Unit 3: DENTAL CONDITIONS

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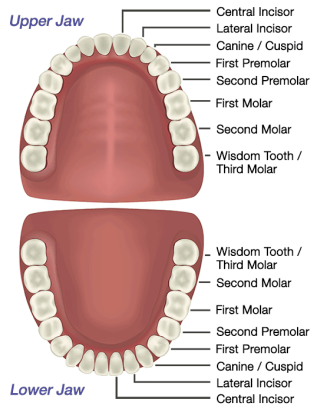
DENTAL CONDITIONS DEFINITION & ETIOLOGY

DEFINITION

According to Tee-Melegrito (2021), oral health encompasses the overall condition of the teeth, gums, and mouth. Dental conditions or dental problems generally refers to issues that impact oral health. Dental issues include cavities, tooth erosion, gum infections, and gum diseases. These problems can lead to pain and discomfort, hinder eating ability, and potentially harm a person's self-esteem.

PARTS & FUNCTIONS OF THE TEETH	
Most adults have 32 permanent teeth (28 if the wisdom teeth are removed). But some people are born with missing teeth (hypodontia), and some people have extra teeth (hyperdontia). • Incisors - For biting and cutting food. • Canines - For tearing and grasping food. • Premolar - For crushing and grinding food. • Molars - For chewing, grinding, and crushing food. • Wisdom Teeth - Provide support in the back of your mouth and preserve bone in your jaw. But in general, we don't really need our wisdom teeth.	

ETIOLOGY

Dental conditions are caused by a range of modifiable risk factors common to many noncommunicable diseases (NCDs), including sugar consumption, tobacco use, alcohol use and poor hygiene, and their underlying social and commercial determinants (WHO, 2023). Malocclusion, or "bad bites," is one of the most common dental problems (Malocclusion: Classes, Definition & Treatment, 2021). It can occur in several ways:

- When teeth are too large for the jaw, causing crowding and affecting alignment between the upper and lower jaw.
- As a result of prolonged thumb-sucking during infancy or toddlerhood.
- Due to the loss of a tooth, causing remaining teeth to shift and fill the gap.
- Through inherited conditions that affect jaw structure, leading to misaligned teeth.

PREVALENCE & INCIDENCE

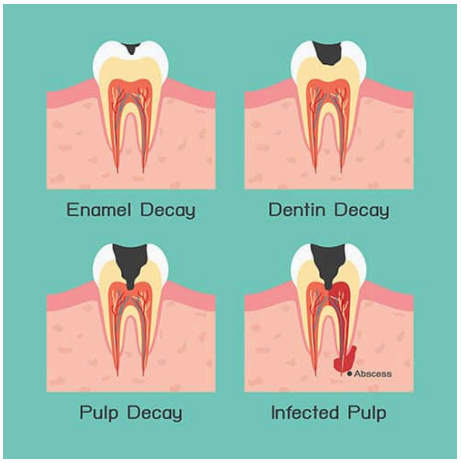
LOCAL	**INTERNATIONAL**

• In the Philippines, dental caries affect 87.4% of the population, while 48.3% suffer from periodontal disease (Alfaro, 2017). • Approximately 72% of Filipinos have dental caries or tooth decay (Montemayor, 2024). • Up to 73 million Filipinos are affected by dental caries, which is referred to by the Department of Health as a "silent epidemic" (Crisostomo, 2023). • In a study conducted in Caloocan, it was found that 57.5% of the participants have Class 1 malocclusion (Najafi, 2016).	• The WHO Global Oral Health Status Report (2022) estimated that oral diseases impact close to 3.5 billion people worldwide, with 75% of those affected living in middle-income countries. • Globally, approximately 2 billion people experience caries of permanent teeth (WHO, 2023). • According to Lombardo et al. (2020), malocclusion occurs in 56% (95% CI: 11–99) of the whole population, specifically 48% in Asia.

SIGNS, SYMPTOMS, PATHOPHYSIOLOGY

SIGNS
Manifestations of dental conditions physician/allied health medical professional perceive
	According to Common signs of serious dental problems (2021), signs during **Oral Examination** are as follows:
	• Gum abnormalities:
	  ○ Bleeding
	  ○ Swelling
	  ○ Pale coloration
	• Oral lesions:
	  ○ Lumps or sores in gums, tongue, cheeks, or neck
	• Dental issues:
	  ○ Bone loss around teeth and jaw
	  ○ Tooth loss or mobility
	  ○ Poorly-fitting dentures
	• Periodontal disease indicators
	• Tongue abnormalities (e.g., smooth texture)
	
	According to Dental X-Rays: Types, Uses and Safety (n.d.), signs during **Dental X-Rays** are as follows:
	• Cavities, including small areas of decay between teeth
	• Decay beneath existing fillings
	• Bone loss in the jaw
	• Areas of infection
	• Position of unerupted or impacted teeth
	• Abscessed teeth (infection at the root or between gums and tooth)
	• Cysts and some types of tumors

SYMPTOMS *Manifestations of dental conditions the patient experiences*	According to Mayo Clinic (2022), symptoms are as follows: • Pain and Discomfort ○ Toothache (varying intensity)

	○ Tooth sensitivity to temperature or sweetness ○ Pain when biting or chewing ● Visual Changes ○ Visible holes or pits in teeth ○ Tooth discoloration (brown, black, or white staining) ● Gum and Soft Tissue Issues ○ Bleeding or swollen gums ○ Gum pain ○ Swollen cheeks ● Functional Problems ○ Loose teeth ○ Jaw clicking or discomfort
PATHOPHYSIOLOGY *Structural and anatomical changes*	According to Roberts et al. (2022), pathophysiology of dental conditions are as follows: Tooth Structure Alterations ● Demineralization and destruction of: ○ Enamel ○ Dentin ○ Pulp  Progressive Damage ● Formation of dental caries (cavities) ● Pulp inflammation or necrosis in advanced cases Periodontal Changes ● Alveolar bone loss ● Gingival recession ● Periodontal pocket formation Systemic Implications ● Potential links to cardiovascular disease, diabetes, and other systemic conditions ● Oral microbiome alterations

POSSIBLE SPEECH-LANGUAGE PROBLEMS ASSOCIATED WITH THE CONDITION

AREAS	
Articulation	• Dental conditions can significantly impact articulation, especially for sounds that require precise tongue-to-teeth contact. • Misaligned teeth, missing teeth, or jaw misalignment can affect the production of specific phonemes, particularly /s/, /z/, /th/, /f/, and /v/.
Phonology	• Dental issues might lead to consistent sound substitutions or distortions, affecting the overall phonological system.
Fluency	• Some dental conditions, particularly those affecting jaw alignment, might impact the smooth flow of speech, potentially leading to disfluencies.
Swallowing	• Many dental conditions can affect the swallowing process, which is often within the purview of SLPs. • Malocclusion or missing teeth can lead to atypical swallowing patterns.
Odynophagia and Dysphagia	• The single swallow and continuous drinking tests are crucial in assessing both dysphagia (difficulty swallowing) and odynophagia (painful swallowing). • These tests are useful after tonsillectomies and in diagnosing unexplained swallowing difficulties. • Following dental procedures, patients often experience both odynophagia and dysphagia.
Cognition	According to Wei et al. (2023), cognition and oral/dental health have a bidirectional relationship: • Chronic inflammation from periodontitis can affect neurological function and increase the risk of cognitive impairment. • Tooth loss is associated with reduced cognitive function. • Changes in the oral microbiome have been associated with cognitive disorders. • Oral dysfunction has been linked to cognitive impairment. • Poor oral condition is a risk factor for cognitive dysfunction, and poor cognition can aggravate the deterioration of oral function.

CHARACTERISTICS	
Articulation	Dental issues such as missing teeth, ill-fitting dentures, or severe gum disease can lead to articulation disorders. Adults may have difficulty producing specific speech sounds, especially consonants that require precise tongue and lip positioning resulting in slurred or unclear speech.
Voice Disorders	Dental conditions can affect the quality of voice. For instance, discomfort from dental issues may lead to strained vocal quality or altered pitch. Additionally, conditions like xerostomia (dry mouth) can affect vocal cord function, leading to hoarseness or breathiness.
Oral Motor Function and/or Feeding and Swallowing	Pain, discomfort, or restricted movement of the lips, tongue, and jaws due to dental issues can impact the precision and coordination of oral movements. Difficulties with chewing, swallowing, and the use of the articulators for clear speech.
Odynophagia and Dysphagia	Painful swallowing (odynophagia) often experienced after dental procedures. Difficulty swallowing (dysphagia) manifesting as problems in the intake or transport of food and liquids. Potential for aspiration or choking due to impaired

	swallowing function.
Cognition	Potential decline in cognitive function associated with chronic oral health issues. Possible memory and motor ability deficits related to tooth loss. Risk of cognitive impairment linked to long-term periodontal disease.

TYPES, DISEASE COURSE, PROGNOSIS

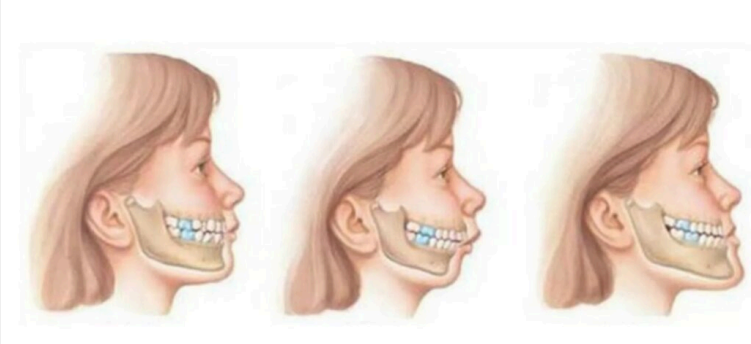
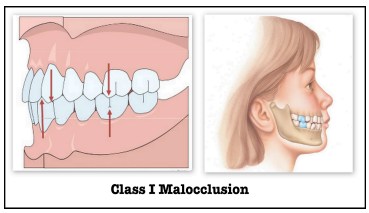
Types	Definition	Disease Course	Prognosis
Tooth Decay (dental caries)  Dental Caries	Tooth decay is the destruction of the tooth's surface, or enamel, caused by acids made by bacteria in the mouth. It can lead to cavities, infection, and tooth loss.	Tooth decay progresses through several stages, starting with demineralization of the enamel, followed by enamel decay, dentin decay, damage to the pulp, and ultimately abscess formation if untreated.	• Severe pain • Tooth abscess • Loss of the tooth • Potential spread of infection to other areas of the body.
Gum disease (periodontal disease) 	Gum disease is an infection of the tissues that surround and support the teeth. It is caused by plaque, a sticky film of bacteria that constantly forms on the teeth.	Gum disease progresses from gingivitis (inflammation of the gums) to periodontitis, where the supporting bone is affected, potentially leading to tooth mobility and loss.	• Tooth loss • Systemic health issues (like heart disease) • Chronic pain
Tooth Sensitivity	Tooth sensitivity is a common problem that causes pain or discomfort in the teeth when encountering certain stimuli, such as hot, cold, sweet, or acidic foods and drinks, or breathing in cold air. It is often caused by exposed dentin.	Sensitivity can worsen if the underlying cause (like enamel erosion or gum recession) is not addressed, leading to increased discomfort.	• Can affect dietary choices and quality of life, and may indicate underlying dental issues that could lead to decay or other conditions.
Dry Mouth (Xerostomia)	Dry mouth, or xerostomia, is a condition that occurs when the salivary glands in the mouth don't produce enough saliva. It can be caused by certain medications,	If untreated, dry mouth can lead to tooth decay, gum disease, and difficulties in speaking, chewing, and swallowing.	• Severe oral health issues: including cavities, gum disease, and oral infections.

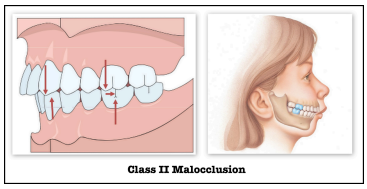
	medical conditions, or cancer treatment. Saliva is important for maintaining oral health.		
Root Decay 	Root decay is tooth decay that occurs on the root surface of the tooth, usually due to gum recession. The root surface is softer than the tooth enamel and more susceptible to decay. It is common in older adults.	Root decay can progress rapidly due to the softer nature of the root surface, leading to deeper decay and potential tooth loss.	• Can lead to severe pain, infection, and ultimately tooth loss.
Tooth Loss (Edentulism) 	Tooth loss, or edentulism, is the condition of having lost one or more permanent teeth. It can be partial or complete. Common causes include tooth decay, gum disease, and injury. Tooth loss can affect chewing ability, speech, and self-esteem.	Tooth loss can lead to further dental issues, including shifting of remaining teeth, bite problems, and jawbone loss.	• Can significantly affect chewing ability, speech, and self-esteem, leading to further dental and health complications.
Oral Thrush 	Oral thrush is a fungal infection that causes creamy white lesions in the mouth. It is caused by an overgrowth of the Candida fungus. It is more common in older adults, especially those who wear dentures.	If untreated, oral thrush can spread to other areas of the body and cause more severe infections, especially in immunocompromised individuals.	• Can lead to painful lesions, difficulty swallowing, and systemic infections.
Denture-related problems	Denture-related problems can include ill-fitting dentures, denture stomatitis (inflammation of the tissue under a denture), and denture-induced hyperplasia (overgrowth	These problems can worsen over time, leading to discomfort, pain, and difficulty eating or speaking.	• Oral infections • Chronic pain • Reduced quality of life.

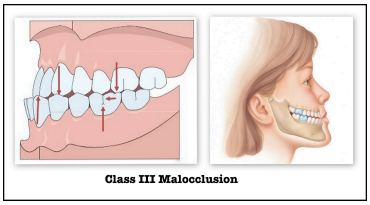
of tissue). These issues can cause discomfort, pain, and difficulty eating.

TYPES OF DENTURES:

- **Complete Dentures:** These replace all teeth in either the upper or lower jaw and are typically placed after tooth extraction.
- **Partial Dentures:** Used when some natural teeth remain, these dentures fill gaps and prevent remaining teeth from shifting.
- **Immediate Dentures:** Inserted immediately after tooth extraction, allowing for a seamless transition.
- **Implant-Supported Dentures:** These are anchored to dental implants for enhanced stability and comfort.
- **Snap-In Dentures:** These attach securely to dental implants, offering a stable fit while remaining removable.
- **Overdentures:** Similar to snap-in dentures but designed to sit on the gums and supported by implants.
- **Economy Dentures:** Budget-friendly options that may not fit as securely or look as natural as custom dentures.
- **Custom Dentures:** Tailored to fit an individual's mouth for improved comfort and aesthetics.

Bad Breath (Halitosis)	Bad breath, or halitosis, is an unpleasant odor from the mouth. It can be caused by poor oral hygiene, certain foods, dry mouth, tobacco use, or medical conditions like diabetes or acid reflux. Regular brushing, flossing, and dental visits can help prevent bad breath.	If the underlying causes are not addressed, bad breath can persist and worsen, potentially leading to social and psychological issues.	• Embarrassment • Social isolation • and may indicate underlying health problems that need attention.
Malocclusion  • Commonly referred to as "bad bites” • A dental condition where the upper and lower teeth do not align properly when the mouth is closed. This misalignment can lead to various dental issues, including tooth decay, gum disease, and difficulties in chewing and speaking. Malocclusion can arise from factors such as overcrowded teeth, crooked teeth, or misaligned jaws, and it is often hereditary.			
Class I  	• Most Common • The bite is normal, but the upper teeth slightly overlap the lower teeth.	Can cause dental problems like tooth decay, gum disease, and difficulties in chewing and speaking. However, most cases can be successfully treated with orthodontic treatments like braces or Invisalign	• Generally good prognosis • Misalignment of other teeth can lead to dental problems if left untreated • Excellent prognosis with proper orthodontic treatment (braces or clear aligners) • Most cases can be successfully corrected • Factors: - Severity of malocclusion - Age ot patient - Underlying causes - Patient cooperation • Treatment options - **Braces:** Traditional metal braces or more aesthetic options like ceramic or lingual

			braces. - **Retainers:** Used to maintain the corrected bite after treatment is complete. - **Clear aligners:** Invisible, removable aligners that gradually shift teeth into place.
Class II  	• Retrognathism or overbite • Occurs when the upper jaw and teeth severely overlap the bottom jaw and teeth. • **Overjet** is the horizontal distance between the upper and lower front teeth, indicating how far the upper teeth protrude beyond the lower teeth. An increased overjet, generally exceeding 2-4 mm, can cause aesthetic issues and functional problems, such as difficulty in chewing. Additionally, a significant overjet raises the risk of dental trauma, especially if it prevents proper jaw alignment or lip closure.	• **Difficulty chewing and biting:** This can lead to digestive problems and weight loss. • **Jaw joint pain (TMJ disorder):** The misalignment can put stress on the temporomandibular joint, leading to pain and discomfort. • **Wear and tear of teeth:** The abnormal bite can cause teeth to wear down unevenly. • **Gum disease:** Difficulty cleaning teeth properly due to the misalignment can increase the risk of gum disease. • **Sleep apnea:** In severe cases, the misalignment can contribute to obstructive sleep apnea, a condition where breathing is interrupted during sleep.	• Prognosis depends on severity and treatment approach • Generally good especially when treated early • Factors: - Severity of malocclusion - Age ot patient - Underlying causes - Patient cooperation • Treatment options: - Braces - Retainers - Clear aligners - Surgery
Class III	• Prognathism or underbite • Occurs when the lower jaw protrudes or juts forward,	Over time, Class 3 malocclusion can lead to:	• Prognosis depends on severity and treatment approach-> generally good

	causing the lower jaw and teeth to overlap the upper jaw and teeth. • It can result from excessive growth of the lower jaw or insufficient growth of the upper jaw.	• **Difficulty chewing and biting:** This can cause digestive problems and weight loss. • **Jaw joint pain (TMJ disorder):** The misalignment can put stress on the temporomandibular joint, leading to pain and discomfort. • **Wear and tear of teeth:** The abnormal bite can cause teeth to wear down unevenly. • **Gum disease:** Difficulty cleaning teeth properly due to the misalignment can increase the risk of gum disease. • **Speech problems:** In some cases, Class 3 malocclusion can affect speech clarity. • **Psychological impact:** The condition can have a negative impact on self-esteem and confidence.	especially when treated early • Untreated cases can lead to difficulties in biting and chewing • Skeletal Class 3 cases in adults typically require a combination of orthodontics and orthognathic surgery • Treatment process can be lengthy and may require significant patient compliance • Factors: - Severity of malocclusion - Age ot patient - Underlying causes - Patient cooperation • Treatment options: - **Braces:** Traditional metal braces or more aesthetic options like ceramic or lingual braces. - **Retainers:** Used to maintain the corrected bite after treatment is complete. - **Clear aligners:** Invisible, removable aligners that gradually shift teeth into place. - **Surgery:** In severe cases, jaw surgery (orthognathic surgery) may be necessary to correct the misalignment.

MANAGEMENT

MEDICAL/SURGICAL		
Condition	**Healthcare Resources**	**Under SLP Therapy**
Tooth Decay (dental caries)	• Medical: Regular dental check-ups, fluoride treatments, dental fillings, and possible root canal therapy. • Surgical: Extraction of severely decayed teeth if necessary.	**SLP Areas Evaluated** ➔ **Articulation:** Assessment of speech sound production, focusing on specific sounds affected by dental conditions (e.g., /s/, /t/). ➔ **Intelligibility:** Measurement of how well speech is understood by others. ➔ **Oral Motor Skills:** Evaluation of the coordination and strength of muscles used for speech and swallowing. ➔ **Voice Quality:** Assessment of vocal characteristics affected by oral health issues. ➔ **Swallowing:** Evaluation of the safety and efficiency of swallowing processes. **Evaluation Materials** ➔ **Oral Mechanism Examination Forms:** - Used to assess the structural and functional integrity of oral structures, including lips, tongue, gums, and palate. This examination helps identify any abnormalities that may affect speech and swallowing. ➔ **Oral Health Assessment Tool (OHAT)** - evaluate oral health impairments across eight categories (e.g., lips, tongue, gums, saliva). It uses a Likert scale to assess the severity of oral health issues and is applicable for interdisciplinary evaluations. ➔ **Speech Assessments** - **Goldman-Fristoe Test of Articulation:** Measures articulation of consonant sounds and identifies types of misarticulation across different positions (initial, medial, final). - **Arizona Articulation Proficiency Scale (AAPS-4):** Evaluates articulation disorders in children aged 18 months to 21 years. - **Hodson Assessment of Phonological Processes (HAPP):** This assessment identifies phonological processes that may affect the person's speech, such as fronting, backing, and cluster reduction.
Gum disease (periodontal disease)	• Medical: Periodontal cleanings, scaling and root planing, and antibiotics if infection is present. • Surgical: Surgical procedures for severe cases, such as flap surgery or bone grafting.	
Tooth Sensitivity	• Medical: Desensitizing toothpaste, fluoride varnishes, and dental sealants. • Surgical: Treatment of underlying conditions (e.g., gum grafts).	
Dry Mouth (xerostomia)	• Medical: Saliva substitutes, medications to stimulate saliva production, and fluoride treatments. • Surgical: Salivary gland surgery in severe cases.	
Oral Cancer	• Medical: Regular screenings, biopsies, and radiation or chemotherapy if diagnosed. • Surgical: Tumor removal surgery.	
Root Decay	• Medical: Fluoride treatments, dental fillings, and preventive care. • Surgical: Extraction of severely decayed teeth.	
Tooth Loss (Edentulism)	• Medical: Dentures, implants, or bridges. • Surgical: Surgical placement of dental implants.	
Oral Thrush	• Medical: Antifungal medications. • Surgical: Rarely necessary unless severe.	
Denture-related problems	• Medical: Patients may require adjustments, relining, or replacement of dentures due to fit issues or wear. • Surgical: Severe tissue changes may necessitate surgical procedures to improve denture fit or oral health.	

Bad Breath (Halitosis)	• Medical: Dental cleanings, treatment of underlying conditions (e.g., gum disease). • Surgical: Rarely necessary unless related to structural issues.	- **Speech Sound Inventory:** This involves eliciting a variety of sounds in different word positions to determine which sounds are produced correctly and which are in error. - **Stimulability Testing:** This involves testing an adult's ability to produce a misarticulated sound correctly with additional cues or prompts. - **Conversational Speech Sample:** Observing an adult's speech in a natural setting can provide valuable information about their articulation skills. ➔ **Language Sampling Techniques** - Collect spontaneous language samples in various contexts (e.g., conversation, storytelling) to assess expressive language skills and speech intelligibility. ➔ **Swallowing Assessments** - **Clinical Swallowing Evaluation:** A non-instrumental assessment that includes observation during eating and drinking tasks to identify signs of dysphagia. - **Instrumental Swallowing Assessment (e.g., Videofluoroscopic Swallow Study):** Provides visualization of swallowing physiology and anatomy to diagnose dysphagia. **Strategies/Approaches** **SPEECH & ARTICULATION** ➔ **Articulation Therapy** - **Targeted Sound Exercises:** Focus on specific sounds affected by dental issues (e.g., /s/, /t/). For example, practice producing these sounds in isolation, syllables, and words. - **Phonological Approaches**: Use minimal pairs (e.g., "pat" vs. "bat") to help clients recognize and correct sound differences. ➔ **Visual Feedback Techniques** - **Mirror Work:** Encourage clients to practice in front of a mirror to observe their articulatory movements. - **Digital Feedback Tools:** Utilize apps that provide visual feedback on sound production, helping clients adjust their articulation in
Class I	• Medical - Orthodontic treatments (braces, Invisalign) - Retainers to maintain teeth position - Regular dental check-ups for monitoring • Surgical - Extraction of teeth if overcrowding is severe	
Class II	• Medical - Orthodontic treatments (braces, retainers) - Functional appliances (e.g., headgear) to support jaw growth - Regular dental check-ups for early intervention • Surgical - Orthognathic surgery for severe cases to realign the jaw	
Class III	• Medical - Orthodontic treatments (braces, functional appliances) - Regular dental check-ups for monitoring - Intraoral appliances to correct dental relationships • Surgical - Orthognathic surgery for severe skeletal discrepancies - Extraction of teeth if necessary to facilitate orthodontic treatment	

		real-time. ➔ **Contextual Utilization** - **Sentence-Level Practice:** Incorporate targeted sounds into sentences to promote generalization (e.g., "The sun is shining" for /s/). - **Storytelling with Target Sounds:** Create stories that emphasize targeted sounds, making practice engaging and contextually relevant. ➔ **Myofunctional Therapy** - **Tongue Positioning Exercises:** Teach clients proper resting tongue posture to support articulation. - **Breathing Exercises:** Incorporate diaphragmatic breathing techniques to enhance oral motor control during speech. **ORAL MOTOR** ➔ **Oral Motor Therapy** - **Strengthening Exercises:** Implement exercises such as tongue push-ups and lip rounding to enhance muscle strength and coordination. - **Tactile Stimulation:** Use tools like vibrating massagers or textured materials to increase awareness of oral structures. - **Lip Closure Exercises:** Practice holding a straw or small piece of food between the lips without letting it drop. - **Tongue Range of Motion Activities**: Engage in exercises that involve moving the tongue up, down, side-to-side, and in circles. - Use resistance tools (e.g., straws) to strengthen the muscles involved in speech production and swallowing. - Incorporate games that require precise oral movements, such as blowing bubbles or using whistles. **SWALLOWING** ➔ **Swallowing Therapy** Postural Adjustments - **Chin Tuck Technique:** Instruct clients to tuck their chin down while swallowing to reduce

		aspiration risk. - **Head Turn Technique:** Teach clients to turn their head toward the weaker side during swallowing for better bolus clearance. ➔ **Swallowing Maneuvers** - **Mendelsohn Maneuver:** Guide clients through this technique, where they hold their swallow at its peak for a few seconds to improve muscle coordination. - **Effortful Swallowing:** Instruct clients to swallow hard while squeezing throat muscles, enhancing swallow strength. ➔ **Dysphagia** - **Texture Modification:** Provide guidance on modifying food textures (e.g., pureed, chopped) based on individual swallowing capabilities. - **Thickened Liquids Protocols:** Educate clients on using thickening agents for liquids to reduce aspiration risk during swallowing. ➔ **Hydration Strategies** - Emphasize the importance of hydration for maintaining oral health and improving swallowing function. **VOICE** - Focus on breath support exercises that enhance vocal strength and endurance. - Implement vocal warm-ups and cool-downs as part of therapy sessions.

EDUCATIONAL

- **Regular Dental Check-ups**
  - Encouraging clients to schedule and attend regular dental visits is crucial for early detection and treatment of dental issues such as cavities and gum disease. Consistent check-ups allow for professional cleanings and examinations that can prevent more serious conditions.
- **Patient Education**
  - Providing education on proper oral hygiene practices, such as brushing and flossing techniques, is essential for empowering clients to take charge of their dental health. Educational programs and materials can help clients understand the importance of maintaining good oral hygiene to prevent dental diseases.
- **Access to Preventive Care**
  - Ensuring that clients have access to preventive dental services, such as fluoride treatments and sealants, can significantly reduce the risk of tooth decay and other oral health

problems. Programs that provide these services, especially in underserved communities, are vital for improving overall dental health.

- **Community Outreach Programs**
  - Implementing outreach programs to educate the community about dental health and available services can help increase awareness and access to care. These programs can include free dental screenings, workshops, and health fairs that promote oral health education.
- **Linking to Social Services**
  - Connecting clients with social services that address broader needs, such as transportation assistance and financial aid for dental care, can help remove barriers to accessing necessary services. Programs that assist with these needs are essential for ensuring that clients can attend dental appointments and receive treatment.
- **Follow-up and Monitoring**
  - Establishing a system for regular follow-up appointments and monitoring clients' oral health can help ensure they are adhering to treatment plans and managing any dental conditions effectively. This ongoing support is crucial for maintaining good oral health and preventing complications.

TYPES OF CHEWING:

Chewing patterns can be categorized into four main types:

- ➔ **Alternate Bilateral Chewing**
  - Involves rhythmic movements of the jaw across the midline, promoting occlusal stability and effective food processing.
- ➔ **Simultaneous Bilateral Chewing**
  - Both sides of the jaw move simultaneously, typically used for softer foods.
- ➔ **Preferential Unilateral Chewing**
  - Involves favoring one side of the mouth during chewing, which may indicate underlying issues.
- ➔ **Chronic Unilateral Chewing**
  - A persistent pattern favoring one side that can lead to imbalances in muscle development and occlusion.

ORAL HYGIENE PRACTICES

Proper oral hygiene practices are vital for maintaining dental health and preventing conditions like tooth decay and gum disease. Key practices include:

- ➔ **Brushing:** Using fluoride toothpaste twice daily to effectively remove plaque.
- ➔ **Flossing:** Daily flossing to clean between teeth where toothbrushes cannot reach.
- ➔ **Regular Dental Visits:** Scheduling check-ups for professional cleanings and examinations.
- ➔ **Dietary Choices:** Limiting sugary foods and beverages that contribute to tooth decay.

CRITICAL MEMBERS OF THE MANAGEMENT TEAM	
Members	**Roles**
Dentists/Dental Surgeons	• Primary care providers for oral health • Diagnose and treat a wide range of dental conditions, including cavities, gum disease, tooth decay, and root canals • Perform preventive care procedures like cleanings, fluoride treatments, and sealants, as well as restorative procedures like fillings, crowns, and bridges

	• Oral surgeons are dentists with additional training to perform surgeries in the mouth and jaw, such as wisdom teeth removal, dental implant placement, and corrective jaw surgery
Orthodontists	• Dentists who specialize in straightening teeth and correcting misaligned bites • Use braces, retainers, and other corrective appliances to move teeth into their proper positions
Oral and Maxillofacial Surgeons	• Surgeons who specialize in treating conditions of the mouth, face, and jaws • Perform a wide range of surgeries, including complex tooth extractions, jaw reconstruction, facial trauma repair, cleft lip & palate repair, and tumor removal
Speech-Language Pathologists	• Can collaborate with dentists and orthodontists to address speech difficulties caused by dental problems, such as missing teeth or cleft lip and palate. They also play a vital role in advocating for and educating individuals on proper oral hygiene
Periodontists	• Dentists who specialize in the treatment of gum disease • Provide deep cleanings (scaling and root planing), gum surgery (flap surgery), and bone grafting procedures to treat gum disease and support teeth
Implant Dentists	• Dentists with advanced training in placing dental implants—artificial tooth roots surgically placed in the jawbone to support crowns, bridges, or dentures
Prosthodontics	• Dentists who specialize in restoring and replacing missing teeth • Create dentures, bridges, crowns, and other dental prosthetics to improve a person's smile, function, and appearance
Physicians	• Play a role in oral health by identifying and managing systemic conditions that can affect oral health, such as diabetes and HIV/AIDS • May also prescribe medication to treat oral infections or manage pain
Psychologists	• Can help address dental anxiety and phobia, which can interfere with a person's ability to seek dental care • Can provide therapy to help patients develop coping mechanisms for dental fear and anxiety

Physiotherapists	• Can help treat temporomandibular joint disorder (TMJ), which can cause pain and discomfort in the jaw joint • May use massage, exercises, and other techniques to improve jaw mobility and reduce pain.

MEDICAL PRECAUTIONS REGARDING SPEECH-LANGUAGE THERAPY		
Actions an SLP should take to protect oneself and the client:		
• Wear personal protective equipment (gloves, mask, face shield) due to potential exposure to oral fluids • Use disposable or sterilizable oral examination tools • Be aware of any recent dental procedures or ongoing treatments • Coordinate with the client's dentist to ensure therapy doesn't interfere with dental care • Be cautious when working with clients who have dental pain or recent oral surgery		
Preventive Measures:		
Before: • Review the client's dental history and any current treatments • Ensure all tools and materials are sanitized • Prepare soft materials if the client has sensitive teeth or recent dental work • Educate the client about proper oral hygiene practices to support speech therapy goals	During: • Avoid exercises that might cause pain or discomfort to sensitive teeth or gums • Monitor for signs of discomfort or fatigue during oral exercises • Monitor for signs of odynophagia (painful swallowing), especially during swallowing exercises or if the client has had recent dental procedures • Be vigilant for any signs that may indicate risk of pneumonia, such as coughing or difficulty swallowing, to prevent aspiration	After: • Clean and sterilize all tools used during the session • Document any observations related to dental issues that may affect speech • Communicate with the dental team if any concerns arise

SUPPORT SYSTEMS

Philippine Dental Association (PDA) - Professional organization for dentists that promotes oral health, provides continuing education, and offers resources for dental care.	**FDI World Dental Federation** - Global organization that promotes oral health, provides resources for dental professionals, and advocates for oral health policies worldwide.
Department of Health (DOH) - The primary responsibility of the DOH is to develop policies and guidelines for local government units. The program aims to achieve this objective by offering preventive, curative, and promotive dental healthcare services to Filipinos throughout their lives.	**Oral Health Foundation** - UK-based charity that works globally to improve oral health. They provide education, run awareness campaigns, and offer support to both the public and dental professionals. Their initiatives include National Smile Month and Mouth Cancer Action Month.

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