

# **Danta Suraksha**

A School Oral Health Promotion Initiative



DPI Rural District, Sarva Shikshana Abhiyana, Karnataka  
Indian Association of Public Health Dentistry  
Sri Ramana Free Clinic Trust  
M S Ramaiah Dental College and Hospital, Bangalore

**ORAL HEALTH TRAINING MANUAL FOR SCHOOL  
TEACHERS**

Objectives of our manual are to enable teachers to:

1. Educate all the teachers in oral health promotion regarding importance of oral health.
2. Identify the oral diseases and prompt referral.
3. Provide emergency care in their capacity.
4. To equip the teachers to be master trainers



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## **1. INTRODUCTION**

Oral health is a fundamental part of general health. Co-ordination between dental professionals, voluntary organizations, education department and other sectors is the key to achieve good health in the community.

Dental diseases are largely preventable and are more common in children, who are reachable in large numbers at schools. The schools provide ideal setting for promoting oral health. The school years cover a period that runs from childhood to adolescence. These are influential stages in people's lives when lifelong sustainable oral health related behaviours, as well as belief and attitudes are being developed with the added advantage of children's receptive nature.

The knowledge gained by children in most instances is shared between family members and community. This spread of effect of oral health promotion is well documented. School provides us an opportunity to render comprehensive oral health care during their formative years. School based programs enables to educate and empower school staff, families and community members. Poor oral health in childhood often continues to adulthood, impacting on economic productivity and quality of life.

School health is an important aspect of any community health program. It is a cost-effective and powerful means of raising community health in future generations. Hence the aim of this module is exchanging information, and addressing the knowledge gaps building a supportive system, improving the oral health of school children and contributing to the wellbeing of the society.

## **2. ROLE OF SCHOOL TEACHERS**

Strong leadership is the cornerstone of a successful school oral health program. Educational systems play a crucial role in health promotion. Education in itself plays a part in improving health. It enables children and adolescents to acquire a broad range of skills, and in this way has an influence on their health. The School teachers are best positioned to coordinate and integrate oral health, curriculum, and environment. There can be no progress in children's health education without a strong commitment to supporting teachers and parental involvement. Teachers can generate interest and instil within them a strong desire to maintain health. Evidences across countries have shown school teachers to be responsible for oral health education, supervising tooth brushing drills and oral health screening and surveillance.

They are considered as role models. Children tend to imitate teachers. This will enable in achieving optimum oral health.



### **3. KNOW MORE ABOUT ORAL CAVITY**

By the end of the session Teachers should be able to:

1. Differentiate types of dentition, teeth, structure their functions and importance
2. Relate oral health to general health

Oral health means healthy teeth, gums, soft tissues, chewing muscles, palate, tongue, lips and salivary glands. Oral health enables an individual to: Speak and socialise and contribute in building confidence.

Eat good healthy nutritious food and contributing in growth and development.

Enhance learning potential and school performance

Fundamental to general health and well being.

Poor oral health can be:

1. Detrimental to child's performance in school and success in later life.
2. Contribute in missing school.
3. Interfere in consuming healthy food.
4. Speech impairments
5. Affect quality life.
6. Financial implications.



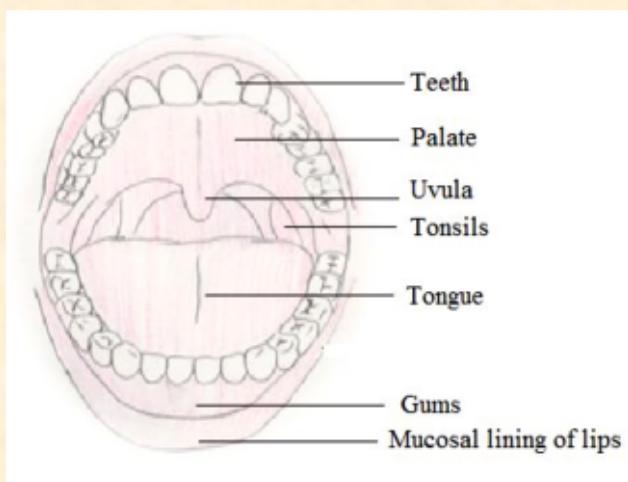
Oral health and General Health: oral health affects general health. Oral diseases if left untreated can have adverse consequences. It has been considered a risk factor for a number of general health conditions. Poor nutrition, psychological problems, cardiovascular disease, diabetes, cancer etc.

### **3.1 COMPONENTS OF ORAL CAVITY**

#### A Healthy Mouth

The major structures that are visible when looking inside the mouth include the

Mucosal Lining of the Lips	Palate
Cheeks	Uvula
Gums	Tonsils and
Teeth	Posterior Oropharynx.
Tongue	



The mucous membranes (inside of the lips, cheeks, palate and underside of the tongue) cover the entire oral cavity and protect the underlying tissues. It looks pink with black pigmentation, smooth, glistening, uniform and moist.

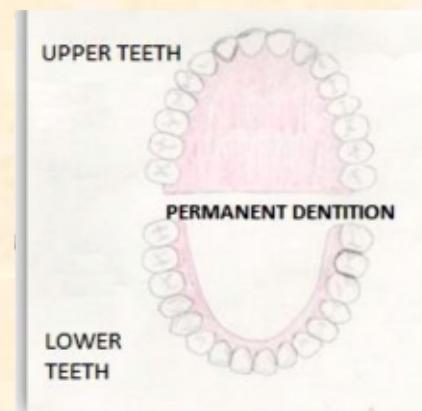
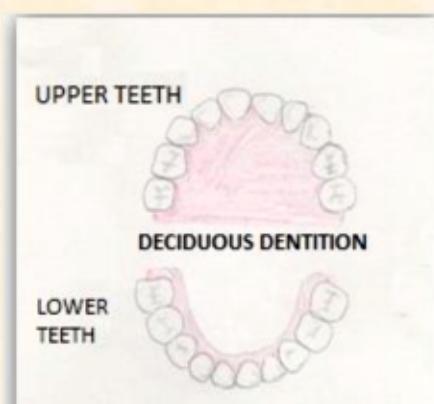
The gums cover like a collar to tooth and protect the underlying tissue which connects tooth to the underlying bone. Gums are pink (in dark-skinned children the gums are more deeply coloured and a brownish area is often observed along the gum line).

The tongue is a soft muscular structure covered by papillae (small projections that contain several taste buds) which give the tongue its characteristic rough appearance. It helps to speak and taste and swallow the food.

The roof of the mouth consists of the hard palate near the front of the cavity, and the soft palate towards the back of the pharynx , which has a

small midline protrusion called the uvula. The arch of the palate should be dome-shaped. Roof of the mouth helps in speech by supporting tongue and acts as traffic controller to at the crossroads between food and air passages.

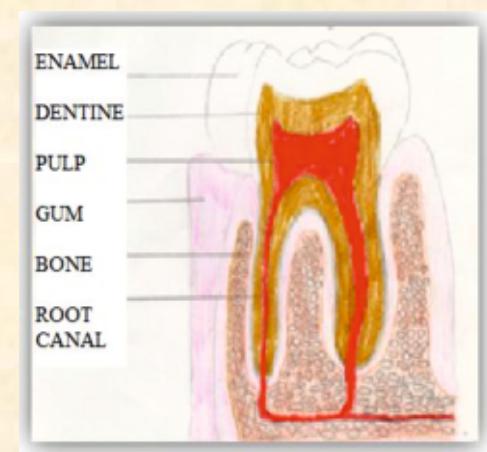
The teeth are the hardest structure of the body and are fixed to jaws. It helps us in chewing, providing nutrition, speech, looking good, sometimes protecting ourselves. Teeth are whitish in colour and smooth (free of deposits). In the lifetime humans have two set of dentition = 20 milk teeth and 32 permanent arranged in upper and lower jaws



### 3.2 STRUCTURE AND TYPES OF TEETH:

Tooth is made up of calcium, phosphorous, sodium, chlorine, fluoride and many trace elements. It is divided into crown and root. Crown is visible in the mouth and root is embedded in the bone and covered by gums. Layers of tooth are enamel, dentin, cementum and pulp.

Enamel is the hardest structure of tooth and is white in colour. Dentin is next hard layer under the enamel and cementum. It is slight yellow in colour. When this layer is exposed, person may experience sensitivity. Cementum is hard layer covering the outer surface of the root which gives attachment to periodontal ligament that inturn connects

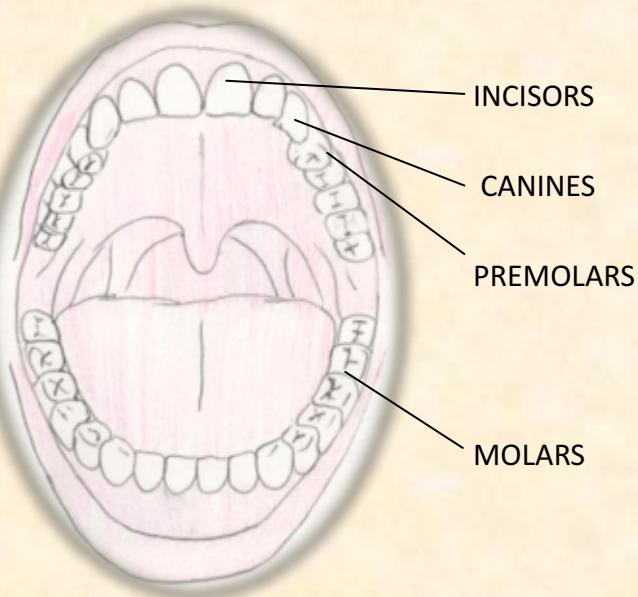


to jaw bone. Pulp is a vital soft tissue in the central portion of the tooth, made up of blood vessels, nerves and cellular elements.

### **3.3 TYPES OF TEETH:**

There are three types of teeth in milk teeth they are incisors, canine, and molars. There four types of teeth in permanent teeth. They are incisors, canine, premolars and molars.

Incisors are front teeth which help in cutting the food. Canines are the corner tooth helps in tearing the food. Premolars are present after the canine helps to crush food. Molars are the biggest in size and helps in chewing food. **Last molar is called wisdom tooth.**



### **3.4 TOOTH ERUPTION**

Teeth (first set or milk teeth) usually begin to erupt between six to eight months of age. Eruption time varies from child to child, just as the individual growth rate varies. The milk teeth complete their eruption by around three years of age.

Lower teeth usually erupt before the upper teeth; tooth eruption usually occurs in girls before boys; and the teeth in both jaws usually erupt in pairs - one on the right and one on the left.

**Transition stage :** At around six years, permanent (second set) molars begin to erupt at the back of the mouth behind the deciduous molars. This is about the same time that the deciduous incisors at the front of the mouth exfoliate and make way for permanent incisors. Between the ages of approximately 6 and 12 years, children have a mixture of permanent and deciduous teeth. This is known as a mixed dentition or ugly duckling stage. By the age of 12, most children have all their permanent teeth except for the third molars. Early loss or delay in falling of primary teeth may result in crooked permanent teeth, speech problems, irregular and unattractive facial features, possible periodontal problems, and increased cost of dental services.

Milk teeth are important too... it helps in,

- Chewing food/ eat food
- Development of normal speech
- Maintain space for permanent teeth
- Maintains child's confidence

**Role of Teacher :** to observe and refer

**Eruption/ shedding time of milk and permanent teeth :**

Milk teeth	Eruption time	Shedding time
Central incisor	6-8 months	6-7 yrs
Lateral incisor	8-10 months	7-8 yrs
First molar	12-16 months	9-11 yrs
Canine	16-20 months	10-12 yrs
Second molar	20-24 months	10-12 yrs

Permanent teeth	Eruption time
First molar	6-7 yrs
Central incisor	7-8 yrs
Lateral incisor	8-9 yrs
First premolar	10-11 yrs
Second premolar	11-12 yrs
Canine	12-13 yrs
Second molar	13-14 yrs
Third molar	17-25 yrs

#### **4. COMMON MOUTH PROBLEMS**

By the end of the session Teachers should be able to:

1. Enlist common oral diseases
2. Identify the common oral diseases in given situation
3. Plan basic remedial measures to certain oral diseases and referral to dentist

Mouth problems are very much widespread because of many reasons. Some of them are poor oral hygiene, improper brushing, eating lots of sticky foods, hereditary, habits that are not good for oral health etc. Following are some of the common mouth diseases which are explained in brief,

- Tooth decay
- Bad breath
- Gum disease
- Dental fluorosis
- Oral habits
- Crooked teeth

##### **4.1 TOOTH DECAY**

Dental caries , also known as tooth decay or a cavity . Tooth decay is caused by specific types of bacteria that produce acid in the presence of fermentable carbohydrates such as sucrose, fructose, and glucose.

Causes:

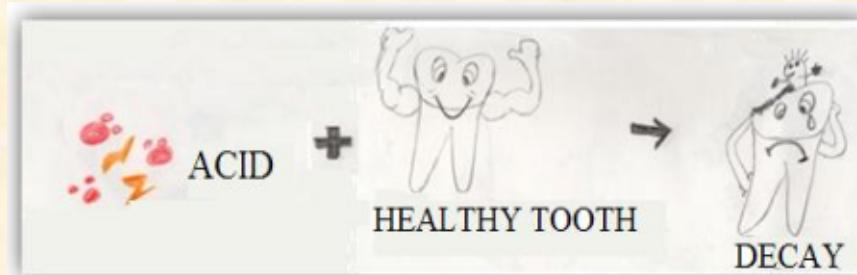
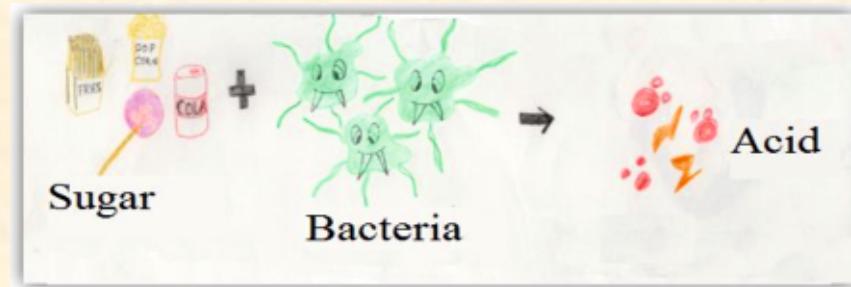
- Bacteria (germs) found in plaque\*
- Sugary foods and drinks
- Not brushing the teeth or brushing teeth improperly (which leaves germs on teeth)

\*PLAQUE is a film or coating which contains bacteria that forms on teeth and gums.

An Acid Attack:

Acid produced by the bacteria in the plaque destroys the tooth's enamel (the hard outer covering of a tooth) and, after repeated attacks, creates a hole or "cavity."

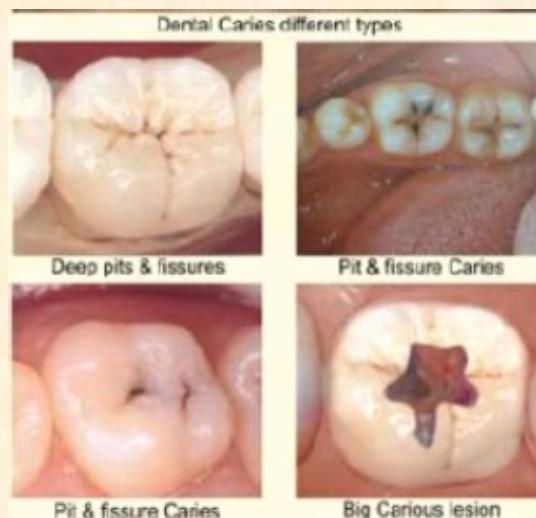
DENTAL PLAQUE + SUCROSE = ACID  $\Rightarrow$  DISSOLVES TOOTH



#### HOW TO IDENTIFY:

##### Identification of Tooth Decay:

1. Initial decay or demineralization appears as a faint whiteness.
2. Early decay shows a feature which called as black cavity (cavitation) which is easy to identify on the surface of tooth which shows a small pits with brown discoloration.
3. Extensive stage of tooth decay shows severe destruction of tooth structure with decay turning from brown to black in color. Tooth appears soft and leathery.
4. Advanced decay is a stage where the tooth goes beyond repair, child might complain of pain, he/ she might end up with formation of pus in gums.



Dental decay is preventable and treatment is possible at early stages to advanced stages

Role of teachers :

Educate students: To rinse after every meal and brush twice daily.

Referral: Make it a routine to look into Childs oral cavity to assess for white spots, black spots, holes and refer to dentist.

Healthy Mouth or Clean Mouth Day can be observed to ensure and encourage students develop good oral hygiene habits.

### EARLY CHILDHOOD CARIES (ECC)

Early childhood caries (ECC) is the presence of 1 or more decayed, missing (due to decay), or filled tooth surfaces in any milk tooth in a child 71 months of age or younger.

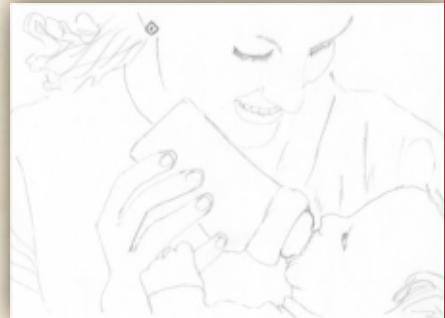
The upper incisors will be the most severely affected

Causes

#### Sharing of utensils.

“washing” a dummy in the mother’s mouth and then giving it to the infant; the infant placing their fingers into their mother’s mouth and then into their own.

If the infant has a high sugar diet, or the bottle (containing fluids other than water) is used as a pacifier, these bacteria become well established and multiply.





### **HOW IT LOOKS:**

Dull white band along the gum line .

Cavities near the necks of the teeth in a yellow, brown or black collar.

Crowns of the four upper incisors may be destroyed completely, leaving decayed brownish-black root stumps.

Usual complaints : tooth sensitivity, pain, infection/swelling and irritability

### **Role of Teachers :**

Educate mothers about child's oral health:

- The appropriate use of the bottle

- Use of sugar-free medications

- Tooth brushing

- Regular dental visits.



Referral: 'Lift the Lip', 'Look', and 'Locate' and refer to Dentist

## 4.2 BAD BREATH

The definition of bad breath, or halitosis, is an unpleasant odour of the mouth.

Causes:

- food like garlic, onions, and spicy food,
- tobacco products
- poor oral hygiene
- health problems
- mouth and throat infections
- Dental problems or medications.
- Food lodgement

Symptoms of bad breath include unpleasant odor or taste in the mouth, dry mouth, or white coating on the tongue.

Role of Teacher :

Education regarding Proper tooth brushing, mouth gargling, quitting smoking, and avoiding foods that causes bad breath odours.

Referral to dentist or General physician if it is due to health problems.

## 4.3 GUM DISEASES

Gums are part of the soft tissue lining of the mouth which appears as coral pink in color in a healthy condition. They surround the teeth and provide a seal around them.



Gum disease is an infection that causes the gum tissue to bleed and / or become red and puffy. It can result in bone loss and eventually tooth loss.

### Causes:

Improper brushing—food accumulation + bacteria= redness of the gums and bad breath.

This further if left untreated forms thicker deposit called tartar—leading to bone loss and eventually loosening of tooth.

### How to identify:

Gums appear red, puffy with deposition of plaque on the teeth.

The gums may bleed when brushed.

Often associated with Bad breath.



### Role of teacher:

Teach correct method of brushing using soft brush and tooth paste.

Advise salt water gargling.

Referral to Dentist for professional cleaning.

### 4.4 CROOKED TEETH /Malocclusion

Malocclusion , or a malignment of the teeth, can be a functional problem (eg, eating), an aesthetic issue, or a hindrance to maintaining good oral hygiene and also contribute in lowering in child's confidence.

### Causes:

Heredity

Oral habits and pressure on teeth or the Upper and lower jaws.

Tooth decay and tooth loss in the milk teeth alter the correct permanent teeth eruptions.

How it looks:



Crowding



Proclination



Anterior Open Bite ,



Anterior Crossbite ,

Role of Teachers:

Identify the children and refer to dentist.

#### 4.5 DENTAL FLUOROSIS

Dental fluorosis, also known as mottling of tooth enamel, is a developmental disturbance of enamel (outer white covering of tooth).

Causes:

Prolonged exposure to high concentrations of fluoride during tooth development.

Pregnant **ladies women** consuming water with Fluoride level higher than 1.5ppm and the child consuming the same water for upto **8** years of age will be at risk of developing dental fluorosis in all his teeth.

Identification points :

- areas- brown pigmentation-

corroded appearance.



#### MILD AND SEVERE FORM OF FLUOROSIS

The greatest concern in dental fluorosis is aesthetic changes in the permanent teeth (the adult teeth).

**Role of Teachers :**

To identify dental fluorosis and refer.

#### 4.6 HABITS

Oral habits are certain habits related to mouth, which if a child performs repeatedly, leads to problems of teeth, like when a child has the habit of thumb sucking for a long time, it causes the upper front teeth to move forward.

These habits may persist for a few months to few years, longer the duration of habit, more severe the effect on teeth. When habits persist beyond 5 years of age of the child, dentist intervention is required.

There are various oral habits, they are:

- Thumb sucking
- Mouth breathing
- Nail biting
- Pencil biting
- Lip biting
- Tongue thrusting

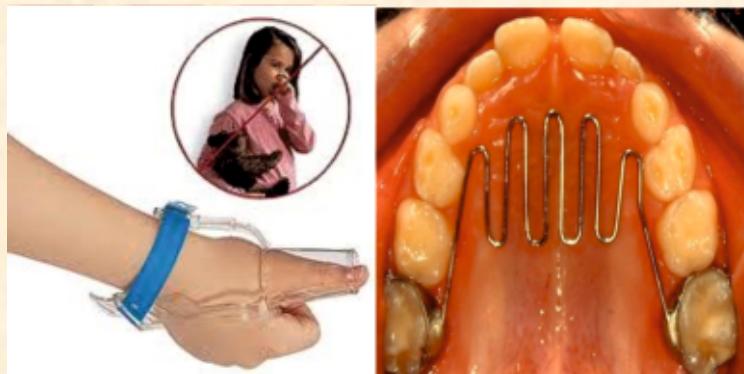
**Thumb sucking**

Most common oral habit in childhood. In this case, the child tends to place his thumb or one or more fingers in his mouth, repeatedly/constantly.

Reason could be underlying psychological reason as to separation from the mother, peer pressure in school, some kind of fears etc.

When the child repeatedly places his thumb in the mouth- the upper front

The Dentist could treat the child in any of the following methods



Mouth breathing:

In this habit, the child breathes through his mouth instead of breathing through his nose. Such children usually keep their lips apart continuously.

Reasons for this could be, chronic nasal congestion, running nose, nasal polyps, deviated nasal septum, adenoids.

Mouth breathing causes dryness of mouth, repeated throat infection.

Nail biting, Pencil biting

Here the child tends to constantly bite his nails, which might lead to notching of the enamel.



Role of Teachers : Identification and referral

#### 4.7 Oral Cancer and pre-cancerous lesions

“Kill Cancer, Before It Kills You”

Cancer is the second most common cause of death. Tobacco use and excessive alcohol consumption have been estimated to account for about 90% of cancers in the oral cavity. In every 8 seconds a death occurs due to tobacco use in India. Oral cancer is largely preventable and it is in our own hands. Oral cancer and pre-cancerous lesions are most commonly seen in middle and old age people. But it is a manifestation of the adverse oral habits cultivated at early age.

Causes: Oral cancer is a multifactorial disease. Following are the established risk factors for the development of oral cancer and it is commonly identified with 6s,

1. Smoking and chewing tobacco
2. Sepsis(Infection)
3. Sharp tooth
4. Spirit (Alcohol)
5. Spicy food
6. Sunlight

Others include familial or genetic predisposition, nutritional deficiency, viral and fungal infections and immune compromised state.

Identification of these lesions is easy if you look into,

Velvety white or red patches in the mouth

Swellings or lumps the lips, gums, or other areas inside the mouth

Unexplained bleeding in the mouth

Unexplained numbness, loss of feeling, or painless/tenderness in any area of the face, mouth, or neck

Persistent sores on the face, neck, or mouth that bleed easily and do not heal within 2 weeks

A soreness or feeling that something is caught in the back of the throat

Difficulty in chewing or swallowing, speaking, or moving the jaw or tongue

Hoarseness, chronic [sore throat](#), or change in voice

[Ear pain](#)

A change in the way your teeth or [dentures](#) fit together

Dramatic [weight loss](#).

Clinical appearance:

Early stage: Ulcer in the oral cavity that fails to heal within 2 weeks. Red and white patches those are not scrapable. Painless elevated mass or swelling.

Advanced stage : Tooth mobility, numbness or loss of feeling, difficulty to swallow, fixation of mass to underlying tissues, with loss of normal mobility. facial disfigurement. It may spread to other organs such as lung, oesophagus, pharynx, intestine and others.

Treatment:

At early stages precancerous lesions regress once habit are discontinued. Topical applications of steroids may be required for some cases. Nutritional supplements include multivitamins and anti-oxidants. Along with these consumption of nutritious food should be encouraged.

At advanced stages this disease can be managed by

Surgery

Radiation therapy

Chemotherapy or anticancer drugs.



## 5. DENTAL EMERGENCIES

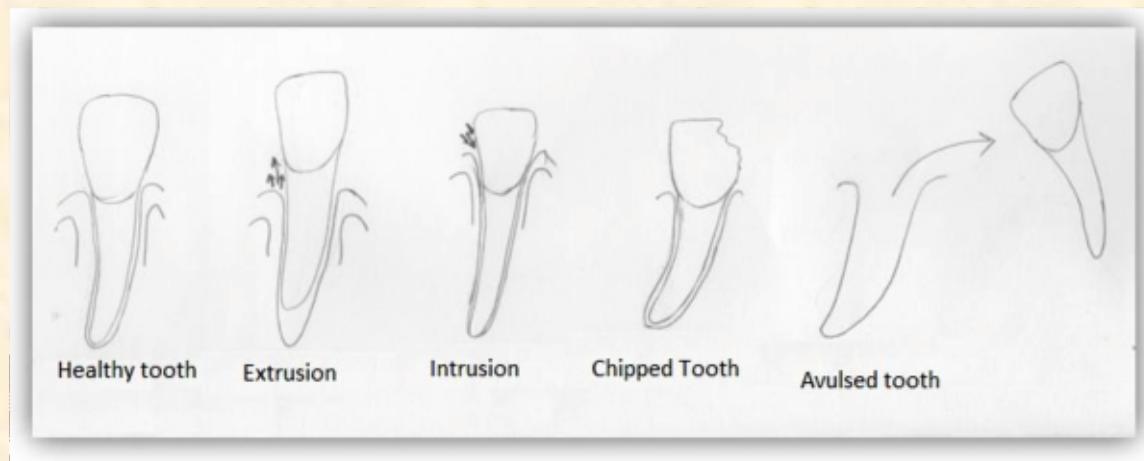
By the end of session teachers should be able to:

1. Provide first aid care in dental emergencies.
2. Enlist the components of First Aid kit, their functions and use during emergencies.

### 5.1 TRAUMA TO TEETH

It is very common for a child to fall down and hurt himself/herself while learning to walk or playing in the school. It can also happen during the fights, road traffic accidents etc. When the child falls down and hurts his face, most commonly, the child's teeth are also traumatised.

The tooth might chip-off, break, become loose, whole tooth could get pushed inside or even pulled outside totally.



Role of Teachers:

When a child falls down and hurts:

1. Calm down the child as the child will be in shock.
2. Ask all the other students not to surround the child, just have 2-3 students with you to help you.
3. Get first aid kit.
4. Clean the area slowly, thoroughly and gently with cotton dipped in antiseptic solution.
5. Give some water to drink to the child if conscious.
6. Check if any teeth are missing .
7. If no teeth are missing, take him to dentist.

8. If any tooth is missing- it might have been totally pushed inside or it might have been pushed outside.
9. So please check the place where the incident has occurred, if you find the tooth , - Do not brush or scrub the tooth .

If there is any dirt on the tooth, gently rinse the tooth with water then place the tooth carefully in fresh tender coconut water/milk/saline/patient's saliva /can be carefully placed back in the place of tooth in child's mouth if child is conscious.If a tooth cannot be replaced within 30 mins then, it has to be placed in storage media till it is taken to the dental clinic.



7 C's :Calm + Clear + Clean + Check + Collect + Contain + Consult  
Even if the part of the tooth is slightly chipped off and found, it can also be fixed.

## 5.2 SOFT TISSUE INJURIES :

Most of the times lips and gingiva/gums are affected.

Whenever there is a dental injury there could be laceration of the lips.

Role of teacher s: Wash hands first with soap and water.

Thoroughly clean the area with wet gauze.

Pressure packs(cotton or clean hand kerchief) to control bleeding and send the child to dentist.

Get TT injection to the injured child, assess for vomiting, giddiness and swelling in any part of the body.

### 5.3 FIRST AID KIT AND ITS COMPONENTS :

First aid kit provides the user with the basic level of tools necessary to treat minor wounds that commonly occur either in school or at home. The kit can be placed in a place which is accessible and known to all teachers. It is always better keep it in closed container and also to change the contents based on date of expiry. Danta suraksha kit – oral examination and emergency kit will contain:

Examination gloves- to be worn by the person cleaning the wound.

Tweezers- to hold cotton /gauze while cleaning the wound

Cotton

sterile gauze (four inch squares are best)- close the wound

Bandage scissors

antiseptic hand cleanser- to wash hands before attempting to provide first aid

elastic bandages- close the wound

medical adhesive tape- close the wound

antibiotic ointment- local application in case of soft tissue injury

Paracetamol- Pain killer

Alcohol wipes- to clean the wound area

Steps to provide first aid

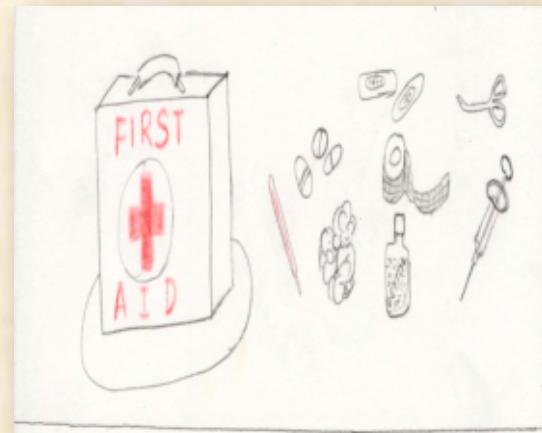
1. Calm the child
2. Check if child is conscious
3. If unconscious, shift to hospital immediately
4. if conscious:

Clean your hands

Using tweezer and cotton clean the wound with clean with plain soap and water.

apply sufficient ointment and put bandage.

5. Provide one crocin paracetamol.



## 6. MISCONCEPTIONS RELATED TO ORAL HEALTH AND DISEASES

There are many myths regarding oral health and treatment.

Myth - Removal of upper teeth affects vision.

Fact - Vision is not affected in any way by undertaking treatment of the upper teeth including its extraction.

Myth – Scaling/removal of tartar causes sensitivity and loosens the teeth.

Fact –Teeth are held in position by the bone. Tartar can sometimes bind the teeth together. Tartar causes inflammation of the gums and hence need to be removed. After removal of this tartar there may be slight mobility of the teeth, however this is necessary to ensure recovery of the health of the supporting structures.

Myth – Dental Procedures are always painful

Fact – not all dental procedures cause pain. however nowadays some procedures are done under local anesthesia (injection) and hence are painless.

Myth – Dental treatment cannot be done during pregnancy.

Fact – Dental treatment can only be done during the second trimester of pregnancy (4-6 months).

Myth – Cleaning of teeth is better with a finger than a toothbrush.

Fact – Toothbrushes can remove plaque and calculus from almost all the teeth and its surfaces and are much more effective compared to cleaning with a finger.

Myth – An infant doesn't need cleaning of teeth

Fact –After every feeding clean the gum pads / teeth.

Myth – Milk teeth decay need not be treated as they are going to fall off anyways.

Fact – Milk teeth need to be cared as much. They could cause pain if decayed and also lead to difficulty in chewing food. Hence they should

be treated. Also if there is an early loss of a milk tooth it could cause drifting and malalignment of the erupting permanent teeth.

**Myth** – When the gums bleed, better not to brush the teeth.

**Fact** – Bleeding is a sign of inflammation of the gums. Bleeding gums usually have plaque and tartar and require scaling (cleaning of teeth) to treat the underlying inflammation. Stopping brushing will accumulate more tartar thereby aggravating the problem. Hence cleaning followed by regular brushing with a soft toothbrush is recommended.

**Myth** – Toothache can be relieved by placing a clove or an aspirin tablet inside the tooth.

**Fact** – Aspirin tablet can cause burning of the soft tissues around the tooth

**Myth** – Expensive toothpastes are always better than cheaper ones.

**Fact** – Cost of a toothpaste is not related to its effectiveness.

## 7. FIVE GOLDEN RULES FOR GOOD ORAL HEALTH

There are five keys things we need to follow to keep our oral health at best.

1. Brush twice daily
2. Rinse after anything you eat
3. Have nutritious diet
4. Avoid frequent snacking between meals
5. Visit dentist atleast six months once

Along with these avoid tobacco (smoking and chewing Gutka).

### 1. Brush twice daily

Brush your teeth with fluoridated toothpaste and use a soft bristles toothbrush

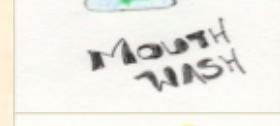
Brush twice daily once in the morning and once at night.

Change your toothbrush every 3 to 4 months, or sooner if the bristles look frayed or worn. (picture)



### 2. Rinse after anything you eat

Rinse your mouth after **eating/ drinking** anything to remove food particles.



### 3. Have nutritious diet

Eat nutritious food containing fresh vegetables and fruits for good oral and general health.



### 4. Avoid frequent snacking in between major meals

Dentist can prevent dental problems.

Dentist can detect dental problems before it becomes severe and causes pain.



## 8. TOOTH BRUSHING TECHNIQUE

Basic instructions:

Clean your teeth using tooth brush and fluoridated toothpaste only  
Peanut size toothpaste should be dispensed on the brush.  
The duration of the tooth brushing should be at least 2 mins.  
Always use short and gentle strokes only.  
Brush covering only 2-3 teeth area.  
Start with outer surfaces, inner, chewing and then tongue area.  
The toothbrush selected should be of soft type.  
The toothbrush has to be changed once in 3 months, as it may fray out.  
Toothbrushes should not be exchanged.

Procedure:

1. Start with upper right region. Place the toothbrush at an angle of 45 degrees, covering 2-3 teeth surface area and ask them to brush the teeth in a soft and gentle forward and backward motion or vibratory motion, and then finally sweep towards the chewing surface.
2. Brush the outer surfaces of each teeth surface coverage area, by placing the bristles against the gum line. Repeat the same technique for the inner surfaces also.
3. Followed by this the inner surfaces of the upper and lower anteriors are cleaned as follows: The tooth brush is placed vertically angulated to the inner surface and makes several gentle up and down strokes.
4. The same gentle strokes have to be used for the chewing surfaces as well. Followed by which the tongue area is cleaned with gentle forward and backward motion. Cleaning the tongue is essential to remove the bacterial coating on it.



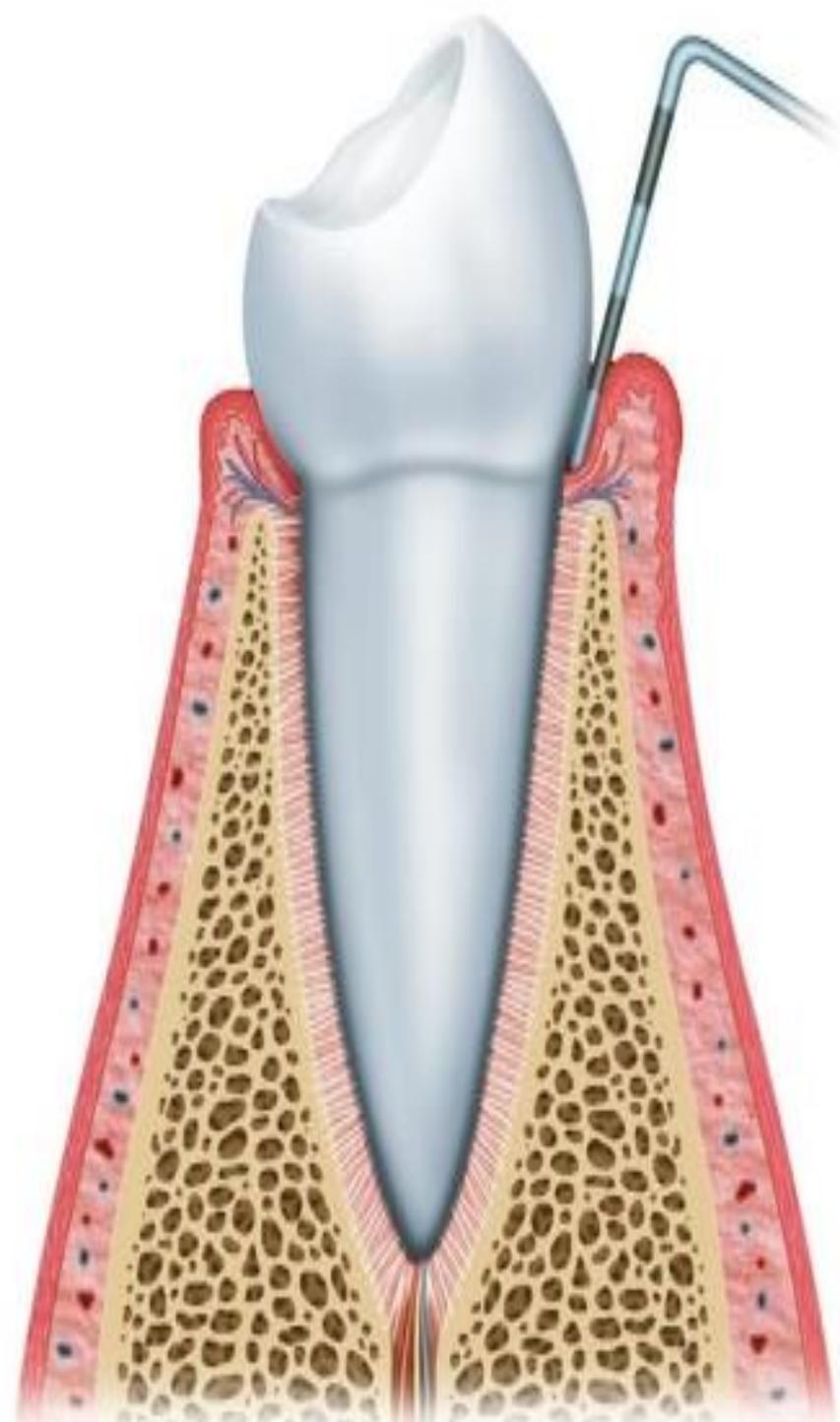


## PERIODONTITIS

### ಹಲ್ಲು ಸುತ್ಪರೆ ರೋಗ

#### GINGIVITIS

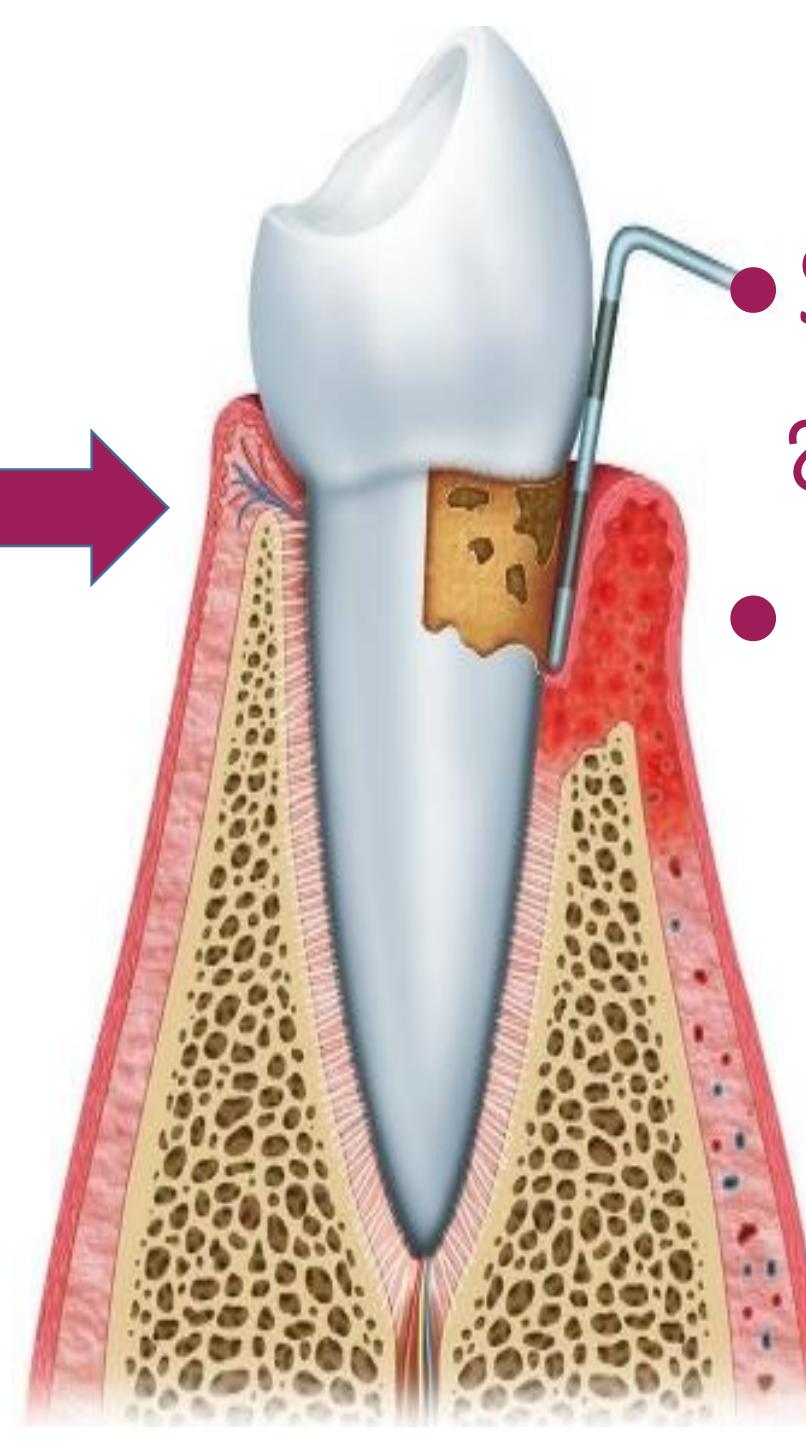
##### ಜಿಂಗ್ವಿಟಿಸ್



- Bad breath  
ಬಾಯಿ ದುಖಾಸನೆ
- Bleeding gums  
ಒಸಡುಗಳು ರಕ್ತಸೂಖ
- Swollen gums  
ಒಸಡುಗಳ ಉತ್ತ

#### POCKET FORMATION

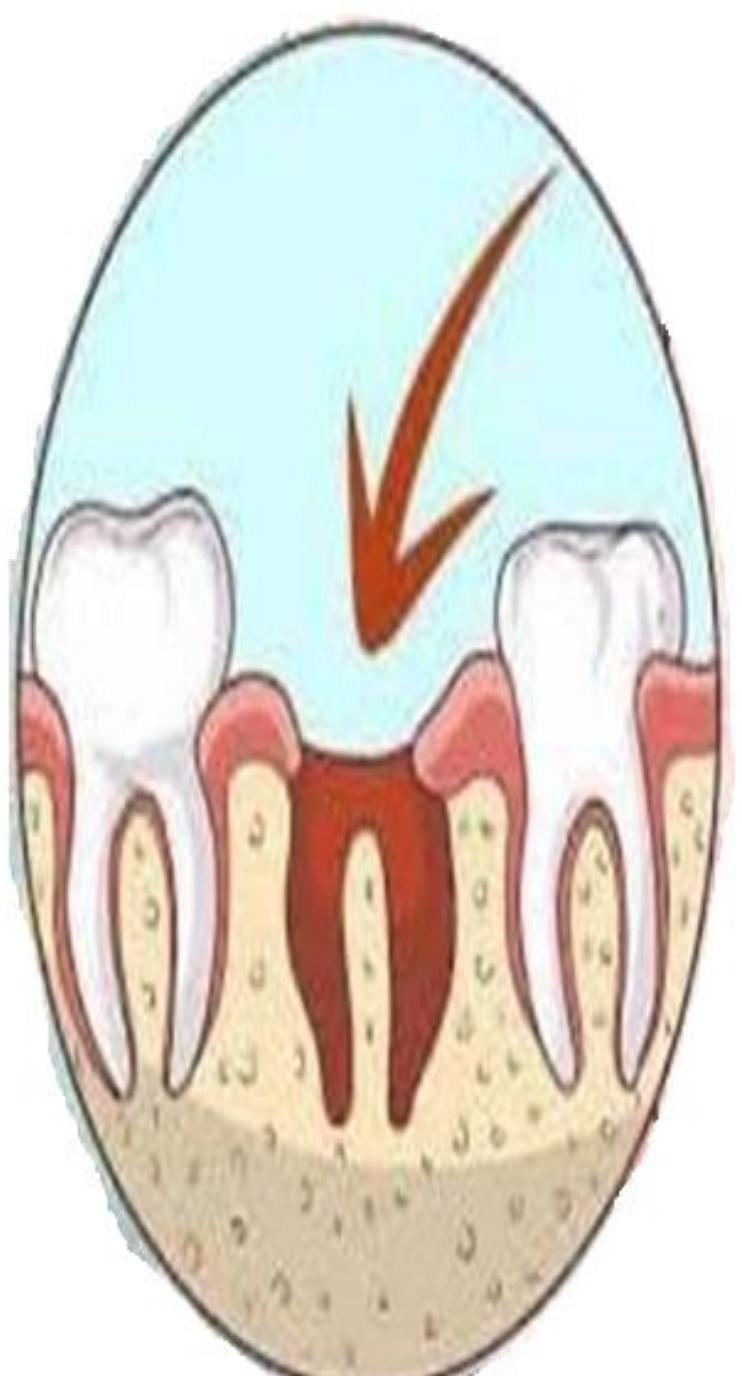
##### ಪಳಕೆಟ್ ರಚನೆ



- Severe Bleeding gums  
ಒಸಡುಗಳಲ್ಲಿ ಶೀವು ರಕ್ತಸೂಖ
- Initial Bone Loss  
ಆರಂಭಿಕ ಮೂಳೆ ಸೆವಿತೆ

#### LOSS of TOOTH

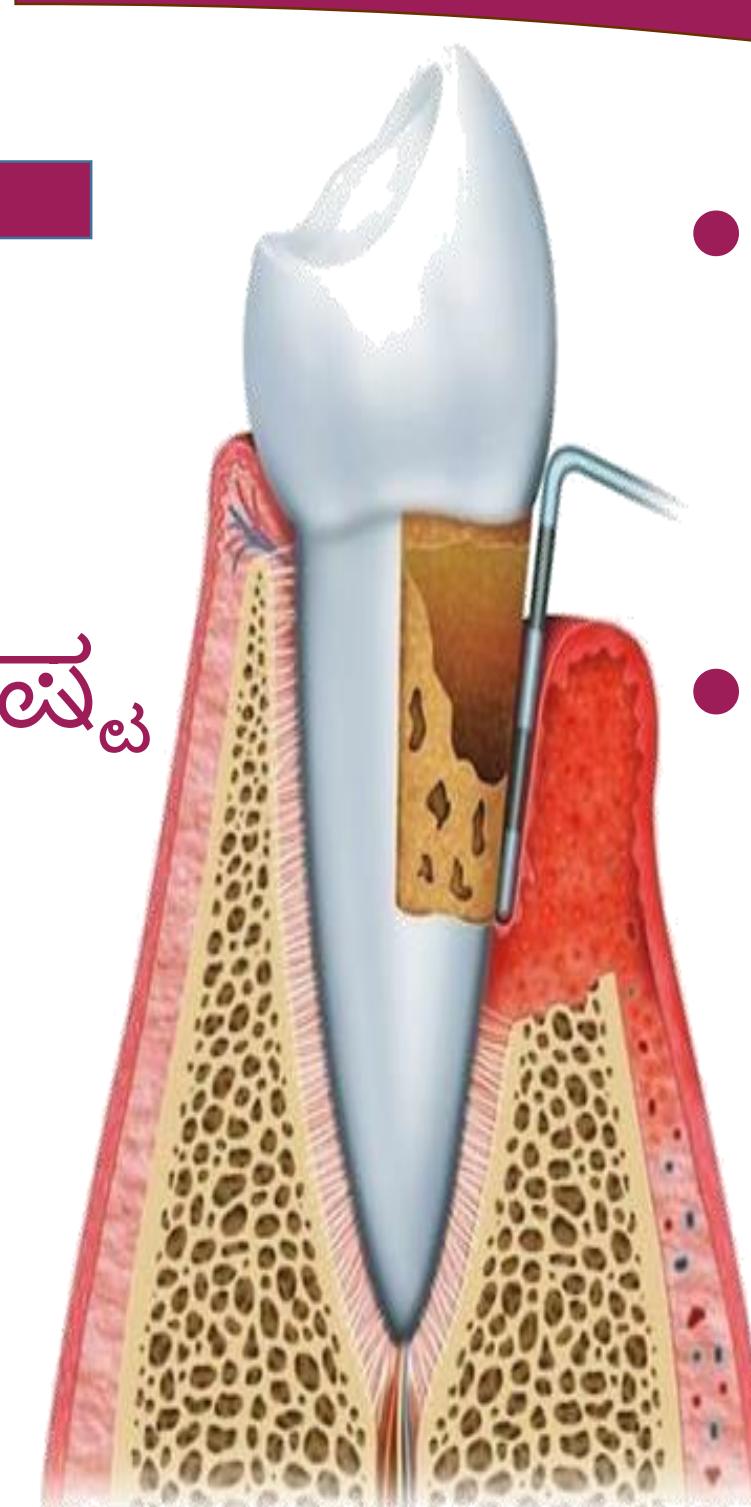
##### ಹಲ್ಲು ನಷ್ಟ



- Early loss of Tooth  
ಅತ್ಯೇ ಬೇಗ ಹಲ್ಲು ಉದುರುವಿಕೆ
- Difficulty in Eating & Speech  
ತೀನ್ನಲು ಮತ್ತು ಮಾತನಾಡಲು ಕಷ್ಟ
- Nutritional Deficiency  
ವೈಟಿಮಿನ್ ಕಾರ್ಬಾರ್ಡ ಕೊರತೆ

#### BONE LOSS

##### ಮೂಳೆ ಕರಗುವಿಕೆ



- Continued Bone Loose  
ಮುಂದುವರಿದ ಮೂಳೆ ಕರಗುವಿಕೆ
- Mobile teeth  
ಸದಿಲವಾದ ಹಲ್ಲು



## Self Examination for Oral Cancer ಬಾಯಿಯ ಕ್ರಾನ್ಸರ್ ಸ್ವಯಂ ಸ್ವಷಟ್ರೀಕ್ರ



1. Lips: Use thumb and index finger and feel for lumps

ತುಟಿಗಳು: ಹೆಚ್ಚರಳು ಮತ್ತು ತೋರು ಬೆರಳನ್ನು ಬಳಸಿ ಮತ್ತು ಗಂಟುಗಳಿಗಾಗಿ ಪರೀಕ್ಷಿಸಿ



Gums: Examine the gums with the lips pulled away

ಒಸಡುಗಳು: ತುಟಿಗಳನ್ನು ಎಳೆದುಕೊಂಡು ಒಸಡುಗಳನ್ನು ಪರೀಕ್ಷಿಸಿ



Cheeks: Use the thumb and forefinger to draw the cheeks away from the teeth

ಕೆನ್ನುಗಳು: ಹಲ್ಲುಗಳಿಂದ ಸೆಳೆಯಲು ಹೆಚ್ಚರಳು ಮತ್ತು ತೋರುಬೆರಳನ್ನು ಬಳಸಿ



Palate: Say "ah" to see the back and roof of the mouth

ಅಂಗುಳಿನ: ಬಾಯಿಯ ಹಿಂಭಾಗ ಮತ್ತು ಧಾವಣೆಯನ್ನು ನೋಡಲು "ಆಹ" ಎಂದು ಹೇಳಿ



Tongue(extended): Grasp the end of tongue with gauze. Pull the tongue outward, right and left, examining each surface

ನಾಲಿಗೆ (ವಿಸ್ತರಿಸಲಾಗಿದೆ): ನಾಲಿಗೆಯ ತುದಿಯನ್ನು ಬಟ್ಟಿಯ ತುಣಕುನಿಂದ ಹಿಡಿದುಕೊಳ್ಳಿ. ನಾಲಿಗೆಯನ್ನು ಹೊರಕ್ಕೆ, ಬಲ ಮತ್ತು ಎಡಕ್ಕೆ ಎಳೆಯಿರಿ, ಪ್ರತಿ ಮೇಲೆಯನ್ನು ಪರೀಕ್ಷಿಸಿ



Tongue(upward):touch tip of tongue to roof of the mouth. Check the floor of the mouth and underside of tongue

ನಾಲಿಗೆ (ಮೇಲಕ್ಕೆ): ಬಾಯಿಯ ಮೇಲಾವಣಿಗೆ ನಾಲಿಗೆಯ ತುದಿಯನ್ನು ಸ್ಪರ್ಶಿಸಿ. ಬಾಯಿಯ ನೆಲ ಮತ್ತು ನಾಲಿಗೆಯ ಕೆಳಭಾಗವನ್ನು ಪರೀಕ್ಷಿಸಿ



# Oral Cancer

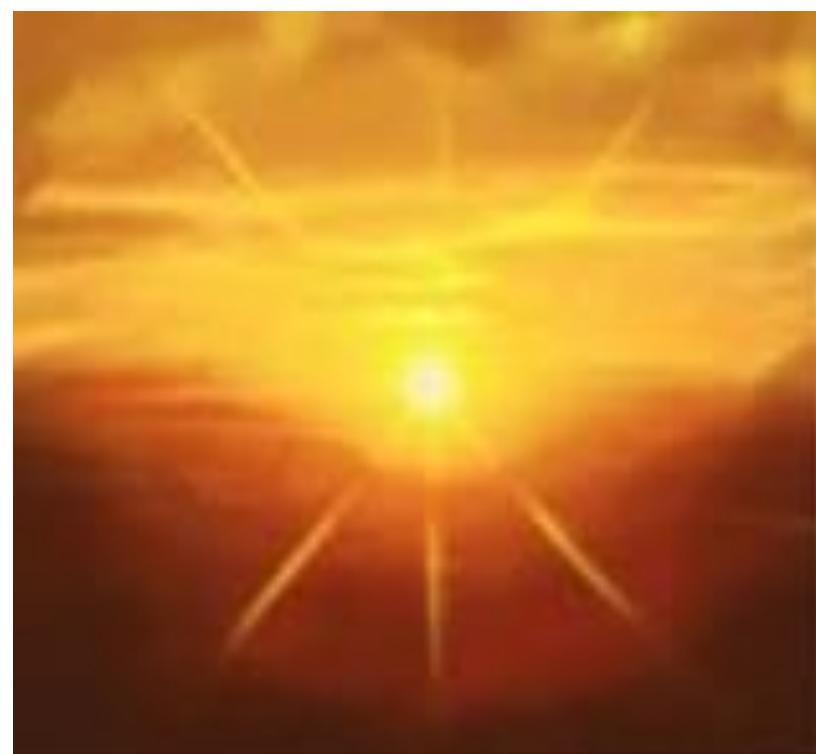
## ಬಾಯಿಯ ಕಾಂಸರ್



### RISK FACTORS

#### ಅಪಾಯದ ಅಂಶಗಳು

- Alcohol Consumption ಮದ್ದ ಸೇವನೆ
- Tobacco Consumption ತಂಬಾಕು ಸೇವನೆ
- Pan Masala ಪಾನ್ ಮಸಾಲ
- Cigarette ಸಿಗರೆಟ್
- Bidis ಬಿಡಿಗಳು
- Malnutrition ಅಪೋಷಿಷ್ಟತೆ
- Virus ವೈರಸ್
- Cigar ಸಿಗಾರ್
- Sunlight ಸೂರ್ಯನ ಬೆಳಕು



### CLINICAL SIGNS OF ORAL CANCER

#### ಬಾಯಿಯ ಕಾಂಸರ್ ನ ಲಕ್ಷಣಗಳು

- |                              |                            |
|------------------------------|----------------------------|
| ▪ White, Red Patches         | ಬಿಳಿ, ಕೆಂಪು ಮಚ್ಚೆ          |
| ▪ Abnormal growth of tissue  | ಅಂಗಾಂಶದ ಅಸರ್ಜ ಬೆಳವಣಿಗೆ     |
| ▪ Swelling                   | ಉರತೆ                       |
| ▪ Non healing Ulcer          | ವಾಸಿಯಾಗದ ಹುಣ್ಣ             |
| ▪ Reduced mouth opening      | ಬಾಯಿ ತೆರೆಯುವುದರಲ್ಲಿ ನೀಭರಂದ |
| ▪ Burning sensation of mouth | ಬಾಯಿಯಲ್ಲಿ ಉರಿ ಸಂವೇದನೆ      |
| ▪ Gingival bleeding          | ಒಸಡು ರಕ್ತಸ್ವಾವ             |



## Dental Caries ಹಂಜುಕು ಹಲ್ಲು



**Enamel Caries**

- **Enamel Caries**  
ದಂತಕವಚದ ಹಂಜುಕು
- **Treatment:** Cement Filling  
ಚಿಕಿತ್ಸೆ: ಸಿಮೆಂಟ್ ತುಂಬಾಲಿಕೆ
- **White Spot Lesion**  
ಹಲ್ಲಿನ ಮೇಲೆ ಬಿಳಿ ಮಚ್ಚೆ
- **Treatment:** Fluoride  
ಚಿಕಿತ್ಸೆ: ಫ್ಲೋರೈಡ್ ಬಳಕೆ



**Progressing Towards  
Dentin**

### Dentinal caries ಹಂಜುಕುಹಲ್ಲು

- Sensitivity to hot or cold foods or drinks, and discoloration of the tooth  
ಬಿಸಿ ಅಥವಾ ತೆಂಪಾದ ಆಹಾರಗಳು ಅಥವಾ ಪಾನೀಯಗಳಿಗೆ ಸಂವೇದನೆ, ಮತ್ತು ಬಣ್ಣ ಬದಲಾಗುತ್ತದೆ
- **Treatment:** Filling  
ಚಿಕಿತ್ಸೆ: ಸಿಮೆಂಟ್ ತುಂಬಾಲಿಕೆ



**Dentinal Caries**

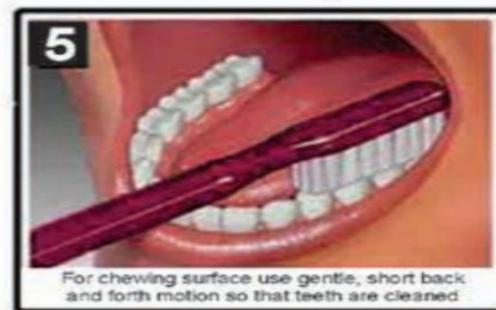
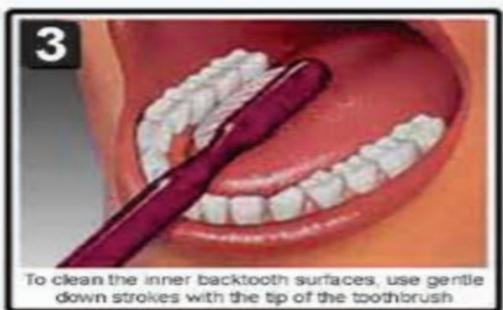
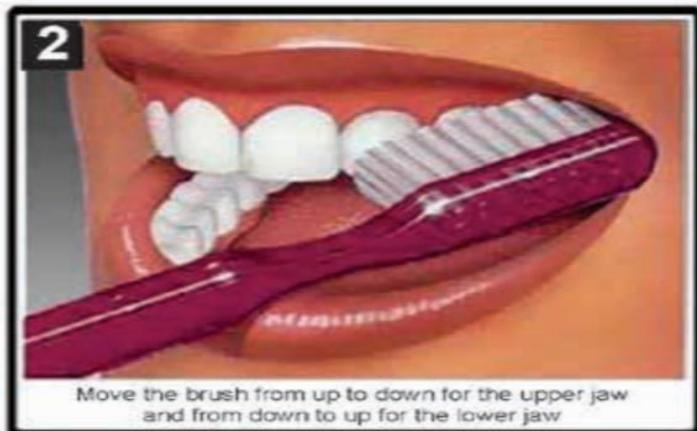
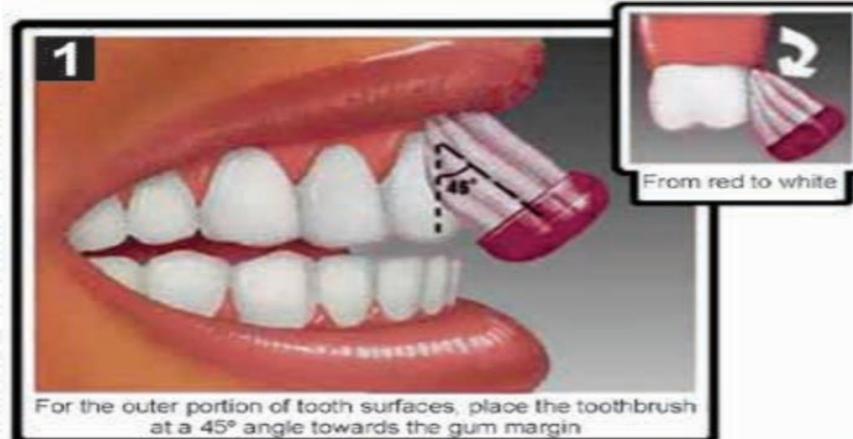
### Pulp involvement

- Person starts to experience sharp shooting pain  
ವ್ಯಕ್ತಿಯು ಶೈಕ್ಷಣಿಕವಾದ ನೋವನ್ನು ಅನುಭವಿಸಲು ಪ್ರಾರಂಭಿಸುತ್ತಾನೆ
- Treatment: Root canal Treatment  
ಚಿಕಿತ್ಸೆ: ಬೇರುಚಿಕಿತ್ಸೆ
- If left untreated, can lead to potential tooth loss  
ಚಿಕಿತ್ಸೆ ನೀಡದಿದ್ದರೆ, ಸಂಭಾವ್ಯ ಹಲ್ಲಿನ ಉದುರುವಿಕೆಗೆ ಕಾರಣವಾಗಬಹುದು
- Late-stage caries can cause a dental abscess  
ಕೊನೆಯ ಹಂತದ ಕ್ಷಯವು ಹಲ್ಲಿನ ದವಡೆಯ ಉತ್ಕೇ ಕಾರಣವಾಗಬಹುದು



**Involvement of  
Pulp &  
Surrounding  
Structures**

### Brushing instructions:



Contact us :

New Bel road , Gnanagangothri campus  
Phone: +91 80 2360 2079/2360 0949  
Timings: Monday to Friday :9 am to 4 pm  
Saturday : 9am to 1 pm

## **TOOTH BRUSHING**

- This is an important part of effective plaque control.
- Has to be done with toothbrush and toothpaste.
- A pea size amount of tooth paste and soft bristled brush must be used.
- Two types of tooth brushes – baby/adult brush may be used according to the age.
- Tooth brush should be changed once in three months .
- Massaging the gums the finger should be advised after tooth brushing.

## **TONGUE CLEANING**

- Advise on cleaning the tongue after tooth brushing.
- Done with the bristles of the brush by applying gentle back and forth strokes.
- Advise rinsing the mouth thoroughly after brushing.



- MOUTH RINSING SHOULD BE ADVOCATED AS A PART OF ROUTINE ORAL HYGIENE ESPECIALLY IN BETWEEN SNACKING.

## MOUTH SELF EXAMINATION

BUCCAL MUCOSA                    TONGUE: LATERAL BORDER

			
RIGHT CHEEK	LEFT CHEEK	RIGHT BORDER	LEFT BORDER

		
UPPER & LOWER LABIAL VESTIBULE	PALATE	FLOOR OF THE MOUTH



## **MOUTH RINSING**

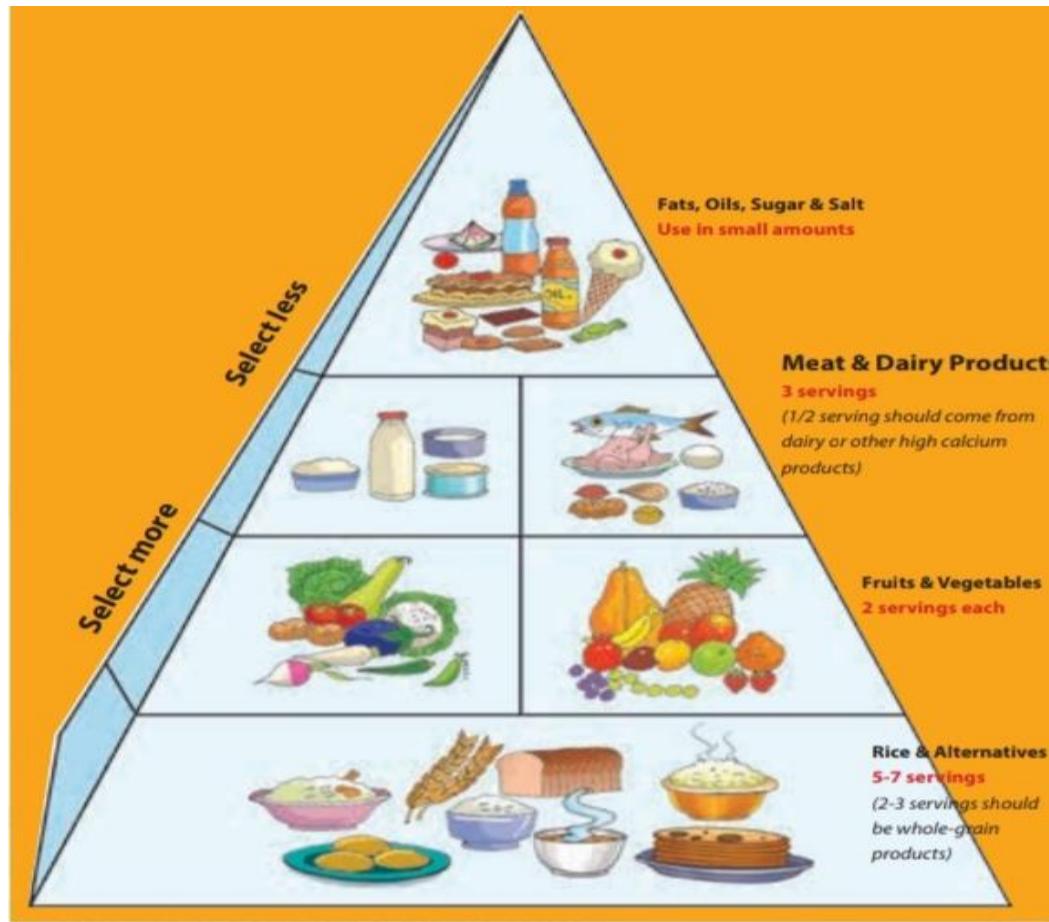
- Should be advocated as a part of routine oral hygiene .
- It must be advised that consumption of sweetened beverages/snacks and meals has to end with a thorough mouth rinse with water.
- Mouthwashes can be used after consultation with dentist.

## **REGULAR MOUTH SELF EXAMINATION**

- Educate about and encourage self examination of mouth.

## **VISITING A DENTIST**

- It is important to advise families and communities to visit dentist at least once a year for a routine dental check-up, early diagnosis and prompt treatment.



## Consumption of healthy non- cariogenic diet

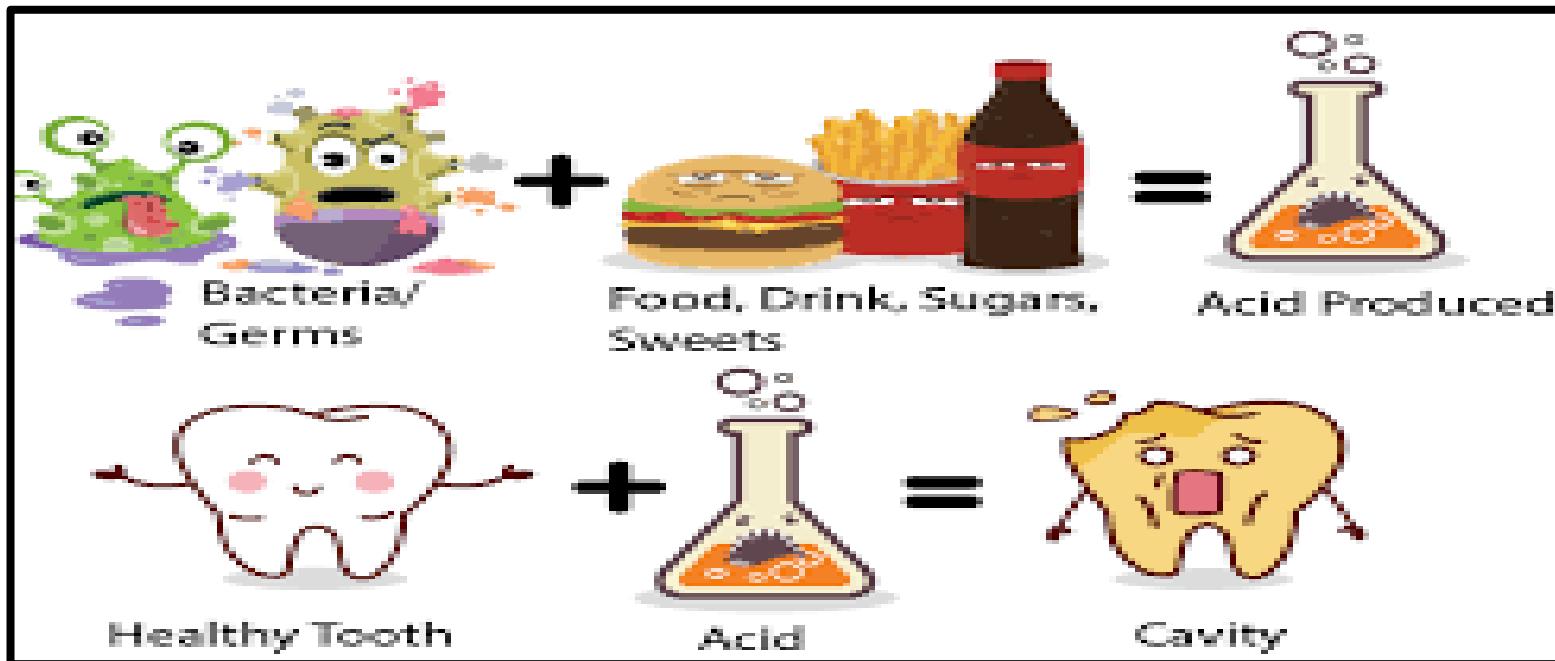
A balanced diet should be recommended at all ages

- Advise on consumption of raw and fibre rich fruits and vegetables
- Advise on avoiding sweetened beverages, soft drinks, sticky and sweet food.
- Advise on avoiding frequent snacking between major meals.

## CONSUMPTION OF NUTRITIOUS FOOD

- IRON - GREEN LEAFY VEGETABLES, WHOLE GRAINS
- CALCIUM – MILK AND PRODUCTS
- VITAMINS – CITRUS FRUITS
- PROTEIN – PANEER, EGG, MEAT
- FATS – BUTTER, GHEE, OILS, NUTS





**Avoid snacking between meals  
and foods containing high  
amounts of sugars, salt and fats**



#OralHealth



World Health  
Organization



Contact us :

New Bel road , Gnanagangothri campus  
Phone: +91 80 2360 2079/2360 0949  
Timings: Monday to Friday :9 am to 4 pm  
Saturday : 9am to 1 pm



## **QUITTING CONSUMPTION OF ALL FORMS OF TOBACCO AND BETEL NUT**

Advise all individuals during interactions:

- Not initiate tobacco consumption
- To quit use of all forms of tobacco (smoke less/smoking),
- Betel nut and any such regular chewing habit



## FACULTY OF DENTAL SCIENCES



## ANNUAL REPORT OF ACTIVITIES - 2022

DEPARTMENT OF PUBLIC HEALTH DENTISTRY

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## Ramaiah University of Applied Sciences

### Faculty of Dental Sciences

#### Department of Public Health Dentistry

#### OVERVIEW:

**Faculty of Dental Sciences** was established in the year 1991 as MS Ramaiah Dental College and Hospital. After moving into the status of private university in 2013, the name was changed to Faculty of Dental Sciences.

The realms of any health care institutions are academics, research, outreach and clinical services. The realm of outreach services are predominantly addressed by the department of Public Health Dentistry. It is inherent in the vision statement of the University to develop a socially accountable institution and promotion of sense of commitment, respect and excellence among the students.

In this context, department of Public health Dentistry strives to capitalize on student learning and service to the community while instilling in them the sense of commitment and service with compassion and empathy.

The department plans all the programmes and service activities through a strong community partnership and engagement. The dual objectives of serving the needy and developing socially accountable future workforce are achieved through the community oral health promotion programmes and tag line '**Healthy Smiles; Healthy Lives'**.

The Team responsible for the community oral health promotion programmes is:

Sl. no	Name	Designation
1.	Dr K Pushpanjali	Professor & Head
2.	Dr Anitha R Sagarkar	Associate Professor
3.	Dr Shwetha K M	Associate Professor
4.	Dr Shivakumar	Tutor
5.	Dr Mary Tanuja	Dental Surgeon/Tutor
6.	Dr Karthik	Dental Surgeon/Tutor
7.	Mr Naveen Kumar	Medico-social worker
8.	Mrs Priyanka	Dental nurse
9.	Mr Devraj	Driver
10.	Mr. Gopal	Dental Assistant
11.	Mrs. Aarti	Dental Assistant
12.	Mr. Thejesh K	Dental Assistant

In the above context, Department of Public Health Dentistry has the below mentioned objectives:

**Objective 1:** Build strong relationships with community leaders and partnerships with stakeholders relevant for the outreach services

**Objective 2:** Facilitate students to inculcate sense of social accountability amongst the students while serving the people through community based learning

**Objective 3:** Address health inequities and proactively incorporate the social determinants of health into health practices

To meet the above mentioned objectives, the department has multiple approaches which are mentioned in the proceeding sections. The programmes mentioned are the ones organised and conducted during January 2022 – December 2022.

Community Oral Health Promotion Programmes		
Oral Health Programmes for school population	Oral Health Programmes for general population	Oral Health Programmes for targeted population
Christel house India	World Oral Health Day	Ashwini Angadi
KV Secondary School, Bangalore	Oral health education material	Trust – Belaku Academy
Government Primary School, Kendanahalli	Hospital based oral cancer registry	Janaseva Samruddi Ashram
Government Primary School, Nagdenahalli	Community based learning programme	Smile Trust Foundation
Anganawadi center, Nagdenahalli		
Government Primary School, Mylapura		

## ORAL HEALTH PROGRAMMES FOR SCHOOL POPULATION

### **Introduction –**

Schools provide an important setting for promoting health as they reach billion children worldwide and through them a school staff, families and a community as a whole. Oral health promotion can be implemented as educative, promotive, preventive and treatment components. Treatment components specific to school population is either incremental or comprehensive oral health care. Oral care is provided under Comprehensive and incremental dental care. Our programmes are designed accordingly based on logistics, consent and available resources.



**Dept. of Public Health Dentistry****Faculty of Dental Sciences – Ramaiah University of Applied Sciences****Christel House India****13<sup>th</sup> June 2022****Introduction –**

Christel House is a holistic model designed to transform the lives of impoverished children. They do this by focusing on the whole child. Robust K–12 education and a strong character development program are complemented with regular healthcare, nutritious meals, guidance counseling, career planning, family assistance and College & Careers support from early childhood through early adulthood.

The mission of Christel House is to help children around the world break the cycle of poverty, realize their hopes and dreams and become self-sufficient, contributing members of society. A Christel House Learning Center is a place for children to grow, to develop and to achieve dignity and success. It is a place where children learn the values of respect, responsibility, independence and integrity, develop a love of learning and maximize their human potential.

**Source – Christel house India website**

**Aim:** To provide comprehensive oral health care to students in Christel House India

**Objective 1:** Collection of the baseline data on oral health status

**Objective 2:** Analysis of data and categorization of students based on the treatment need phase

**Objective 3:** Providing comprehensive treatment based on details obtained from objective 1 and 2

**Objective 4:** Assess the comparative data after one year

Number of visits	Date of visit
1)	13 <sup>th</sup> June 2022
2)	03 <sup>rd</sup> November 2022

**Target population –**

Newly enrolled students for the academic year of 2021- 2022. The total students enrolled are **70** in the kindergarten section.

**Objective 1 – Baseline data collection on oral health status**

The first visit was on 13<sup>th</sup> June 2022. It was a 4 days camp where all specialty experts had assembled to screen the entire students enrolled to school. Since the WHO evaluation proforma (2013) is well acknowledged, it was adopted to conduct the survey. The survey tool was filled using google form. The participating students were trained and calibrated for all clinical assessment indices mentioned in the WHO proforma. The clinical examination was conducted for all the 1000 students and baseline data was collected for 70 new entrants.

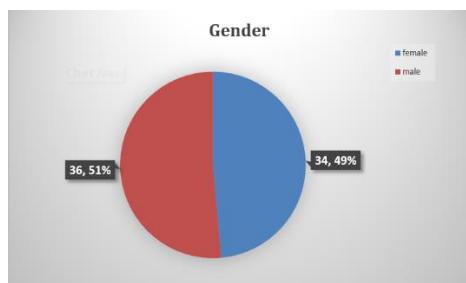
Since it was an annual camp organized every year, the dental unit along with dermatologists, ENT specialists, ophthalmologists, general physicians, physiotherapists and nursing specialists screened the gathering ( students from kindergarten to 12<sup>th</sup> standard).



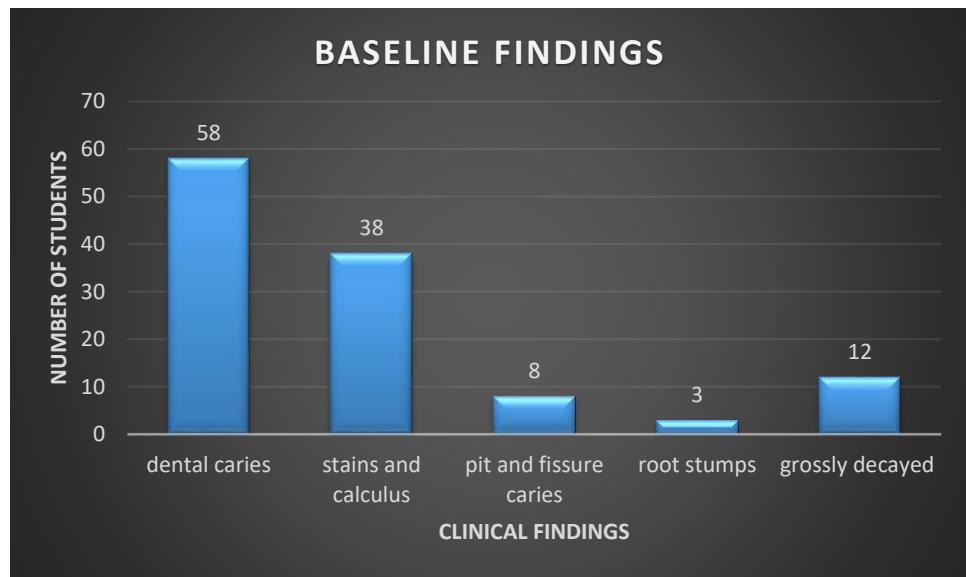
**Objective 2 – Analysis of data collected and categorization of students based on the treatment needs**

### **Results of the objective 1**

**Total children: 70**



**Fig no 1: Gender distribution**



**Fig no 2: Distribution of dental conditions among the 70 children**

**Interpretation:** 80% of the students had dental caries and sequel. Majority of the students required preventive and restorative treatment. 15 of the students required extraction of teeth.

Phase of treatment needed	Number of students requiring the treatment
<b>Preventive phase</b>	
Topical fluoride application	70
Pit and fissure sealant application	08
<b>Promotive phase</b>	
Oral health education	70
Oral prophylaxis	38
<b>Restorative phase</b>	
	58
<b>Surgical phase</b>	
	15

### Action Plan:

1. Preventive and promotive phase at the Christel House India school premises: Oral health education for the students as well as for the parents. The contents for the oral health education included importance of oral health, prevention of dental caries, gingivitis, tobacco consumption etc. Skills for children included brushing techniques appropriate for children, hand washing technique and oral hygiene instructions.
2. The restorative phase and surgical phase at the **Faculty of Dental Sciences** premises for the ease and faster treatment provision.



### Oral health education interactive session

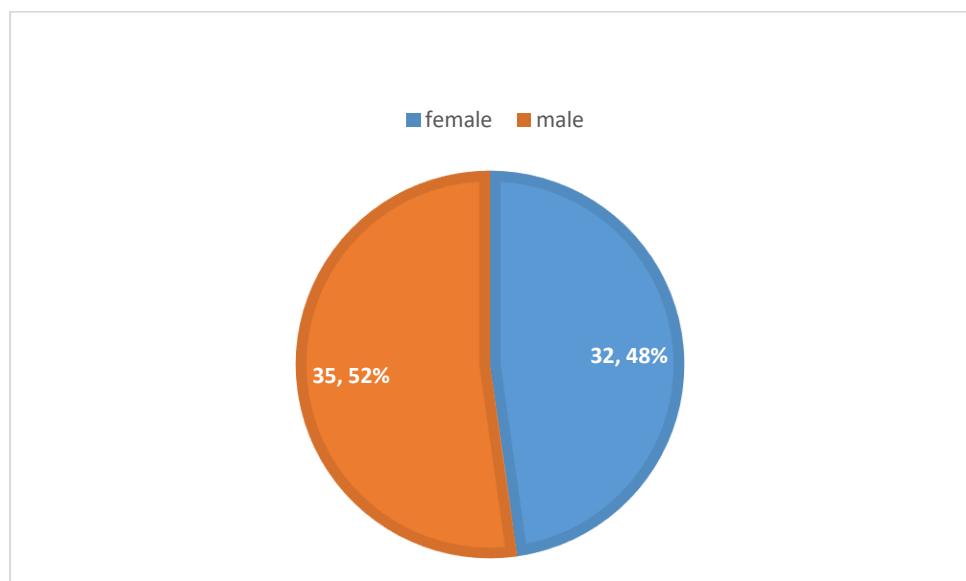
**Objective 3: To provide comprehensive treatment based on details obtained from objective 1 and 2**

After obtaining permission from school authorities and consent from parents and children the first visit for treatment was scheduled on 3rd November 2022.

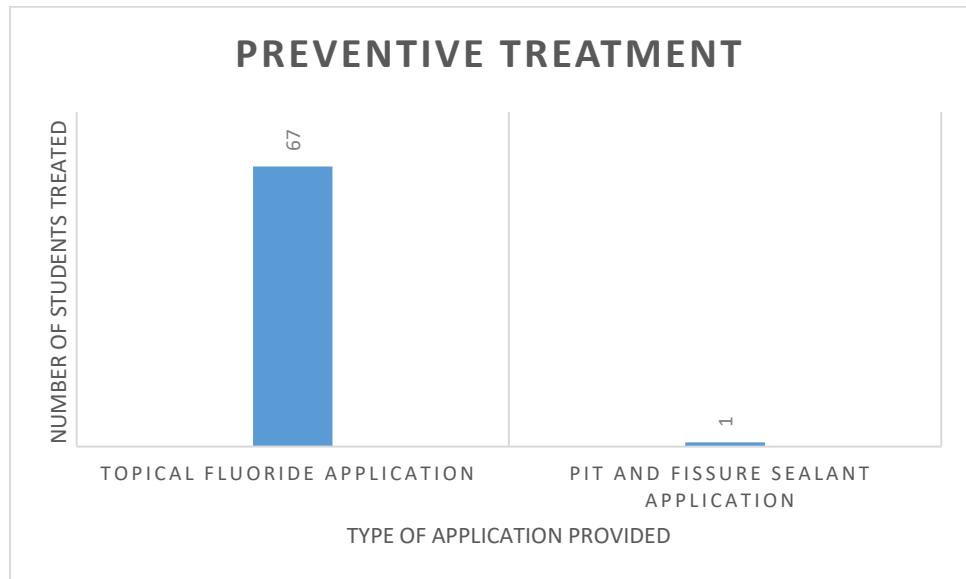
Promotive: Oral health education session and skill based training session for brushing and hand hygiene for all 67 students

Preventive: APF gel topical fluoride application was done for all 67 as everyone was at risk for dental caries. Pit and fissure sealant was given for one student.

Complex treatment: The restorative and surgical phases treatment were being provided in the college institute premises, where specific days every fortnight were fixed as per convenience from both the students and doctors end. The comprehensive treatment was provided by the **Department of Pedodontics and Preventive Dentistry** as the treatment needed specialist's guidance.

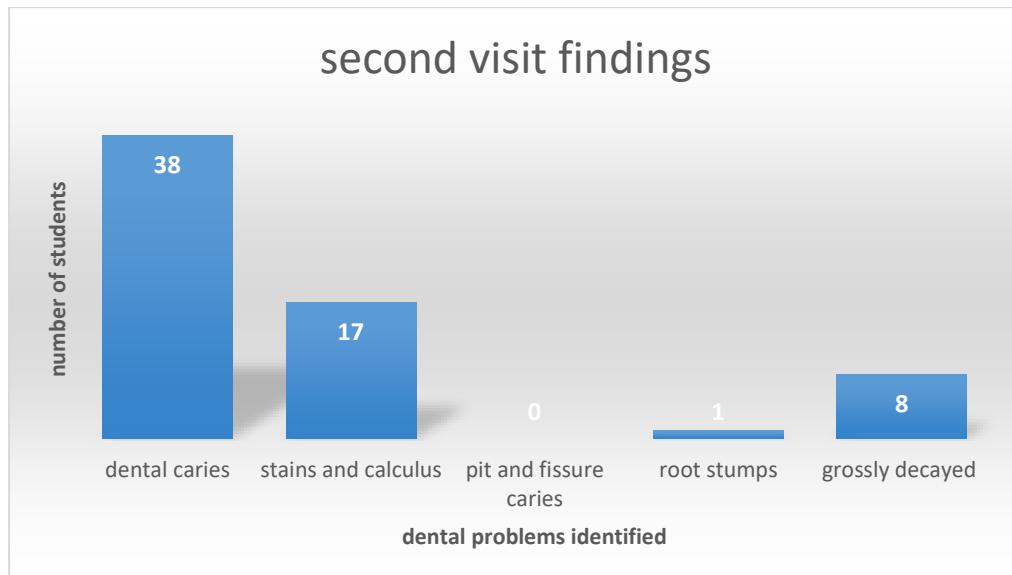


**Fig no 3: Gender distribution after second visit**



**Fig no 4: Preventive treatment provided on second visit**

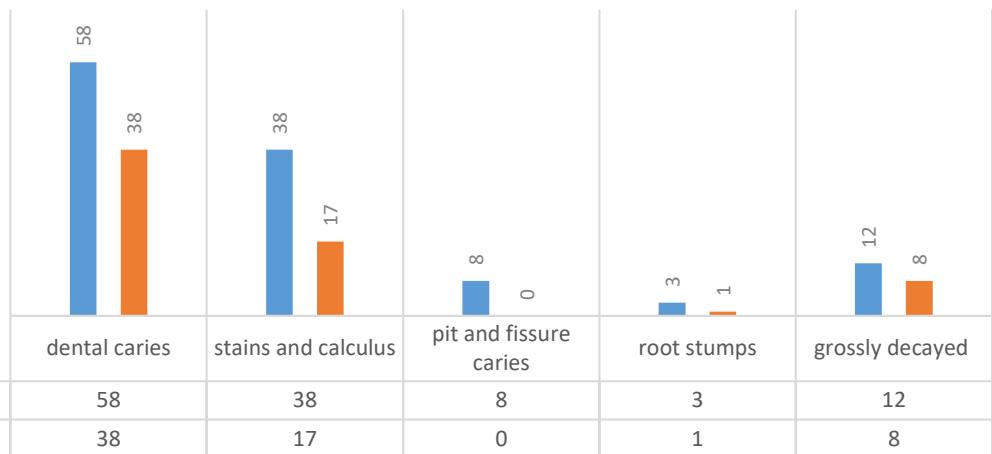
Based on the treatment provided from July 2022 till 3<sup>rd</sup> November 2022, screening was done again on 3<sup>rd</sup> November 2022 and the following data was obtained.



**Fig no 5: dental problems identified after second visit**

## COMPARISON BETWEEN FIRST AND SECOND VISIT

■ Preintervention ■ Postintervention



**Fig no 6: comparison of dental problems identified between first and second visit**

Dental problems	Baseline (first visit )	1 <sup>st</sup> follow up ( second visit )
	n (%)	n (%)
Dental caries	58 (82.85%)	38 (54.29%)
Stains and calculus	38 (54.29%)	17 (24.29%)
Pit and fissure caries	08 (11.43%)	0 (0%)
Root stumps	03 (04.29%)	01 (01.43%)
Grossly decayed	12 (17.14%)	08 (11.43%)

Inference: there was **reduction** of dental caries by **28.56%**, **30%** students had **no** stains and calculus, **0%** pit and fissure caries, just **1.4%** root stumps and **11.43%** grossly decayed. There has been a **significant reduction** in the dental problems seen in the first visit and first follow up.

The comprehensive treatment is undergoing and we are on the way of making these students free of any dental problems which will be very soon achieved.

To follow up the status of further decrease in the dental problems, a follow up visit is scheduled in the month of February 2023.





## ORAL HEALTH PROGRAMMES FOR SPECIAL POPULATION

**Ashwini Angadi Trust – Belaku Academy**

**12<sup>th</sup> January 2022**

**Venue:** Ashwini Angadi Trust – Belaku Academy- Home for visually impaired and underprivileged children

### **Introduction/ background:**

Ashwini Angadi Trust – Belaku Academy is located on Magadi Road, 25km from the Faculty of Dental Sciences, Bangalore. Ashwini Angadi and her father Prakash Angadi founded the Ashwini Angadi Trust in 2014. It is a residential school for both boys and girls who struggle with various levels of visual impairment. This organization is well managed by Ms Ashwini Angadi.



Visit to this academy was done on 12<sup>th</sup> January 2022. The key aspects of the visit was to create awareness, teaching important skills related to brushing technique, oral hygiene, hand sanitization and comprehensive dental treatment.

**Aim:** To improve oral health status by incorporating Comprehensive Oral Health Care services for children

**Activities:**

**Activity 1:** Exchange of MOU and collection of baseline data on oral health using WHO proforma

**Activity 2:** To plan and provide comprehensive oral health for all the children in the orphanage

**Activity 3:** To assess the effectiveness of comprehensive oral health care programme in the academic year (2021-2022)

**1<sup>st</sup> visit**

- **Collect baseline data on oral health**

WHO proforma (2013) was used to collect the data since it is internationally accepted. Calibration was done in the department of Public Health Dentistry for all the components of WHO proforma to ensure reliability. The visit also included signing of MOU with the Belaku Academy for sustained oral health care services from Faculty of Dental Sciences.

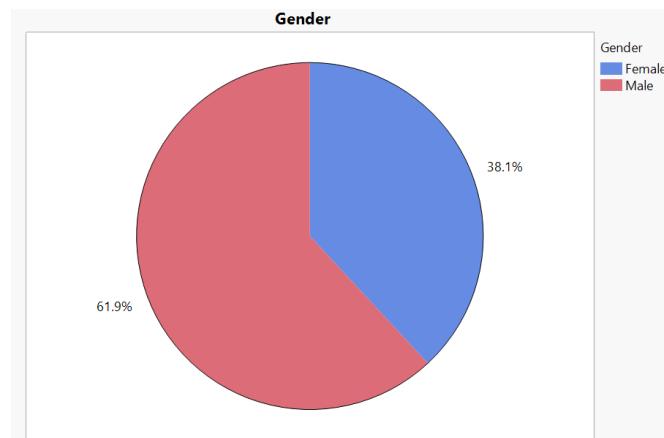
**Data collection:** Clinical examination was conducted and data was obtained on the excel sheet for the analysis.

Base line data was collected based on WHO proforma (2013).

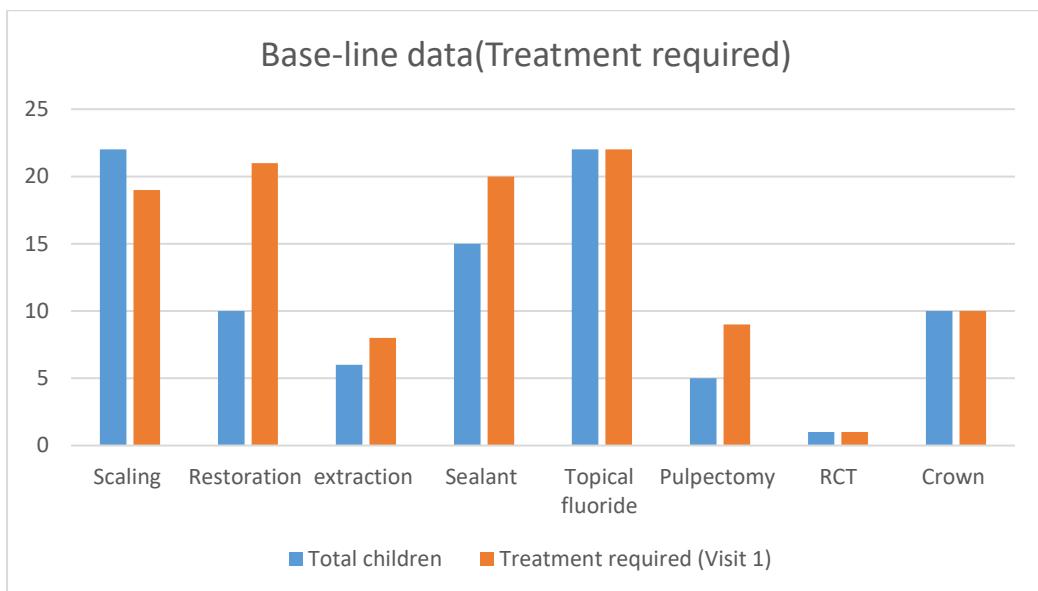
**Data collected**

**Following are the data collection of oral base line data:**

**Total children: 22**



**Fig 1: Gender distribution**



**Fig no 2: Base-line data on treatment required**

\*Treatment required based on number of teeth for restoration, extraction, sealant, pulpectomy, RCT, CROWN

- Additional services provided on same day was to create awareness among children regarding hand hygiene, brushing technique

The undergraduate training program was integrated into this activity. Priory, undergraduates were trained in hand hygiene and brushing techniques by giving them demonstrations and asking them to perform prior. Each undergrad was assigned a child

from the academy (buddy system), so each child received individualized training. Services were offered by teaching them how to brush, rinse, and wash their hands. This was followed by an interactive session, where dental students and children spent about 30-40 minutes getting to know one another. Additionally, students were motivated to sponsor a kit (self-hygiene kit) that contained a toothbrush, toothpaste, hand sanitizer, and hand wash liquid.



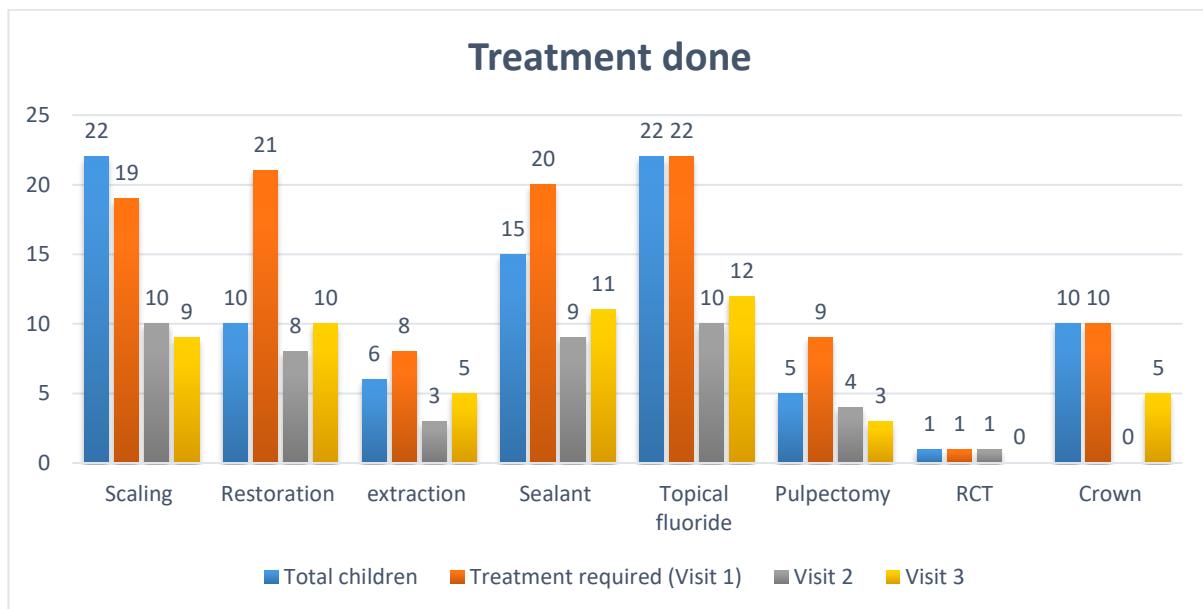


## Visit 2 and 3: Providing treatment to the children

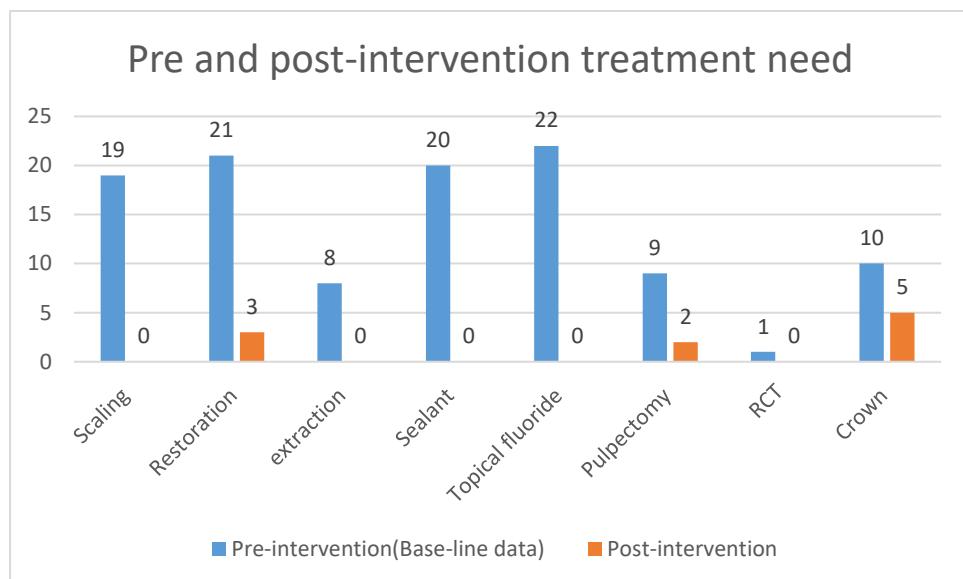
### Treatment at Faculty of Dental Sciences

A bus was arranged to bring the children who required treatment to the Faculty of Dental Sciences and treatment was given.





**Fig 3: Treatment done at 2nd and 3<sup>rd</sup> visit**



**Fig no. 4 Pre and post intervention treatment need**

**Date of visits:**

**1<sup>st</sup> visit:** 12<sup>th</sup> January 2022

**2<sup>nd</sup> visit:** 16<sup>th</sup> May 2022

**3<sup>rd</sup> visit:** 28<sup>th</sup> May 2022

### Dental students' reflections:

**Harshitha:** “After I graduate as a dental professional, I would like to serve the society and serve to make the world less competitive for the differently abled children. Being in a noble profession it is our responsibility to serve the people in need. I would like to Orient a definite amount of time during my practice for this sole purpose of treating the visually impaired children free of cost and counsel them regarding the maintenance of oral health.”

**Likith:** “The visit to Belaku Academy was one of the most informative as it works on great cause of believe in using education to empower children and enabling them to lead independent lives in the future. Coming to learning experience from that visit was really great it taught me many more social values which education as such didn't teach me. It also taught me about the will power of the students who are not ready to give up at any point of time and also taught us how to interact with challenged people. As a Ramaiah student we are privileged to have attended such field trips also privileged in all aspect like access to education having teachers who can guide us access to all healthcare facility but it is very unfortunate the students of Belaku Academy are deprived of all this, in-spite of all this their willingness to learn and inculcate was pleasing “

## **Janaseva Samruddi Ashram**

**20<sup>th</sup> March 2022**

**Venue** Janaseva Samruddi Ashram – For under-privileged boys aged 5 to 16 years

### **Introduction/ background:**

Jana Seva Samruddi Ashram located in Kachoalli, Magadi road, which is 23km from the Faculty of Dental Sciences, Bangalore. It is a social-cultural organization founded on 2-4-2013 to find a permanent solution to orphanages and child labor. This non-profit organization works to identify underprivileged and helpless children. It is a Non-Government Organization that takes responsibility for children in the community, providing them with education, employment, nutrition, food, clothes, shelter and medical assistance. This organization is well managed by Mr Devraj BT.



Visit to this Ashram was done on 20<sup>th</sup> March 2022. The key aspects of the visit were to create awareness, teaching important skills related to brushing technique, oral hygiene, hand sanitization and comprehensive dental treatment.

**Aim:** To improve oral health status by incorporating Comprehensive Oral Health Care services for children

## Activities:

**Activity 1:** Exchange of MOU and collection of baseline data on oral health using WHO proforma

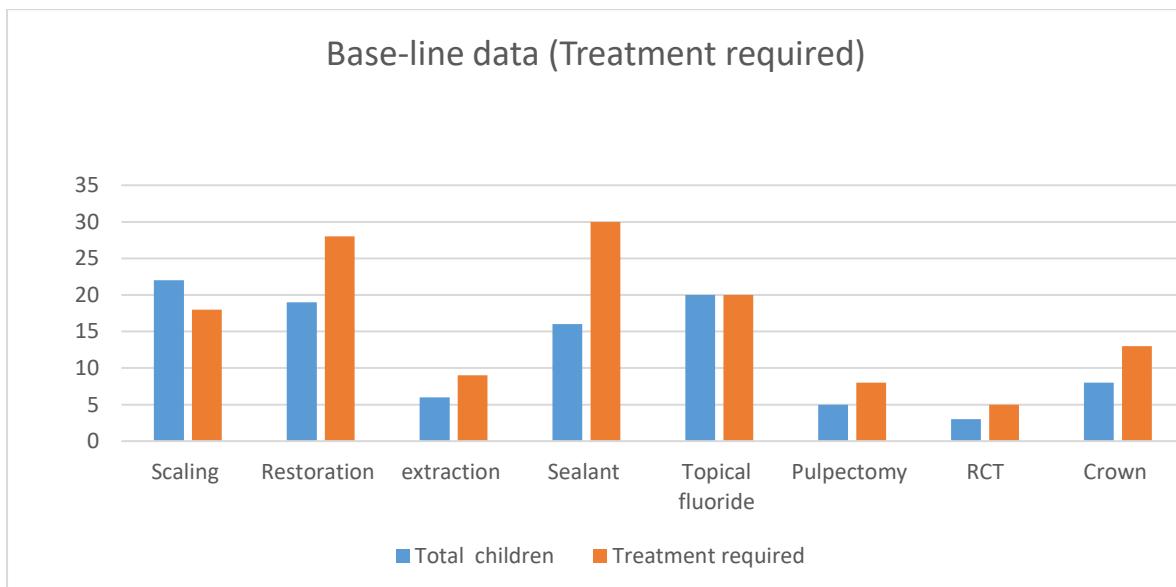
**Activity 2:** To plan and provide comprehensive oral health for all the children in the orphanage

**Activity 3:** To assess the effectiveness of comprehensive oral health care programme in the academic year (2021-2022)

### 1<sup>st</sup> visit

- **Collect baseline data on oral health**

WHO proforma (2013) was used to collect the data since it is internationally accepted. Calibration was done in the department of Public Health Dentistry for all the components of WHO proforma to ensure reliability. Clinical examination was conducted and data was obtained on the excel sheet for the analysis.



**Fig no 1: Base-line data on treatment required**

\*Treatment required based on number of teeth

- Additional services provided on same day was to create awareness among children regarding hand hygiene, brushing technique

The undergraduate training program was integrated into this activity. Priory, undergraduates were trained in hand hygiene and brushing techniques by giving them demonstrations and asking them to perform prior. Each undergrad was assigned a child from the academy (buddy system), so each child received individualized training. Services were offered by teaching them how to brush, rinse, and wash their hands. This was followed by an interactive session, where dental students and children spent about 30-40 minutes getting to know one another. Additionally, students were motivated to sponsor a kit (self-hygiene kit) that contained a toothbrush, toothpaste, hand sanitizer, and hand wash liquid.

### Visit 2: Skit performance by undergraduate students

Prior to the treatment, final year undergraduate students performed the skit based on the tobacco awareness to the children of the JanaSeva Samruddi trust. At the end of the skit, children were asked questions regarding the ill-effects of the tobacco and prizes were given to the best two.





- **Providing preventive treatment to the children**

Based on the baseline data, preventive treatment were given to the children which included oral prophylaxis, ART, topical fluoride application, pit and fissure sealant. Other treatments like extractions, pulpectomy were referred to the Faculty of Dental Sciences. At end of the session, children who had clean mouth, best behaviour were given prize.





- **3<sup>rd</sup> visit: Providing preventive treatment to the children**



#### 4<sup>th</sup> & 5<sup>th</sup> visit combined

#### Treatment at FDS

A bus was arranged to bring the children who required treatment to the Faculty of Dental Sciences and the following treatment was given.

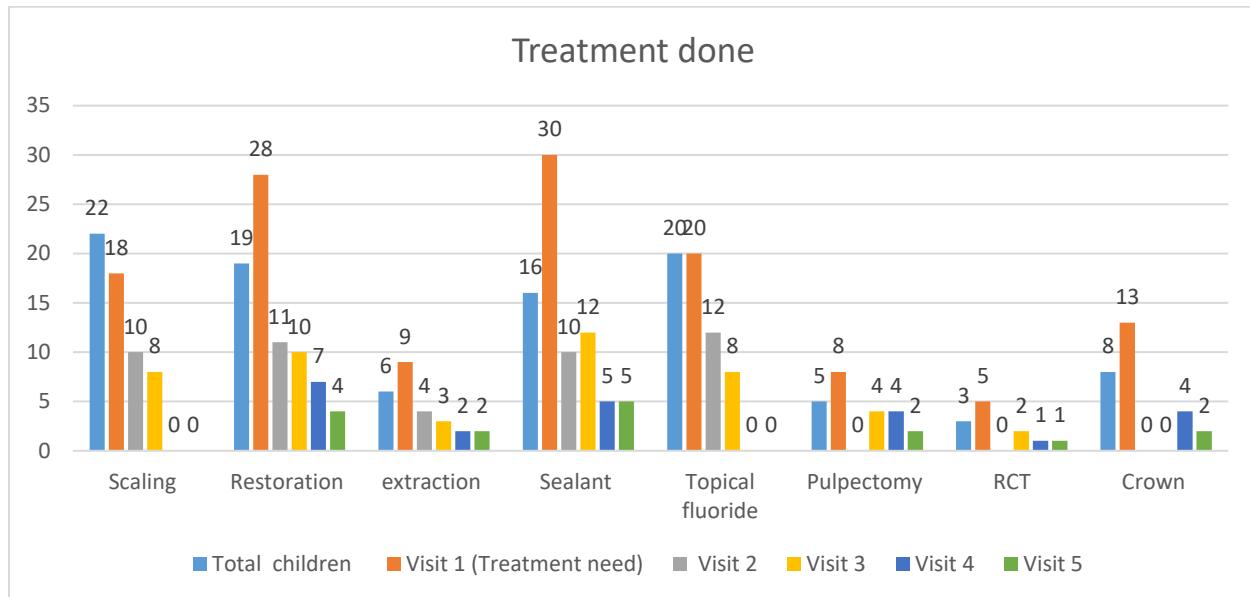


Sealant application: 10 teeth

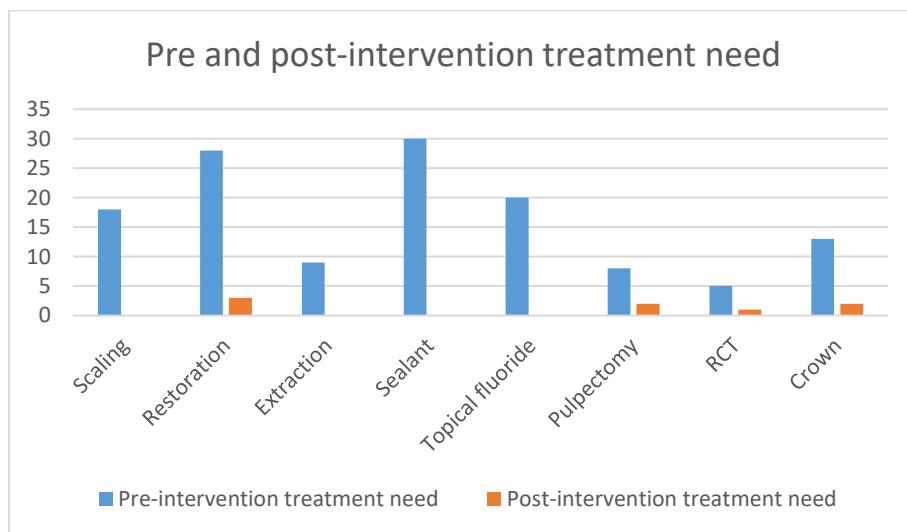
Restorations: 11 teeth

Extractions: 4 teeth

Pulpectomy: 6 teeth



**Fig no. 2:** Treatment done in 1<sup>st</sup>, 2<sup>nd</sup>, 3rd, 4<sup>th</sup> and 5th visit



**Fig no. 3: Pre and post intervention treatment need**

#### Date of visits:

**1<sup>st</sup> visit:** 20<sup>th</sup> March 2022

**2<sup>nd</sup> visit:** 23<sup>rd</sup> May 2022

**3<sup>rd</sup> visit:** 19<sup>th</sup> October 2022

**4<sup>th</sup> visit:** 29<sup>th</sup> October 2022

**5<sup>th</sup> visit:** 3<sup>rd</sup> November 2022



## **Smile Trust foundation**

**12<sup>th</sup> September 2022**

- **Organizer** – Smile Trust Foundation
- **Venue** – Infants Jesus Children Home
- **Introduction -**

Visit to this HIV patients' shelter was organized on 11<sup>th</sup> September 2022. The camp for the neglected patients was organized by the Smile Trust Foundation. The HIV positive female patients were our point of interest for this treatment camp. The key aspects of the visit were to create awareness, teaching important skills related to brushing technique, oral hygiene, and dental treatment which included oral prophylaxis, sealant application and fluoride application. Based on the screening done for all the patients, preventive treatment was given to the children which included oral prophylaxis, topical fluoride application, pit and fissure sealant. Other comprehensive treatments like extractions, pulpectomy were referred to the FDS, RUAS. Overall, the children learnt a lot about the dental hygiene and behaviour related to good dental hygiene. It was a great privilege to treat them and an experience to remember for lifetime.

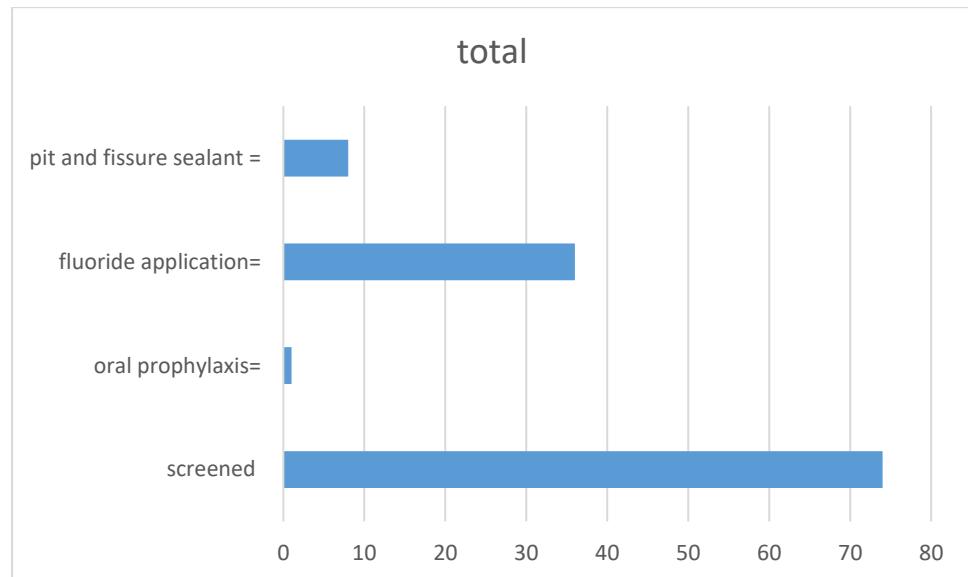
- **Objectives –**
  1. To get a baseline data on the HIV positive female patients
  2. To do preventive treatment for these HIV positive female patients
  3. To emphasize on treating the HIV patients and inculcating good oral hygiene habits
- **Date of visit -** 12<sup>th</sup> September, 2022
- **Target population –** HIV positive female patients
- **Screening/ treatment/ health education Data collected -**

Total number of patients screened = 74

Total number of oral prophylaxes done = 01

Total number of sealant application done = 08

Total number of fluoride application done = 36



- **Summary with evidence –**





- **Reflections –**

1. Smile Trust Foundation -

Hi aunty

Thank you so much Aunty I visited kids yesterday all were very happy about the camp and they explained me about awareness program about dental hygiene and how to brush. Thank you so much for your time and interest in helping people who deserved to be helped. I am really impressed with your care and concern towards service to needy. Thank you so much aunty. Sending lots of love to you. You're the most beautiful soul. This thank you note is dedicated for all the beautiful doctors who made the children smile on behalf of our Smile Trust.

2. Students –

Dr.Anam, Post Graduate, Dept. of Public Health Dentistry

It was an indeed beautiful experience to provide service and care to the most neglected section of the society that is the HIV infected female patients. Educating them on maintenance of oral hygiene and even providing them with preventive measures will help them in maintaining good oral hygiene.

Dr.Sanjana, Post Graduate, Dept. of Public Health Dentistry

The camp for HIV positive patients was indeed a great experience. The entire camp went on smoothly with great team participation of dedicated post graduates' and interns. This all happened systematically due to proper execution by our staff members. Overall, it was a great experience treating the patients.

Dr Amra, Post Graduate, Dept. of Public Health Dentistry

It was a nice experience serving the people of the trust. One of the most important things was the dedication and interest. It was a wonderful experience to attend the camp for HIV-positive patients. The entire programme ran successfully thanks to the excellent teamwork of committed postgraduate students and interns. Treating the patients was a wonderful experience all around

## ORAL HEALTH PROGRAMMES FOR GENERAL POPULATION

**World Oral Health Day**

**Dept. of Public Health Dentistry**

**Faculty of Dental Sciences – Ramaiah University of Applied Sciences**



**Faculty of Dental Sciences**

## **World Oral Health Day**

**20<sup>th</sup> March 2022**

**Celebrating from  
20<sup>th</sup> to 31<sup>st</sup> March 2022**

**“Be Proud of Your Mouth”  
for your happiness and well-being**

### **Activity no 1:**

**Title: Oral health education camp for ASHA workers at Bashettalli PHC and**

**Santhekallahalli PHC Date: 28<sup>th</sup> March 2022**

**Venue: Bashettalli and Santhekallahalli Primary Health Care Centre**

World Oral Health Day is an initiative of FDI World Dental Federation; an organization that brings together the world of dentistry with the aim of achieving optimal oral health for everyone.

World Oral Health Day was first declared in 2007 and was originally celebrated on 12 September - the birth date of FDI founder Dr Charles Godon. However, the campaign was not fully activated until 2013, after the date was changed to 20 March to avoid conflict with the FDI World Dental Congress taking place in September.

The new date was chosen to reflect that:

- Seniors must have a total of 20 natural teeth at the end of their life to be considered healthy
- Children should possess 20 baby teeth
- Healthy adults must have a total of 32 teeth and 0 dental cavities
- Expressed on a numerical basis this can be translated as 3/20 hence March 20
- This activity was targeted for ASHA workers to reinforce oral health education
- Individuals to take personal action
- Schools and youth groups to deliver learning activities about oral health
- Oral health professionals and the wider healthcare community to educate the populations they serve
- Government and policymakers to champion better oral health for all

On this occasion of World Oral Health Week, 20<sup>th</sup> to 31<sup>st</sup> March 2022, we conducted an oral health education camp for ASHA workers at Bashettalli PHC and Santhekallahalli PHC. ASHA workers come in direct contact with the rural population more than the doctors, it is more beneficial to imbibe education to public through them.

The camp consisted of a kit (pouch with a torch-for oral examination, a small notebook and a pen-to record the findings, ice-cream sticks-to look for oral findings and a handbook on oral cancer-signs, symptoms and preventive measures) and oral health education regarding general oral health and oral cancer.

Brushing technique and hand hygiene was demonstrated to the ASHA workers followed by Q&A sessions. Importance of proper brushing needs to be imparted to the public as the first step of preventive measure. ASHA workers were educated about duration of brushing, type of toothpaste, importance of brushing twice, frequency of changing toothbrush and most importantly, the benefits of visiting a dentist at the earliest.

Since the COVID pandemic is still taking a toll on people's health, it's important to follow proper hand washing technique along with the use of hand sanitizer.



## Activity No.2

### World Oral Health Day Celebrations, 2022

**Preamble:** On the occasion of World Oral Health Day 2022, Department of Public Health Dentistry, Faculty of Dental Sciences, RUAS organized World Oral Health Celebration from 20th March 2022 to 25th March 2022 with the theme - “**Be Proud of your Mouth**”

The main focus was to create awareness on importance of oral health among people.

This year, to help us spread the word to encourage as many people as possible to look after their mouth and protect their quality of life. Because an unhealthy mouth not only impacts general health but it can have a severe impact on people's emotional, social, mental, and overall physical well-being; and that's why we are calling on people to **Be Proud of their Mouth for their happiness and well-being.**

It was a good opportunity for all to win exciting prizes and certificates as well through the eventList of Activities Organized were:

- Best Smile Contest
- Meme Challenge
- Instagram Reels Contest

Activities done:

#### **Best Smile Contest**

A smile is closely related to our confidence, wellbeing and health.

A smile is highly contagious and is worth remembering that is something we all possess.

The best three participants were awarded for each day with e certificates

Total number of participants: 73



### **Meme challenge Competition**

This was an open competition, where the content for the meme was given and participants have to come up with the quality of meme's message, the amount of votes the meme received and how unique was the meme.

The total number of participants participated were 10

The best three memes were awarded with the e- certificates

### **Reels competition**

The key objective of this Competition was to use the power of audio-visual medium blended with the creativity of young minds to spread awareness about the importance of oral health, in a way the competition will also enhance awareness and knowledge levels among the students that shall ultimately reflect in the reel as an end product.

Total Number of Participants were 04



### **Activity 3:**

**Title of the activity:** World Oral Health Awareness program, Dantavahini, FDS,RUAS

**Preamble:** World oral health day celebrated on 20th March every year. This year's theme was "Be proud of your mouth". This program was initiated to increase the awareness and care related to oral health among each and every individual.

Why does Oral Health Matter?

**Mirror to Overall Health** — A mouth with healthy gums, strong teeth, neutral breath, and a clean tongue is a sign of overall good physical and mental health.

**Oral Hygiene is Vital** — Neglecting oral hygiene can make your overall existence difficult. It will not only cause pain and oral diseases but also lower your self-esteem.

Maintaining good oral health is only possible through regular oral hygiene practices such as brushing twice, flossing, and using a mouthwash.

**Be Aware** — Oral health is a much neglected topic, people are not aware of dental problems until they start to appear.

**Say Cheese** — a newly born child might look cute without a tooth, but not adults. Not caring for teeth and mouth will not only make you look odd but even eating, talking, and smiling difficult.

**Department of Public Health Dentistry** conducted an oral health awareness programme at Dantavahini, FDS, RUAS

**Our main objectives of the program were:**

- Creating awareness on importance of oral health (Golden Rules for good oral health)  
Brush twice daily, Rinse after you eat, Have nutritious diet, Avoid Snacking between meals, Visit dentist at least six months once and Avoid smoking and chewing tobacco
- Demonstration of tooth brushing
- Motivation to children by distributing free samples of toothpaste
- Distributing the leaflets based on early childhood caries, Periodontitis and diabetes
- Education on oral cancer

**Beneficiaries:** Patients visiting FDS from 21<sup>st</sup> March 2022 to 31<sup>st</sup> March 2022, Dantavahini

**Participants:** Postgraduate and interns of Department of Public Health Dentistry

**Postgraduates Posted-** Dr Aabha Singh, Dr Pooja Balurkar, Dr Amra Sultana, Dr Sanjana M M, Dr Anam Tasneem

**Interns Posted-** Sonia Prabhu, Shruthi, Spoorthy, Kamran Sarah, Sushma

**Total Number of patients** visited were **60** from 21<sup>st</sup> March to 31<sup>st</sup> March 2022

Most of the patient visited the hospital with complain of decay in their tooth region. So we educated the patients on oral hygiene, dental caries majorly, and also on periodontitis and clinical signs and symptoms, risk factor and prevention of oral cancer. Also demonstrated tooth brushing technique, motivated the children by distributing free samples of toothpaste.

Distributed the leaflets based on complain they have visited the hospital.

Cleared their myths about oral health and videos were played on Television screen including the Amrutavahini and Danta - suraksha, telling the importance of oral health.

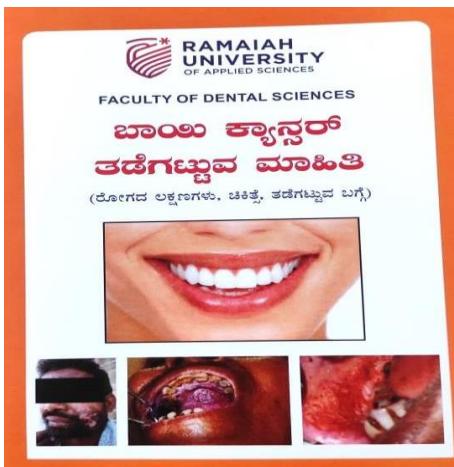
And at the end patient's Feedback was collected in the given feedback register.



#### **ORIENTATION ON WORLD ORAL HEALTH DAY COMPETITION**



## ORAL HEALTH EDUCATION TO THE TARGET POPULATION



## RESOURCE MATERIALS USED FOR TARGET POPULATION

## BOOK MARK

 **RAMAIAH  
UNIVERSITY**  
OF APPLIED SCIENCES

FACULTY OF DENTAL SCIENCES  
PUBLIC HEALTH DENTISTRY

 **DANTA SURAKSHA**  
EMPOWERING COMMUNITY

**GOLDEN RULES FOR GOOD ORAL HEALTH**

**Brush twice daily**

**Rinse after you eat**

**Have nutritious diet**

**Avoid snacking between meals**

**Visit dentist at least six months once**

**Avoid smoking and chewing tobacco**

 **RAMAIAH  
UNIVERSITY**  
OF APPLIED SCIENCES

FACULTY OF DENTAL SCIENCES  
PUBLIC HEALTH DENTISTRY

 **DANTA SURAKSHA**  
EMPOWERING COMMUNITY

**Myths (✗) and Facts (✓)**

- ✗ Removal of upper teeth affects vision
- ✓ Vision is not affected during extraction
- ✗ Scaling/removal of tartar causes sensitivity and loosens the teeth
- ✓ Teeth are held in position by the bone. Tartar can sometimes bind the teeth together and removal of this may lead to slight mobility of the teeth
- ✗ Dental Procedures are always painful
- ✓ Not all dental procedures cause pain. Nowadays some procedures are done under local anaesthesia
- ✗ Cleaning of teeth is better with a finger than toothbrush
- ✓ Toothbrushes can remove plaque and calculus from the teeth
- ✗ An infant doesn't need cleaning of teeth
- ✓ After every feeding clean the gum pads
- ✗ Decay in milk teeth need not be treated as they are going to fall off anyway
- ✓ Milk teeth need to be cared as much as permanent teeth`

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**Contact us :**  
 New Bel road , Gnanagangothri campus  
 Phone: +91 80 2360 2079/2360 0949  
 Timings: Monday to Friday :9 am to 4 pm  
 Saturday : 9am to 1 pm

## Oral health education materials for the year 2022

### Oral health education material – 1 (Leaflets)

#### Target population – Tobacco-consuming population

**RAMAIAH UNIVERSITY OF APPLIED SCIENCES** | **FACULTY OF DENTAL SCIENCES** | **ORAL CANCER**

- 2018 statistics shows that 49% people died from Oral Cancer worldwide (GLOBCAN data)
- Over 66 % cases get reported in advanced stage
- Early detection increases 5 years survival rate up to 80%

**KNOW IT BEFORE IT KILLS YOU**



**RISK FACTORS- Put it out, before it puts you out**



**An ounce of Prevention is better than pounds of Cure**

- Quit smoking and tobacco
- Good oral hygiene and Regular Checkup
- Avoid alcohol

**8 Steps for Self-Examination**



- Lips and cheek - look at and feel with the thumb and forefinger
- Palate- say "Ah" to see the back and roof of the mouth
- Tongue-check the lower surface and sides of the tongue

Presented by:  
Dr. B. Sowditha, Dr. Ellice Elizabeth,  
Dr. Chetan D.P., Dr. Chaitanya Gupta,  
Mr. Venkateshwarulu and Dr. Shanthi V. M.

**Initiative by Department of Public Health Dentistry**

**RAMAIAH UNIVERSITY OF APPLIED SCIENCES** | **FACULTY OF DENTAL SCIENCES** | **RAMAIAH UNIVERSITY OF APPLIED SCIENCES** | **FACULTY OF DENTAL SCIENCES**

**Steps in Examination for oral cancer**

		
Lips: look and feel the inside and outside of the lip, using thumb and forefinger	Gums: Examine the gums with the lips pulled away	Cheeks: Use the thumb and forefinger to draw the cheeks away from the teeth

		
Palate: Say "ah" to see the back and roof of the mouth	Tongue[extended]: Grasp the end of tongue with gauze. Pull the tongue outward, right and left, examining each surface	Tongue(upward): touch tip of tongue to roof of the mouth. Check the floor of the mouth and underside of tongue

**RISK FACTORS**

- Hookah
- Alcohol Consumption
- Pan Masala
- Khaini
- Malnutrition
- Tobacco Consumption
- Virus
- Cigarette
- Bidis
- Cigar
- Sunlight

**Oral Cancer**



**CLINICAL SIGNS OF ORAL CANCER**

- White/Red Patches
- Abnormal growth of tissue
- Swelling
- Non healing Ulcer
- Reduced mouth opening
- Burning sensation of mouth
- Gingival bleeding

**SCREENING AND PREVENTION**

- History taking
- Examining a patient's mouth on admission to hospital
- Educate the Patient about tobacco consumption
- Refer the patients with suspicious oral lesions to the dentist

**Initiative by Department of Public Health Dentistry**

## Oral health education material – 2 (Poster)

Target population – Pregnant women



**RAMAIAH  
UNIVERSITY**  
OF APPLIED SCIENCES

### DOES YOUR ORAL HEALTH DETERMINE YOUR CHILD'S SMILE?

HAVE YOU BEEN OBSERVING...



TOOTH DECAY?



BLEEDING ON BRUSHING?



LOOSE TEETH?



SWELLING ?

DO YOU KNOW WHY?

Your sugary food intake and cravings during this time can lead to cavities!

Increased hormonal levels provoke bacteria leading to gum problems

Infection in gums can move down into bone and lead to shaking teeth

Again because of hormonal changes

WHAT TO DO NOW?

- ~VISIT YOUR DENTIST
- ~BRUSH TWICE DAILY
- ~RINSE AFTER EVERY MEAL

WHAT NOT TO DO

- ~DO NOT TAKE MEDICATIONS ON YOUR OWN
- ~DO NOT SMOKE

IF YOU DO NOT VISIT A DENTIST -

SOME DENTAL DISEASES CAN LEAD TO- PREMATURE DELIVERY AND LOW BIRTH WEIGHT OF BABY.

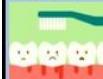
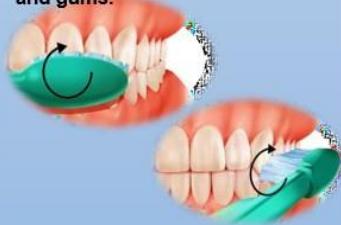
TOKNOW MORE



BATCH-2018 SHAKIR, SUPTHA, ADHINAYA, ACHIVESH, AISHA, AISHWARYA N, AISHWARYA P.J, ANAND S.H.

## Oral health education material – 3

### Target population – Special care children

WHAT HAPPENS? WHY IT HAPPENS?	WHY IS IT DIFFICULT?	HOW TO BRUSH?
<p><b>CAVITIES:</b> Eating too much sticky food and improperly maintained teeth.</p>  <p><b>BLEEDING GUMS:</b> Bleeding while brushing teeth is common when there are food particles on teeth.</p>  <p><b>SHAKING TEETH:</b> Improper care of teeth and continued cavities and bleeding gums cause shaking of teeth.</p> 	<ul style="list-style-type: none"> <li>Child not able to follow instructions</li> <li>Improper body movements</li> <li>Less care about mouth and teeth</li> <li>Child not able to express pain and problems</li> <li>Child does not pay attention for a long time</li> <li>Less control on the type of food eaten</li> <li>Stress about the mental health is more.</li> </ul> 	<p>The child should be asked to make circles with the toothbrush covering the teeth and gums.</p>  <p><b>FOR MORE DETAILS SCAN THE QR CODE</b></p> 

SPECIAL CARE FOR YOUR SPECIAL CHILD	WHAT SHOULD I DO?	BRUSHING
  	<ul style="list-style-type: none"> <li>Proper brushing of teeth twice a day</li> <li>Visit the dentist regularly once every 6 months</li> <li>Consume healthy food</li> <li>Avoid sticky and sweet food like chocolates, cakes and sweets</li> </ul> 	 <ul style="list-style-type: none"> <li>Brush twice a day</li> <li>Brush for 2-3 min</li> <li>Use tooth brush and fluorinated toothpaste</li> <li>Check while the child is brushing. Make sure they are brushing the right way. If not, help them do it correctly.</li> <li>If the child has a problem holding the brush, make modifications</li> </ul>  

## Oral health education material – 4

### Target population – General population

#### QUITTING CONSUMPTION OF ALL FORMS OF TOBACCO AND BETEL NUT

Advise all individuals during interactions:

- Not initiate tobacco consumption
- To quit use of all forms of tobacco (smoke less/smoking),
- Betel nut and any such regular chewing habit



nal Oral Health Education Material (NOHP)

Contact us :  
 New Bel road, Granagangotri campus  
 Phone: +91 80 2360 2079/2360 0949  
 Timings: Monday to Friday 9 am to 4 pm  
 Saturday : 9 am to 1 pm

[https://dcindia.gov.in/Download/Health\\_Manual.pdf](https://dcindia.gov.in/Download/Health_Manual.pdf)

#### Avoid snacking between meals and foods containing high amounts of sugars, salt and fats



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#### Consumption of healthy non-cariogenic diet

A balanced diet should be recommended at all ages

- Advise on consumption of raw and fibre rich fruits and vegetables
- Advise on avoiding sweetened beverages, soft drinks, sticky and sweet food.
- Advise on avoiding frequent snacking between major meals.

#### CONSUMPTION OF NUTRITIOUS FOOD

- IRON - GREEN LEAFY VEGETABLES, WHOLE GRAINS
- CALCIUM - MILK AND PRODUCTS
- VITAMINS - CITRUS FRUITS
- PROTEIN - PANEER, EGG, MEAT
- FATS - BUTTER, GHEE, OILS, NUTS



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[https://dcindia.gov.in/Download/Health\\_Manual.pdf](https://dcindia.gov.in/Download/Health_Manual.pdf)

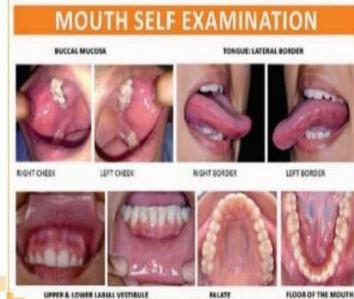
### MOUTH RINSING

- Should be advocated as a part of routine oral hygiene .
- It must be advised that consumption of sweetened beverages/snacks and meals has to end with a thorough mouth rinse with water.
- Mouthwashes can be used after consultation with dentist.



### REGULAR MOUTH SELF EXAMINATION

- Educate about and encourage self examination of mouth.



### TOOTH BRUSHING

- This is an important part of effective plaque control.
- Has to be done with toothbrush and toothpaste.
- A pea size amount of tooth paste and soft bristled brush must be used.
- Two types of tooth brushes – baby/adult brush may be used according to the age.
- Tooth brush should be changed once in three months .
- Massaging the gums the finger should be advised after tooth brushing.



#### Brushing instructions:



### TONGUE CLEANING

- Advise on cleaning the tongue after tooth brushing.
- Done with the bristles of the brush by applying gentle back and forth strokes.
- Advise rinsing the mouth thoroughly after brushing.

[https://dcindia.gov.in/Download/Health\\_Manual.pdf](https://dcindia.gov.in/Download/Health_Manual.pdf)

**RAMAIAH  
UNIVERSITY  
OF APPLIED SCIENCES** | **FACULTY OF  
DENTAL SCIENCES** | **ORAL HYGIENE AIDS**

Sometimes it's very difficult to remove food particles stuck between teeth

We require special aids for complete maintenance of oral hygiene

**BRUSHING ONLY CLEANS 60% OF YOUR TEETH, REST 40% NEEDS...**

1. Intercusal brush  
2. Interdental brush  
3. Floss  
4. Salt

**BRUSH – FLOSS – RINSE – REPEAT**

Presented by:  
Dr. S. Sowdha, Dr. Bianca Elizabeth,  
Dr. Charita D.P., Dr. Chhaya Gupta,  
Dr. Divya K. M.  
Guided by: Dr. Shwetha K. M.

Initiative by Department of Public Health Dentistry

**Oral health education material – 5**

## **Target population – Diabetic patients**

## Oral health education – 6 (leaflet)

Target population – Bottle-feeding infants

 **WHAT IS EARLY CHILDHOOD CARIES?**

The term early childhood caries (ECC) refers to decay in milk teeth caused by long exposure of your child's teeth to liquid containing sugars in children aged less than 71 months.



**WHY DOES YOUR CHILD DEVELOP EARLY CHILDHOOD CARIES?**

- Sleeping at night with a bottle containing milk, formula, juice or any liquid containing sugar after the age of 12 months.
- Feeding frequencies and other medical or dental conditions can also determine your child's risk for tooth decay.

**HOW TO PREVENT EARLY CHILDHOOD CARIES?**

**DO'S**

- Use fluoridated toothpaste
- Ensure a balanced diet for your child
- Brush your child's teeth twice daily
- Regular dental visits of the child

**DON'TS**

- Don't let your child fall asleep with bottle in mouth
- Avoid sugar in milk
- No sticky foods!
- Avoid pacifiers and feeding bottles



**DENTIST'S ROLE**

- 01** Early identification of childhood caries
- 02** Topical fluoride applications to reduce the risk of tooth decay
- 03** Guided counselling and preventive programs
- 04** Restore any cavities if present to avoid further destruction



**WHY SHOULD YOU BE AWARE ABOUT EARLY CHILDHOOD CARIES?**

- Severe pain while eating
- Difficulty in speaking
- Ruining child self image
- Rapid tooth destruction
- Interference with general growth of child
- Decay in milk teeth can lead to decay in permanent teeth



**SIGNS OF ECC**

<b>STAGE 1</b> WHITE SPOTS	
<b>STAGE 2</b> BROWNISH YELLOW CAVITIES	
<b>STAGE 3</b> SEVERE BLACK CAVITIES	

**CONTACT US**

Faculty of Dental Sciences,  
MSRIT Post, MSR College Rd,  
M S R Nagar, Mathikere,  
Bengaluru, Karnataka 560054  
[www.dental.msrus.ac.in](http://www.dental.msrus.ac.in)

Telephone: 080 2360 0949



**RAMAIAH UNIVERSITY OF APPLIED SCIENCES**

**EARLY CHILDHOOD CARIES**

Is your child susceptible to early childhood caries?

**FACULTY OF DENTAL SCIENCES, RUAS**

**DEPARTMENT OF PUBLIC HEALTH DENTISTRY**

## Oral health education material – 7 (poster)

Target population – Geriatric population

# Oral health care for the elderly



Research indicates gum disease may increase the risk of heart disease and stroke



Cancers of the mouth are primarily found in older adults. The median age at diagnosis is 63 years.

Almost 3 out of 4 (70%) seniors have gum disease there is an association between oral disease and increased risk of other diseases.



Talk to your dentist if you have these common symptoms:

- Bleeding or sore gums
- Toothache
- Temperature sensitivity
- Mouth sores
- Persistent bad breath
- Dry mouth
- Cracked or broken teeth
- Jaw pain or locking/clicking

If you have dentures, remember to clean them with a denture cleanser (not toothpaste) after eating and to soak them every night in a cleansing solution.





Oral health can affect nutrition, communication, appearance, dignity and well being



People are keeping their teeth for longer than ever:  
1968 = 37% no teeth  
2020 = <5% no teeth



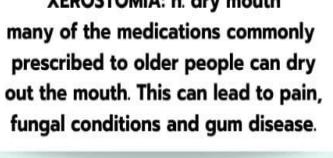
Oral health can influence systemic health in general, and cardiovascular disease in particular.



As many as 1 in 10 deaths from pneumonia in older people in nursing homes may be prevented by improving oral hygiene.



Mouth problems are often missed .....  
Look inside the mouth



XEROSTOMIA: i.e. dry mouth  
many of the medications commonly prescribed to older people can dry out the mouth. This can lead to pain, fungal conditions and gum disease.

**5 Oral care tips**

Oral health indicates one's overall health, that's why oral hygiene should be maintained. For elders, here are some ways you can implement good oral health.

**1** As our age goes up, so does the number of medications we take. Some of which can cause dry mouth. To avoid this, it is Advised to drink lots of water.

**2** Your teeth have been through a lot over the years! And like bones, they can become brittle into your golden years. Visit your dentist regularly to keep them in check.

**3** Older individuals are more susceptible to gum disease and oral cancer if not screened properly.

**4** Gums tend to recede as we age, leaving roots exposed and open to decay. Continue to brush using a fluoridated toothpaste and floss your teeth everyday to reduce plaque build up near the roots.

**5** Avoid smoking and chewing tobacco to help keep your mouth healthy and your teeth bright for years to come.

## ORAL CANCER PREVENTION PROJECT

### **Project 1a –**

#### **Registry to record Oral Potentially Malignant Disorders and oral cancer at outreach center of Faculty of Dental Sciences (Kaiwara)**

This was initiated in alignment to oral health resolution of World Health Organization, National Non – Communicable Disease programme and National Tobacco Control programme.

- Organization for the systematic collection, storage, analysis, interpretation and reporting of data on subjects with oral cancer

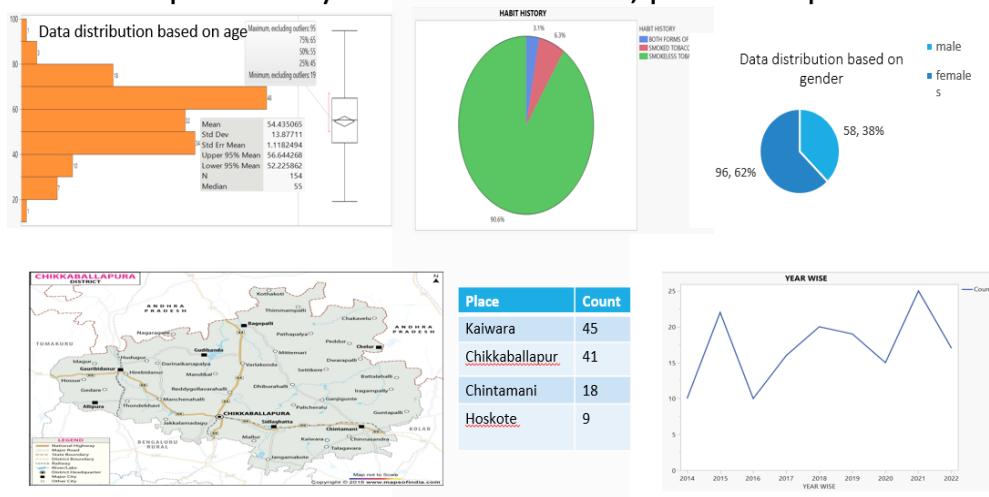
### **CONTENTS OF REGISTRY –**

- Generate reliable data on the magnitude and patterns of oral cancer
- Undertake epidemiological studies based on the results of the registry data
- Help in designing, planning, monitoring and evaluation of cancer control activities
- Develop training programs in oral cancer registration and epidemiology

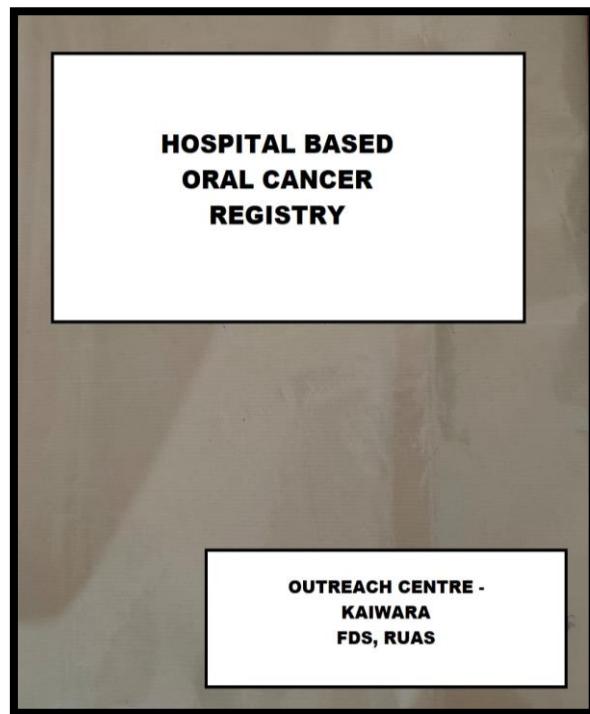
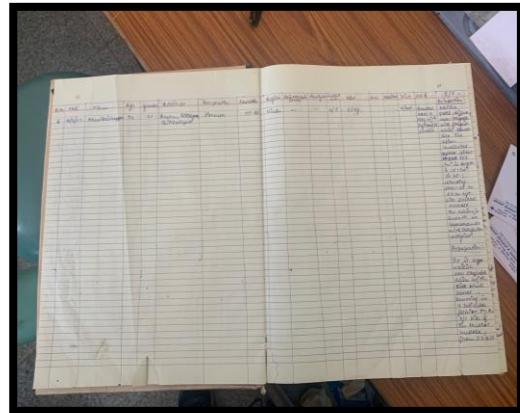
**Data analysis period:** From 2014 till September 2022

Sr no.	Variables	Total count
1.	Patients reported in HBOCR	232
2.	Deceased patients	15
3.	Missing contact number and address	63
4.	Total patients with complete information	154

## Descriptive analysis in terms of time, place and person



- HBOCR – an important database for reporting oral cancer with uniformity in mechanism with an aim for providing data for state and central surveillance
- To overcome the missing variables found, it was essential to establish a sound system for reporting the data in the registry
- Training and monitoring of the personnel followed systematic mechanism and resulted in completeness of the system establishment with legitimate enlistment of the data equipped for analysis
  - This could be attributed to the general trend of Head and Neck Cancer in India
  - Cases that come up in dental institutes goes unregistered and unnoticeable
  - No executions in securing pattern information and which may offer assistance in state and central surveillance
  - Extraordinary marker in finding the hotspot ranges



Hospital based oral cancer registry of FDS

## Project 1b –

### **Ascertainment of risk factors associated with Oral Cancer**

Based on the data obtained from the registry and realizing the increasing trend of oral cancer prevalence, an analytical study to understand the risk factors associated with oral cancer in this geographic location was conducted.

A case control study using the data in the registry was conducted. Our study confirmed that **consumption of betel quid with raw tobacco (OR 35.25)** is the major risk factor for increased prevalence of oral cancer among the residents of Kaiwara. And also found that the **OR 0.22** for vegetarian diet which means It was protective.

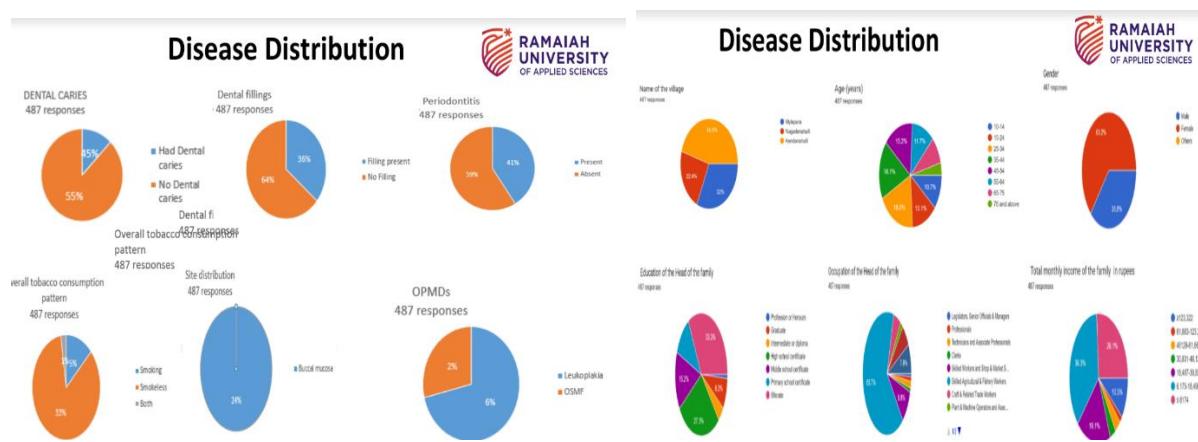
Results also showed lowest age at which tobacco consumption was initiated was 12 years.

## Project 1C –

### Estimation of OPMD and oral cancer burden among people residing in Kaiwara

The increasing trend of oral cancer and alarming Odds Ratio of risk factors compelled us to plan above project. Data from residents aged between 10 and above from 3 villages namely Kendanahalli, Nagdenahalli and Mylapura drawn from sampling frame of consisting of 22 villages of Kaiwara was obtained. for the ease of data collection and analysis google survey form was created.

Data was obtained from 487 eligible subjects.



Dental caries	45%
Gingivitis	41%
Smokeless form of tobacco consumption	33%
OPMDs	8%
Site of OPMD	Buccal mucosa and labial mucosa

### Action taken and future plan:

Health education sessions in the form of role plays, folk songs, slogans, and posters were conducted ensuring community participation.

The data collection will be continued for a larger population and strategies at advocacy level, community level and individual level are being planned.



## **Project 2 –**

### **Community based learning programme (CBLP) 2022**

**05<sup>th</sup> – 14<sup>th</sup> December 2022**

#### **Introduction –**

CBLP (Community Based Learning Programme) refers to the platform through which community development foundation is built.

#### **Goals of CBLP (Community Based Learning Programme) –**

1. Ensure value education through service to vulnerable or marginalized groups that is people living in villages/slums/poorest of the poor and people with disabilities
2. To strengthen skills and attitude input to the students to help them serve later as effective doctors and leaders in the society
3. Help the institution to work towards increased social accountability- in service, training and research endeavors in undergraduate curriculum
4. Helps the students develop appropriate communication skills
5. Working together as a team towards unity for health

#### **Understanding the village structure through social mapping**

It is a semi-structured process of learning, from, with and by local people relatively quickly and in a multi-disciplinary team about the opportunities and key problems of the village. This is used to help identify households using pre-determined indicators that are based on socio-economic factors. A base map was prepared with the help of the people in kendanahalli, Nagdenahalli and Mylapura.and various landmarks of the village were located. All the materials used to make the map such as brick powder, rangoli powder and coal were locally available in the village.



### **School Oral health examination:**

It is an essential care to identify hidden illness and clinical examination to identify overt illness which should be made available to every school going child with the available resources, and appropriate technology.

School children were screened for dental caries, fluorosis and periodontal lesions.

We screened approximately 60 students

The most common problems we saw were:

- Dental caries (extreme tooth decay)
- Oral Potentially Malignant Disorders
- Oral Cancer
- Malocclusion
- Fluorosis
- Toothache

### **School and community health education:**

Points covered:

- Prevention of dental caries
- Prevention of gingivitis and periodontitis
- Importance of oral hygiene
- Distribution of Danta – Suraksha kit (materials for providing first aid service and a container for managing avulsed tooth)
- Ill – effects of tobacco and alcohol consumption
- Tooth brushing technique and hand hygiene



## Shramadaan

As a part of shramadaan students contributed by providing following services –

- 1) Government Primary School, Kendanahalli –  
Cleaning of school garden and improving sanitation services
- 2) Anganawadi center, Nagdenahalli –  
Improving the aesthetics of the anganawadi center
- 3) Government Primary School, Mylapura  
Planting of the saplings (fruits and vegetables), improving sanitary services, provision of CFL bulbs in the classroom and cleaning of the premises.

All these activities were in alignment to SDGs -

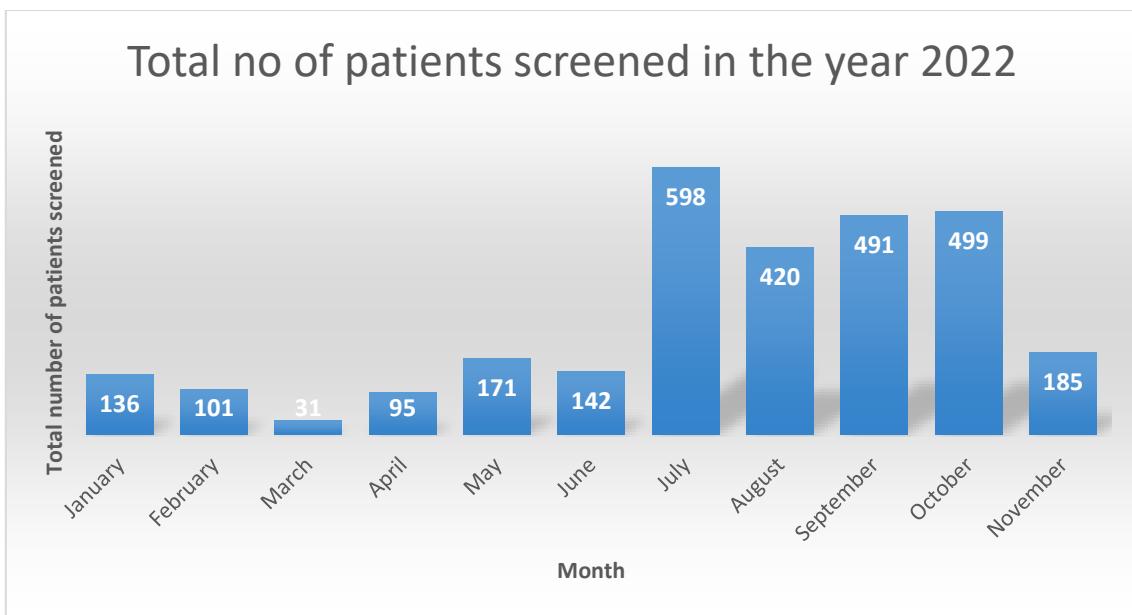


**SUMMARY OF OTHER CAMPS ORGANIZED FOR THE YEAR 2022**

Sr no	Month	Outreach center name			Total no. Of patients screened
		MTH	Lions Club	other camps	
1.	January	22		114	136
2.	February	11		90	101
3.	March	12		19	31
4.	April	10		85	95
5.	May	79	55	37	171
6.	June	17	75	50	142
7.	July	26	204	370	598
8.	August	14	266	140	420
9.	September	16	195	280	491
10.	October	05	103	391	499
11.	November	08	150	27	185



**Fig no. 1 – summary of camps in 2022**



**Fig no. 2 – summary of total number of patients screened in 2022**

## SUMMARY

Department of Public Health Dentistry has undertaken various field programmes and projects that which are beneficial to the communities and also fostering sense of commitment to the community among the student population.

The objectives of building strong relationships with the communities, and addressing key health issues while ascertaining the risk factors were the primary outcomes of this year's programmes.

We definitely will strive hard and continue the projects and contribute in creating healthy teeth and healthy communities.

As a health care professional, it is a virtue to provide service to any kind of population especially to the neglected part of the society. Their enthusiasm and interest to know about their oral health motivates to work more for their good wellbeing.