura | 01 | TH Kalutara | 01 | CNTH Ragama | 01 |
| TH Batticaloa | 01 | TH Karapitiya | 01 | TH Ratnapura | 01 |
| TH Jaffna | 01 | TH Kuliyaipitiya | 01 | | |

5.5. Recommendations to improve other treatment modalities and supplementary services

Counselling services

The counselling services should be established in following OMF units.

| | | |
|-----------------|-------------|------------------|
| NDHSL | CNTH Ragama | DGH Embilipitiya |
| TH Anuradhapura | PGH Badulla | DGH Nuwara-Eliya |
| TH Batticaloa | DGH Ampara | DGH Polonnaruwa |
| TH Karapitiya | DGH Gampaha | DGH Trincomalee |

MDT/Tumour boards

The MDT/Tumour boards should be established in following OMF units.

| | | |
|------------------|------------------|-----------------|
| TH Anuradhapura | DGH Ampara | DGH Matale |
| TH Batticaloa | DGH Awissawella | DGH Negambo |
| TH Kuliyaipitiya | DGH Gampaha | DGH Polonnaruwa |
| CNTH Ragama | DGH Embilipitiya | DGH Trincomalee |

Rehabilitation care

The rehabilitation care services should be established in following OMF units.

| | | |
|------------------|------------------|-----------------|
| DentH Peradeniya | DGH Ampara | DGH Polonnaruwa |
| NDHSL | DGH Awissawella | DGH Trincomalee |
| TH Anuradhapura | DGH Chilaw | DGH Vavuniya |
| TH Karapitiya | DGH Gampaha | BH Panadura |
| CNTH Ragama | DGH Embilipitiya | |
| PGH Badulla | DGH Nuwara-Eliya | |

Prosthetic reconstruction facilities

Prosthetic reconstruction facilities should be upgraded in following hospitals.

| | | |
|------------------|------------------|------------------|
| TH Anuradhapura | DGH Chilaw | DGH Negambo |
| TH Batticaloa | DGH Gampaha | DGH Nuwara-Eliya |
| TH Kalutara | DGH Embilipitiya | DGH Polonnaruwa |
| TH Kuliyaipitiya | DGH Hambantota | DGH Trincomalee |
| CNTH Ragama | DGH Kegalle | DGH Vavuniya |
| DGH Ampara | DGH Matale | BH Panadura |
| DGH Awissawella | DGH Matara | |

Speech therapy

It was identified to establish Speech Therapy facilities in the following institutions.

| | | |
|-------|-------------|------------------|
| NDHSL | DGH Gampaha | DGH Nuwara-Eliya |
|-------|-------------|------------------|

Nutrition support therapy

The nutrition support therapy should be established in the following institutions

| | | |
|------------------|------------------|------------------|
| DentH Peradeniya | DGH Ampara | DGH Nuwara-Eliya |
| NDHSL | DGH Gampaha | |
| TH Kuliyaipitiya | DGH Embilipitiya | |

Link with social services department

Oral cancer management needs continuum of care with provision of palliative care for patients under the care of OMF units. They need social support to overcome the economic and social burden, which is associated with oral cancer. Therefore, it is recommended to establish links with social service department improve quality of oral cancer management. The following units are identified as units that need to establish links with social services department.

| | | |
|------------------|------------------|-----------------|
| DentH Peradeniya | CNTH Ragama | DGH Kegalle |
| NDHSL | DGH Ampara | DGH Matale |
| TH Anuradhapura | DGH Awissawella | DGH Matara |
| TH Batticaloa | DGH Chilaw | DGH Negambo |
| CSTH Kalubowila | DGH Gampaha | DGH Polonnaruwa |
| TH Karapitiya | DGH Embilipitiya | DGH Trincomalee |
| TH Kuliyaipitiya | DGH Hambantota | DGH Vavuniya |

Radiotherapy services

Since radiotherapy is identified as an essential service component of cancer specific care it is recommended to be established in identified cancer treatment centres of excellence. Therefore, two units should be established in the following identified centres.

TH Ratnapura

TH Kurunegala

Palliative care services

Palliative care services are another important supportive service component where OMF units need to establish links with to ensure comprehensive and continuum of care of OC patients. Therefore, following units should establish links with above service component.

DentH Peradeniya

TH Kuliyaipitiya

DGH Embilipitiya

TH Batticaloa

DGH Ampara

DGH Matara

TH Jaffna

DGH Chilaw

DGH Negambo

CSTH Kalubowila

DGH Gampaha

BH Panadura

5.6. Recommendations to improve facilities for oral cancer surveillance and data dissemination

Oral cancer surveillance is an important component of oral cancer care where oral cancer burden of the country can be explained. Therefore, basic facilities to improve the oral cancer surveillance is identified as follows.

Desktop/laptop designated to the OMF unit

It is recommended that all OMF units should be equipped with desktop/laptop to maintain a database for oral cancers. Therefore, following units that need computers to improve the surveillance facilities.

DentH Peradeniya

TH Ratnapura

DGH Matale

TH Anuradhapura

DGH Ampara

DGH Matara

TH Batticaloa

DGH Chilaw

DGH Negambo

CSTH Kalubowila

DGH Gampaha

DGH Nuwara-Eliya

TH Karapitiya

DGH Embilipitiya

DGH Polonnaruwa

TH Kuliyaipitiya

DGH Hambantota

Internet facilities available for the unit

Internet is an essential component for data dissemination. Therefore, it is recommended to provide internet facilities to the identified OMF units.

| | | |
|------------------|------------------|------------------|
| DentH Peradeniya | CNTH Ragama | DGH Matale |
| TH Anuradhapura | TH Ratnapura | DGH Matara |
| TH Karapitiya | PGH Badulla | DGH Negambo |
| TH Batticaloa | DGH Ampara | DGH Nuwara-Eliya |
| TH Jaffna | DGH Awissawella | DGH Polonnaruwa |
| CSTH Kalubowila | DGH Gampaha | DGH Trincomalee |
| TH Kalutara | DGH Embilipitiya | DGH Vavuniya |
| TH Kurunegala | DGH Hambantota | |
| TH Kuliyaipitiya | DGH Kegalle | |

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7. Annexure

Annexure1

Situational assessment of the facilities available in Oro Maxillo Facial (OMF) units for the management of OPMD / oral cancer in Sri Lanka

General Information

1. Name of the hospital

2. Type of hospital

| | |
|-----------------------------|--|
| National hospital | |
| Teaching hospital | |
| University | |
| Provincial General hospital | |
| District General hospital | |
| Other..... | |

3. Location of the hospital

| | |
|----------|--|
| Province | |
| District | |

4. Type of facilities available for diagnosis of Oral Cancer

| Diagnostic modality | Diagnosis test | Availability (Yes/NO) | If unavailable Institution patient is referred | If there is a waiting list length of time taken |
|---------------------|-----------------------|-----------------------|--|---|
| X rays | Dental x-ray – IOPA | yes / no | | |
| | Chest X-ray | yes / no | | |
| | skull x-ray – OPG | yes / no | | |
| | Skull x-ray – AP / PA | yes / no | | |
| Pathology | Histopathology | yes / no | | |
| | Chemical Pathology | yes / no | | |
| Imaging | Ultrasound scan | yes / no | | |
| | MRI | yes / no | | |
| | CBCT | yes / no | | |
| | CT scan | yes / no | | |
| | PET | yes / no | | |
| Hematology | Blood investigations | yes / no | | |
| Other | | yes / no | | |

OMF clinic related data

5. Human resources available at the unit

| Category | Carder approved | Number available within the unit on 01.01.2021 |
|----------------------------|-----------------|---|
| Consultant OMF Surgeon | | |
| Senior Registrars (OMF) | | |
| Registrars (OMF) | | |
| Senior House Officer (OMF) | | |
| House Officer (OMF) | | |
| Intern dental officers | | |
| Nursing Officer | | |
| Attendants | | |
| SKS | | |
| Other..... | | |

Physical resources available at the clinic

6. Number of dental chairs in the unit:

| Facilities available within the unit | Yes / No | Number of functioning units |
|--------------------------------------|----------|-----------------------------|
| Oral surgical equipment | | |
| Straight hand piece/ drill | | |
| Diathermy | | |
| Suction apparatus | | |
| Instruments for punch biopsy | | |

Patient related data regarding OMF Clinic

7. When considering treatment provided by the unit, is there a designated time or day for: Oral cancer patients - Yes / No

OPMD - Yes / No

If yes, mention frequency and duration:

Oral Cancer patients Sessions Per week (.....hours)

OPMD patients Sessions Per week (.....hours)

Please submit the data using Monthly statistics (January 2020). As data during COVID 19 pandemic is not comparable.

Please note that we would verify data sent by going through 2020 January hospital data.

| Topic | Description | number |
|--------------------------|--|--------|
| General information | Average number of casualty days per month | |
| | Average number of patients (seen at OMF clinic per month) | |
| | Average number of new patients seen per month | |
| OPMD related information | Average number of new OPMD patients seen per month | |
| | Average number of OPMD related review visits per month | |
| Oral cancer information | Average no. of new oral cancer patients seen per month | |
| | Average no. of Oral Cancer related review visits per month | |

8, Any important facilities / equipment do you think are needed to be provided to enhance the management of OPMD / Oral Cancer in the OMF clinic

| Facilities / equipment related to OPMD | Facilities related to oral cancer |
|--|-----------------------------------|
| | |

Resources available for management of oral cancer other than OMF Staff

| Dental laboratory facilities available: | Yes / No | |
|--|-------------|------------------|
| If yes number of staff working in laboratory | Technicians | Supporting staff |
| If no, institution where dental laboratory is done | | |

Availability of other specialties in the management of oral cancer in the institute

| Specialty | Consultant | Availability | Institution from where visiting consultant visits |
|------------|--------------------------------|--------------|---|
| Diagnostic | Consultant Radiologist | yes / no | |
| | Consultant Oral Pathologist | yes / no | |
| | Consultant Histopathologist | yes / no | |
| | Consultant Immunologist | yes / no | |
| | Chemical Pathologist | yes / no | |
| Surgical | Consultant Anaesthetist | yes / no | |
| | Consultant General Surgeon | yes / no | |
| | Consultant ENT surgeon | yes / no | |
| | Consultant Onco-surgeon | yes / no | |
| | Consultant Plastic surgeon | yes / no | |
| | Consultant Vascular surgeon | yes / no | |
| Oncology | Consultant Oncologist | yes / no | |
| Other | Consultant Physician | yes / no | |
| | Consultant Haematologist | yes / no | |
| | Cons. in Restorative Dentistry | yes / no | |

1. Availability of oncology unit within the hospital ☐ Yes ☐ No
2. Availability of radiotherapy unit within the hospital ☐ Yes ☐ No

5. If following treatment facilities are not available for oral cancer patients within the institution indicate to which hospital the patient is referred to

| Treatment modality | Availability | If not available to which Institution referred to |
|---------------------------|--------------|---|
| Chemotherapy | yes / no | |
| Radiotherapy | yes / no | |
| Prosthetic Reconstruction | yes / no | |
| Combined surgeries | yes / no | |
| Palliative care | yes / no | |
| Other | yes / no | |

6. Inward / ICU facilities for the management of oral cancer

Number of available ICU Beds within the Institution:

| Surgical ICU | Medical ICU | HDU |
|--------------|-------------|-----|
| | | |

If all ICU Beds are occupied institution where patient is referred to:

| Description | Males | Females |
|--|----------|----------|
| Designated ward for OMF surgical patients | yes / no | yes / no |
| Shared basis ward facilities for OMF surgical patients | yes / no | yes / no |
| ward where facilities provided for OMF surgical patients | | |
| Number of beds available | | |
| Average number of admissions per month | | |

Theatre facilities utilized for the management of oral cancer

| | |
|---|------------------|
| Separate theatre facility for routine surgeries of OMF Unit | Yes /No (shared) |
| No. of theatre beds | |
| Available theatre time | Full days |
| Days per week | Hours per week |

7. Please indicate the relevant data related to the management of oral cancer and OPMDs

| | | |
|--|----------|---------|
| Average number of Biopsies taken per month | | |
| Average number of Biopsies related to OPMD and oral cancer taken per month | | |
| Average oral cancer related surgical output (excluding biopsies) performed by OMF unit per month | | |
| Under Local anesthesia | | |
| Under General anesthesia | | |
| Allocated theatre time for the management of oral cancer | Hrs/week | |
| Average number of oral cancer cases operated per month | Male: | Female: |

8. Facilities available at the theatre of the institution for the management of oral cancer

| Facility | Availability | No. of functioning machines |
|--|--------------|-----------------------------|
| Laser | yes / no | |
| Cryotherapy | yes / no | |
| Piezo knife | yes / no | |
| Operating microscope | yes / no | |
| Operating loops and head lights | yes / no | |
| Hand held Doppler | yes / no | |
| Surgical drill and saws | yes / no | |
| Osteosynthesis kits | yes / no | |
| Digital reconstruction planning facilities | yes / no | |
| Microtomes | yes / no | |
| Bone plates | yes / no | |
| Interdental wiring | yes / no | |
| Facilities for frozen section | yes / no | |
| Other (indicate the facility) | yes / no | |

9. Any important facilities / equipment do you think are needed to be provided to enhance the management of Oral Cancer in the OMF clinic

.....

10. Availability of MDT (multi-disciplinary team) / for the management of oral cancer

- i) Is the MDT approach used in you institution: Yes / No
- ii) Frequency of MDT clinics: per month
- iii) Is the MDT approach used in the management of oral cancer cases: Yes / No
- iv) Average monthly patients attendance to MDT clinic in oral cancer: per month

11. Availability of supplementary services within institution utilized in the management of oral cancer

| Supplementary services | Availability (Yes/No) | Frequency of utilization per week | If not available, the nearest institution patients referred to: |
|--|-----------------------|-----------------------------------|---|
| Habit intervention services | yes / no | | |
| Counselling services | yes / no | | |
| Rehabilitation care | yes / no | | |
| Speech therapy | yes / no | | |
| Nutrition | yes / no | | |
| Palliative care services | yes / no | | |
| Link with the Social services department | yes / no | | |
| Other | | | |

12. Oral cancer reporting (surveillance) related to oral cancer

| | |
|--|---------------|
| Laptop designated to the OMF unit | Yes / No |
| Desktop designated to the OMF unit | Yes / No |
| Internet facilities available for the unit | Yes / No |
| Designated officer for management of oral cancer data | Yes / No |
| Methods of data entry | |
| Written formats | Yes / No |
| Oral cancer register | Yes / No |
| Entered to computer | Yes / No |
| Both (written and computer) | Yes / No |
| Utilizing software such as CAN REG 5 | Yes / No |
| Not entered | Yes / No |
| Data sent to National Cancer Control Programme: | Yes / No |
| If yes, latest year in which oral cancer data was sent: | |
| Mode of Oral cancer data sent to National Cancer Control Programme | Post / E-mail |
| Are you analysing oral cancer data reported in your unit? | Yes / No |
| Have you presented the oral cancer data recorded in your clinic | Yes / No |
| If yes where data has been presented..... | |

Training and oral cancer text book requirements

13. Do members of the OMF unit undergo annual in service training / workshops

| | | |
|--|----------|--|
| Consultant OMF Surgeon | Yes / No | |
| Registrars & Senior Registrars | Yes / No | |
| House Officers / Senior House Officers | Yes / No | |
| Nursing staff | Yes / No | |
| Health assistants (SKS) | | |

14. When was the most recent in service training / workshop and what were the topics covered:

| Service category | When was it held (year) | Topics covered |
|------------------------|-------------------------|----------------|
| Consultant OMF Surgeon | | |
| Senior Registrars | | |
| Registrars | | |
| Senior House Officers | | |
| House Officers | | |
| Nursing officer | | |
| Health assistants | | |

15) Is there a requirement for any oral cancer related in service training to be organized:

yes / no

16) What are the potential topics:

.....

17) If there is a need for oral cancer text books related to management of oral cancers and OPMDs please indicate

title of text books

Treatment times and delays

18) Average number of time taken register a new oral cancer patient, examine and begin treatment:

.....

19) Average number of time taken to complete investigations in an oral cancer patient prior to surgery?

.....

20) Average time taken to obtain histopathology report in oral cancer patients:

21) Average time taken for new oral cancer patient to undergo surgery:

22) During your routine work in the OMF unit do you perceive a delay in the management of oral cancer?

Yes / No

If yes, kindly tick on where you perceive the delay to be (you can tick more than one box)

- | | |
|--|--------------------------|
| Delay in registration, history taking..... | <input type="checkbox"/> |
| Delay in taking investigations within the institution..... | <input type="checkbox"/> |
| Delay in taking investigations from outside institution..... | <input type="checkbox"/> |
| Delay in obtaining theatre time for surgery..... | <input type="checkbox"/> |
| Delay when obtaining adjuvant treatment from other institutions..... | <input type="checkbox"/> |
| Delay in finding ICU facilities for patients..... | <input type="checkbox"/> |
| Delay caused by postoperative ward stay..... | <input type="checkbox"/> |
| Any other delay | |

23) How do you plan to address the above mentioned delays.....

.....

.....

.....

.....

I certify that the data given above is true to the best of my ability

Signature :

Name of the officer :

Designation :

Date :

Annexure 2

Table 7.1: Identified facility norms for management of oral cancer and Initial priority list for 2025

| Facilities | Norm for TH/NH/PGH | Norm for DGH/BH | Priority for 2025 | Priority for 2025 Hospitals TH/NH/PGH | | Priority for 2025 Hospitals DGH/BH | |
|---------------------------------------|------------------------|--------------------|--|---|----|---|----|
| Facilities for diagnosis of OC | | | | | | | |
| Dental IOPA | All Hospitals | All Hospitals | All Hospitals | TH Batticaloa 01 | 01 | DGH Gampaha 01 BH Panadura 01 | 02 |
| OPG | All Hospitals | All Hospitals | All NH, TH and PGH | NH Kandy 01 TH Batticaloa 01 CSTH Kalubowila 01 TH Kuliyaipitiya 01 TH Ratnapura 01 PGH Badulla 01 | 06 | N/R | |
| CBCT | 01 per all TH/NH | N/A | 01 per all TH/NH | NH Kandy 01 TH Anuradhapura 01 TH Batticaloa 01 CSTH Kalubowila 01 TH Kalutara 01 TH Kuliyaipitiya 01 CNTH Ragama 01 TH Ratnapura 01 | | N/R | |
| Oral Pathology | 01 per province | - | - | Sabaragamuwa Province North Central Province Northern Province Uva province Eastern Province | | - | - |
| Facilities within OMF units | | | | | | | |
| Dental Chair | NH&TH = 06 PGH = 05 | DGHs=04 BHs= 03 | Minimum of 03 Dental Chairs in all units | TH Batticaloa 01 TH Kuliyaipitiya 01 TH Kurunegala 01 TH Ratnapura 01 | 04 | DGH Ampara 01 DGH Chilaw 02 DGH Embilipitiya 02 DGH Hambantota 01 DGH Trincomalee 01 DGH Vavuniya 01 | 08 |

| | | | | | | | |
|------------------------------|---|--------------------------|---|--|--------------------------|--|--------------------------|
| Straight hand piece | 05 per dental chair | 05 per dental chair | Minimum of 03 straight hand-pieces in all units | DentH Peradeniya 01 TH Batticaloa 01 TH Jaffna 01 TH Kuliypitiya 01 TH Kurunegala 02 CNTH Ragama 01 | 07 | DGH Ampara 01 DGH Chilaw 02 DGH Embilipitiya 01 DGH Gampaha 02 DGH Hambantota 01 DGH Kegalle 02 DGH Nuwara Eliya 01 DGH Trincomalee 02 DGH Vavuniya 01 BH Panadura 01 | 14 |
| Suction apparatus | 01 per dental chair | 01 per dental chair | Minimum 02 per unit | TH Batticaloa 01 CSTH Kalubowila 01 TH Kuliypitiya 01 TH Kurunegala 01 | 04 | DGH Ampara 01 DGH Chilaw 01 DGH Embilipitiya 01 DGH Gampaha 01 DGH Negambo 01 DGH Nuwara Eliya 01 DGH Trincomalee 01 DGH Vavuniya 01 | 08 |
| Diathermy apparatus | 01 per unit | 01 per unit | 01 per unit | DentH Peradeniya 01 NDHSL 01 TH Anuradhapura 01 CSTH Kalubowila 01 TH Kurunegala 01 TH Ratnapura 01 | 06 | DGH Awissawella 01 DGH Chilaw 01 DGH Embilipitiya 01 DGH Gampaha 01 DGH Matale 01 DGH Negambo 01 DGH Panadura 01 | 07 |
| Human resources at OMF units | | | | | | | |
| SHO+HO | 07 per NH/TH, 06 per PGH, | 05 per DGH, 04 per BH | At least 05 SHO/HO | TH Batticaloa TH Kalutara TH Kuliypitiya | Cadre completed annually | DGH Ampara DGH Chilaw DGH Embilipitiya DGH Gampaha DGH Matara DGH Nuwara-Eliya DGH Polonnaruwa DGH Trincomalee DGH Vavuniya BH Panadura | Cadre completed annually |
| Nursing officers | 01 per Dental chair; NH/TH, 03 per clinic | Minimum 02 per clinic at | At least 03 per clinic | CSTH Kalubowila TH Kalutara TH Kuliypitiya CNTH Ragama TH Ratnapura | Cadre completed annually | DGH Chilaw DGH Negambo DGH Trincomalee DGH Vavuniya | Cadre completed annually |

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| Attendants +SKS | 01 per Dental chair | 01 per Dental chair | At least 03 per clinic | DentH Peradeniya TH Batticaloa TH Kuliyaipitiya | Cadre completed annually | DGH Awissawella DGH Chilaw DGH Embilipitiya DGH Gampaha DGH Matale DGH Matara DGH Negambo DGH Nuwara-Eliya DGH Polonnaruwa DGH Trincomalee DGH Vavuniya BH Panadura | Cadre completed annually |
| Ward and theatre facilities | | | | | | | |
| No. of beds – male | NH/TH: 20 male, and 20 female beds PGH: 18M & 18F (either designated or shared) | DGH: 15M & 15F BH: 10M & 10F | At least 10 beds | TH Batticaloa 05 TH Jaffna 10 CSTH Kalubowila 02 TH Kuliyaipitiya 04 | | DGH Ampara 04 DGH Chilaw 06 DGH Embilipitiya 03 DGH Gampaha 06 DGH Nuwara-Eliya 06 DGH Trincomalee 03 BH Panadura 04 | |
| Theatre time full days | NH & TH Minimum: 02 full days per week | Minimum of 01 full day per week | At least one full day | TH Batticaloa | | | |
| Availability of facilities at theatre | | | | | | | |
| Surgical drill and saws | 01 per all units, | 01 per all units | 01 per all units | TH Batticaloa 01 PGH Badulla 01 | 02 | DGH Embilipitiya 01 DGH Gampaha 01 BH Panadura 01 | 03 |
| Operating loops & head lights | 01 per all units | 01 per all units | Minimum 01 per NH/TH/PGH | TH Anuradhapura 01 TH Batticaloa 01 TH Jaffna 01 CSTH Kalubowila 01 TH Kuliyaipitiya 01 TH Kurunegala 01 CNTH Ragama 01 PGH Badulla 01 | 08 | N/R | - |
| Laser | 01 per all units | N/R | Minimum 01 per province | Northern (TH Jaffna) North Central (TH Anuradhapura), Sabaragamuwa (TH Ratnapura) | 03 | - | - |

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|----------------------|--------------------------------------|------------------|------------------|---|----|--|----|
| Osteosynthesis kits | 01 per all units | 01 per all units | 01 per all units | NH Kandy 01 TH Jaffna 01 TH Kurunegala 01 TH Ratnapura 01 | 04 | DGH Awissawella 01 DGH Chilaw 01 DGH Gampaha 01 DGH Hambantota 01 DGH Kegalle 01 DGH Matale 01 DGH Matara 01 DGH Nuwara-Eliya 01 DGH Polonnaruwa 01 DGH Trincomalee 01 DGH Vavuniya 01 BH Panadura 01 | 12 |
| Operating microscope | 01 for all Units | N/R | 1 per NH/TH | NDHSL 01 TH Anuradhapura 01 TH Batticaloa 01 TH Jaffna 01 Csth Kalubowila 01 TH Kalutara 01 TH Karapitiya 01 TH Kuliapitiya 01 TH Kurunegala 01 CNTH Ragama 01 | 10 | N/R | |
| Cryotherapy | Only for DentH Peradeniya, NH and TH | N/R | | NH Kandy 01 TH Anuradhapura 01 TH Batticaloa 01 TH Jaffna 01 Csth Kalubowila 01 TH Kalutara 01 TH Karapitiya 01 TH Kuliapitiya 01 TH Kurunegala 01 CNTH Ragama 01 TH Ratnapura 01 | 11 | N/R | |
| Hand-held Doppler | Only for DentH Peradeniya, NH and TH | N/R | | NDHSL 01 NH Kandy 01 TH Batticaloa 01 TH Jaffna 01 Csth Kalubowila 01 TH Kalutara 01 TH Karapitiya 01 TH Kuliapitiya 01 H Kurunegala 01 CNTH Ragama 01 TH Ratnapura 01 | 11 | N/R | |

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| Digital reconstruction facilities | Only for DentH Peradeniya, NH and TH | | | NH Kandy 01 TH Anuradhapura 01 TH Batticaloa 01 TH Jaffna 01 CSTH Kalubowila 01 TH Kalutara 01 TH Karapitiya 01 TH Kuliypitiya 01 TH Kurunegala 01 CNTH Ragama 01 TH Ratnapura 01 | 11 | | |
| Facilities for frozen sections | Only for DentH Peradeniya, NH and TH | N/R | | NH Kandy 01 TH Anuradhapura 01 TH Batticaloa 01 TH Jaffna 01 CSTH Kalubowila 01 TH Kalutara 01 TH Karapitiya 01 TH Kuliypitiya 01 TH Kurunegala 01 CNTH Ragama 01 TH Ratnapura 01 | 11 | N/R | |
| Availability of other treatment modalities and supplementary services | | | | | | | |
| Counselling services | All Hospitals | All Hospitals | All Hospitals | NDHSL TH Anuradhapura TH Batticaloa TH Karapitiya CNTH Ragama PGH Badulla | | DGH Ampara DGH Embilipitiya DGH Gampaha DGH Nuwara-Eliya DGH Polonnaruwa DGH Trincomalee | |
| MDT/Tumour boards | All Hospitals | All Hospitals | All Hospitals | TH Anuradhapura TH Batticaloa TH Kuliypitiya CNTH Ragama | | DGH Ampara DGH Awissawella DGH Embilipitiya DGH Gampaha DGH Matale DGH Negambo DGH Polonnaruwa DGH Trincomalee | |

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| Rehabilitation care | All Hospitals | All Hospitals | All Hospitals | DentH Peradeniya NDHSL TH Anuradhapura TH Karapitiya CNTH Ragama PGH Badulla | | DGH Ampara DGH Awissawella DGH Chilaw DGH Embilipitiya DGH Gampaha DGH Nuwara-Eliya DGH Polonnaruwa DGH Trincomalee DGH Vavuniya BH Panadura | |
| Prosthetic reconstruction | All Hospitals | All Hospitals | All Hospitals | TH Anuradhapura TH Batticaloa TH Kalutara TH Kuliapitiya TH Ragama | | DGH Ampara, DGH Awissawella DGH Chilaw DGH Embilipitiya DGH Gampaha DGH Hambantota DGH Kegalle DGH Matale DGH Matara DGH Negambo DGH Nuwara Eliya DGH Polonnaruwa DGH Trincomalee DGH Vavuniya BH Panadura | |
| Speech therapy | All Hospitals | All Hospitals | All Hospitals | NDHSL | | DGH Gampaha DGH Nuwara-Eliya | |
| Nutrition support therapy | All Hospitals | All Hospitals | All Hospitals | DentH Peradeniya NDHSL TH Kuliapitiya | | DGH Ampara DGH Embilipitiya DGH Gampaha DGH Vavuniya | |
| Link with Social services Dept. | All Hospitals | All Hospitals | All Hospitals | DentH Peradeniya NDHSL TH Anuradhapura TH Batticaloa CSTH Kalubowila TH Karapitiya TH Kuliapitiya CNTH Ragama | | DGH Ampara DGH Awissawella DGH Chilaw DGH Embilipitiya DGH Gampaha DGH Hambantota DGH Matale DGH Matara DGH Negambo DGH Polonnaruwa DGH Trincomalee DGH Vavuniya | |
| Radiotherapy services | All CoE of cancer treatment | | All CoE of cancer treatment | | | | |

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|---|-----------------------------|---------------|-----------------------------|---|--|---|--|
| Chemotherapy services | All CoE of cancer treatment | | All CoE of cancer treatment | Available | | | |
| Palliative care services | All Hospitals | All Hospitals | All Hospitals | DentH Peradeniya NDHSL TH Batticaloa TH Jaffna CSTH Kalubowila TH Kuliypitiya | | DGH Ampara DGH Chilaw DGH Embilipitiya DGH Gampaha DGH Matara DGH Negambo BH Panadura | |
| Facilities for OC surveillance and data dissemination | | | | | | | |
| Desktop/laptop designated to the OMF unit | All Hospitals | All Hospitals | All Hospitals | DentH Peradeniya TH Batticaloa CSTH Kalubowila TH Karapitiya TH Kuliypitiya CNTH Ragama TH Ratnapura | | DGH Chilaw DGH Embilipitiya DGH Gampaha DGH Hambantota DGH Matale DGH Matara DGH Negambo DGH Nuwara Eliya DGH Polonnaruwa | |
| Internet facilities available for the unit | All Hospitals | All Hospitals | All Hospitals | TH Anuradhapura TH Batticaloa CSTH Kalubowila TH Karapitiya TH Kalutara TH Kuliypitiya CNTH Ragama TH Ratnapura PGH Badulla | | DGH Chilaw DGH Embilipitiya DGH Gampaha DGH Hambantota DGH Matale DGH Matara DGH Negambo DGH Nuwara Eliya DGH Polonnaruwa | |