



MINISTRY OF HEALTH MALAYSIA
ORAL HEALTH PROGRAMME

Oral Health Simplified Education Module (OHSEM)

A Guide for Dental Practitioners

In collaboration with:

- School of Dental Sciences, Universiti Sains Malaysia
- Health Services Division, Ministry of Defence
- Malaysian Dental Association







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2026

HAK CIPTA

Segala hak cipta adalah terpelihara. Setiap bahagian daripada terbitan ini tidak boleh diterbitkan semula, tidak boleh disimpan dalam apa jua bentuk mekanikal atau elektronik kecuali setelah mendapat kebenaran daripada penerbit.

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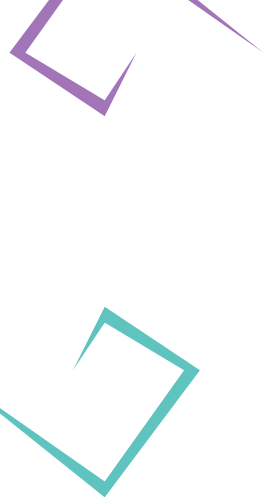
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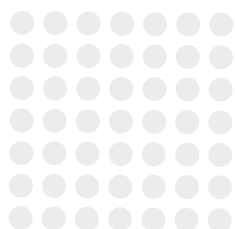
Special thanks to everyone who contributed directly or indirectly
to the successful creation of the
ORAL HEALTH SIMPLIFIED EDUCATION MODULE (OHSEM).

May this module serve as a valuable resource
for everyone.

Thank you!



Oral Health Simplified Education Module (OHSEM)



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FOREWORD

**DIRECTOR - GENERAL OF HEALTH MALAYSIA
MINISTRY OF HEALTH MALAYSIA**



**Assalamualaikum Warahmatullahi Wabarakatuh
dan Salam Malaysia MADANI.**

Oral health is an integral component of overall health and quality of life. Addressing the global and national burden of oral diseases requires a strategic shift from treatment-focused care to proactive prevention, health promotion, and enhanced oral health literacy.

The introduction of the Oral Health Simplified Education Module (OHSEM) marks an important step in strengthening our preventive efforts. Designed specifically as a practical reference for dental practitioners across both public and private sectors, this module equips dental practitioners with clear, standardized, and evidence-based guidance to plan and deliver effective oral health education.

By synthesizing core educational principles, behavioural change frameworks, and practical communication strategies, OHSEM empowers dental practitioners to deliver tailored, impactful oral health messages, ranging from plaque control and fluoride use to dietary advice, tobacco cessation, and regular dental check-ups. Crucially, this standardized approach supports dental practitioners in effectively communicating essential health concepts to individuals across the life course, from early childhood through adulthood and older age.

I commend the Oral Health Programme, Ministry of Health Malaysia, along with our valued collaborators from the School of Dental Sciences, Universiti Sains Malaysia, the Health Services Division, Ministry of Defence, and the Malaysian Dental Association, for their dedication to bringing this module to fruition. It is my hope that OHSEM will be widely utilized by all dental practitioners to elevate oral health advocacy, cultivate healthy habits, and improve health outcomes for the entire Malaysian population.

YBhg. Datuk Dr. Mahathar bin Abd Wahab

**DIRECTOR - GENERAL OF HEALTH MALAYSIA
MINISTRY OF HEALTH MALAYSIA**

FOREWORD

DEPUTY DIRECTOR GENERAL OF HEALTH (ORAL HEALTH)
MINISTRY OF HEALTH MALAYSIA

Bismillahirrahmaanirrahim.
Assalamualaikum dan Salam Malaysia MADANI.

Alhamdulillah, praise be to Allah SWT. With His permission, Oral Health Simplified Education Module (OHSEM) has been developed to deliver a structured overview of the principles and strategies for the effective delivery of oral health education, along with the foundational messages that support its implementation.



In recent years, the field of dentistry has undergone a significant transformation, transitioning towards a steadfast focus on patient-centered care excellence. In line with the National Oral Health Strategic Plan 2022–2030, the approach has evolved from solely addressing dental diseases to emphasizing prevention and promoting overall wellness. The Ministry of Health Malaysia's broader transition from "sick care" to "health care and wellness" signifies a major transformation.

Given the ongoing high burden of oral diseases, with nearly 95% of Malaysian adults requiring dental treatment (NHMS 2020: NOHSA 2020), it is crucial to initiate this transformation. Consequently, additional measures should be implemented to enhance oral health literacy and awareness among the population, empowering individuals to make informed decisions and fostering greater responsibility for their personal oral health. In this context, this module serves as a comprehensive guide for delivering oral health education to the public in a clear and accessible manner.

This manual represents the steadfast commitment and strong collaboration between Oral Health Programme, Ministry of Health (OHP MOH), representatives from the School of Dental Sciences of Universiti Sains Malaysia, the Malaysian Armed Forces Dental Services, and the Malaysian Dental Association (MDA) to uphold the highest standards in oral health delivery. I would like to take this opportunity to express my sincere congratulations and appreciation to all committee members for their dedication and efforts in the development of OHSEM. We hope that this module will be a valuable tool for dental practitioners, equipping them to deliver comprehensive and evidence-based oral health education that meets the needs of the community.

Thank you.

Dr. Fauziah binti Ahmad

DEPUTY DIRECTOR GENERAL OF HEALTH (ORAL HEALTH)
MINISTRY OF HEALTH MALAYSIA

HIGHLIGHTS

There are five key oral health messages that serve as the foundation for all oral health education.

1

PLAQUE CONTROL

- ✓ Start a daily toothbrushing routine as soon as a child's first tooth appears, typically around 6 months of age.
- ✓ Use a soft-bristled toothbrush.
- ✓ Daily oral hygiene regime include: toothbrushing at least twice daily, most importantly before bedtime, interdental cleaning such as flossing and tongue cleaning at least once daily.
- ✓ Use of toothpaste and mouthwash is recommended as an adjunct to improve oral hygiene and prevent oral diseases.

2

EXPOSURE TO FLUORIDE

- ✓ Use of fluoride toothpaste should begin as early as the first deciduous tooth erupts.
- ✓ A smear or rice-sized amount of toothpaste containing 1,000 ppm fluoride is recommended for children less than three years of age.
- ✓ A pea-sized amount of toothpaste containing 1,350-1,500 ppm fluoride is recommended for children over three years old and adults.
- ✓ Spit out the excess paste after toothbrushing; rinsing with water should be minimised or completely avoided.
- ✓ Parents should assist or supervise their children during toothbrushing to ensure proper technique and prevent excessive ingestion of toothpaste.
- ✓ Fluoride mouthwash is recommended as an additional preventive measure for individuals aged 6 years and above, particularly those at higher risk of dental caries.

3

HEALTHY DIET

- ✓ Reduce the amount and frequency of consumption of free sugars.
- ✓ When sugar-sweetened foods or drinks are consumed, they should be part of a meal rather than between meals.
- ✓ Snacks and drinks should be free of added sugars whenever possible.
- ✓ Avoid acidic drinks to reduce the risk of enamel erosion.
- ✓ Do not add sugar to foods or drinks for children under 2 years of age.
- ✓ Never let children fall asleep with a bottle of milk or any sugar-sweetened drinks in their mouth.
- ✓ Stop bottle feeding by the age of one.

HIGHLIGHTS

4

TOBACCO AVOIDANCE/TOBACCO CESSATION

✓ **Use the 5A's technique to guide conversations related to smoking cessation.**

- 1) Ask: Identify and document patient's tobacco use status.
- 2) Advise: Urge active tobacco users to quit in a clear, strong, and personalised manner
- 3) Assess: Determine if the patient is willing to make a quit attempt.
- 4) Assist: For patients who are willing to quit, provide counselling and consider pharmacotherapy to help them quit.
- 5) Arrange: Schedule a follow-up within the first week after the quit date.

✓ **Use the 5R's technique to motivate patient who is not willing to quit.**

- 1)Relevance: Encourage the patient to indicate why quitting is personally relevant.
- 2)Risks: Ask the patient to identify potential negative consequences of tobacco use.
- 3)Rewards: Ask the patient to identify potential benefits of stopping tobacco use.
- 4)Roadblocks: Ask the patient to identify barriers or impediments to quitting.
- 5)Repetition: Repeat the motivational intervention every time the patient comes to the clinic.

5

REGULAR DENTAL ATTENDANCE

- ✓ Children should have their first dental visit by their first birthday or within six months after their first tooth erupts.
- ✓ After the initial visit, recall interval should be tailored to the patient's risk for dental caries.
- ✓ Caries risk assessment (CRA) methods or guidelines combine factors that are associated with development and progression of dental caries.
- ✓ A patient can be categorised into low risk, moderate risk, and high risk, and extremely high-risk.
- ✓ Common recall intervals based on CRA are as follows:
 - 1) Low risk: every 6 to 12 months.
 - 2) Moderate risk: every 6 months.
 - 3) High risk: every 3 months.
 - 4) Extremely high risk: every 1 to 3 months.

1.0 BACKGROUND, PURPOSE, AND SCOPE OF MODULE

Oral diseases are the most prevalent noncommunicable diseases worldwide. According to the World Health Organization (2022), approximately 3.5 billion people, which is almost half of the world's population, suffer from oral diseases.

Affecting individuals across their entire lifespan, from early childhood to old age, oral diseases impose substantial health and economic burdens for many countries including Malaysia.

Dental caries and periodontal disease are two of the most common oral diseases. Others include cancers of the lips and oral cavity and conditions like edentulism. When not managed or treated early, oral diseases can have irreversible sequelae and impact on individuals and family members, diminishing quality of life.

Oral diseases are largely preventable, and oral health education plays a crucial role in oral disease prevention.

This module aims to provide a brief overview of the principles and strategies related to oral health education, together with the key messages that should form the basis for all oral health advice and information. It helps to ensure that the messages delivered to patients and the public are comprehensive, accurate, evidence-based, appropriate, and practical. The OHSEM can be used by all dental practitioners in both the public and private sectors.

2.0 INTRODUCTION

2.1

What is Health Education?

The World Health Organization (2021) defines health education as “any combination of learning experiences designed to help individuals and communities improve their health by increasing knowledge, influencing motivation and improving health literacy”.

To put it simply, health education is the process through which individuals receive information to empower them in making informed decisions and take control of their own health.

2.2

Domains of Learning in Health Education

There are three domains of learning:

01

Cognitive

Knowledge about facts related to health (e.g., knowledge that dental plaque can cause caries).

02

Affective

Attitudes, feelings, beliefs, values, emotions, and opinion, either positive or negative, associated with health (e.g., belief that baby teeth need not be given good care as they will be replaced by permanent teeth).

03

Behaviour

Skills to maintain or improve health (e.g., skills to effectively brush teeth).

Traditionally, health education was based upon the theory that acquiring new knowledge would modify attitudes and lead to a change in behaviour.

In reality, a complex and dynamic relationship exists between the three domains.

Hence, providing patients with the required information alone has been shown to be unsuccessful in securing long-term behaviour changes.

Each domain requires a different instruction style or approach to achieve its intended outcomes.

2.3

Levels of Health Education

Health education can be delivered at the individual, community, or population level:



INDIVIDUAL LEVEL

Oral health education to patients
(e.g., chairside oral health education)

COMMUNITY LEVEL

Oral health education to identified target groups
(e.g., general adults, school children, antenatal mothers, carers of special needs individuals, elderly)



POPULATION LEVEL

Oral health education to a large audience usually via
use of mass media (e.g., social media, television,
radio, newspaper, or other printed materials)

This module focuses on oral health education at individual level. However, the key messages remain relevant if the oral health education is delivered at community or population level.

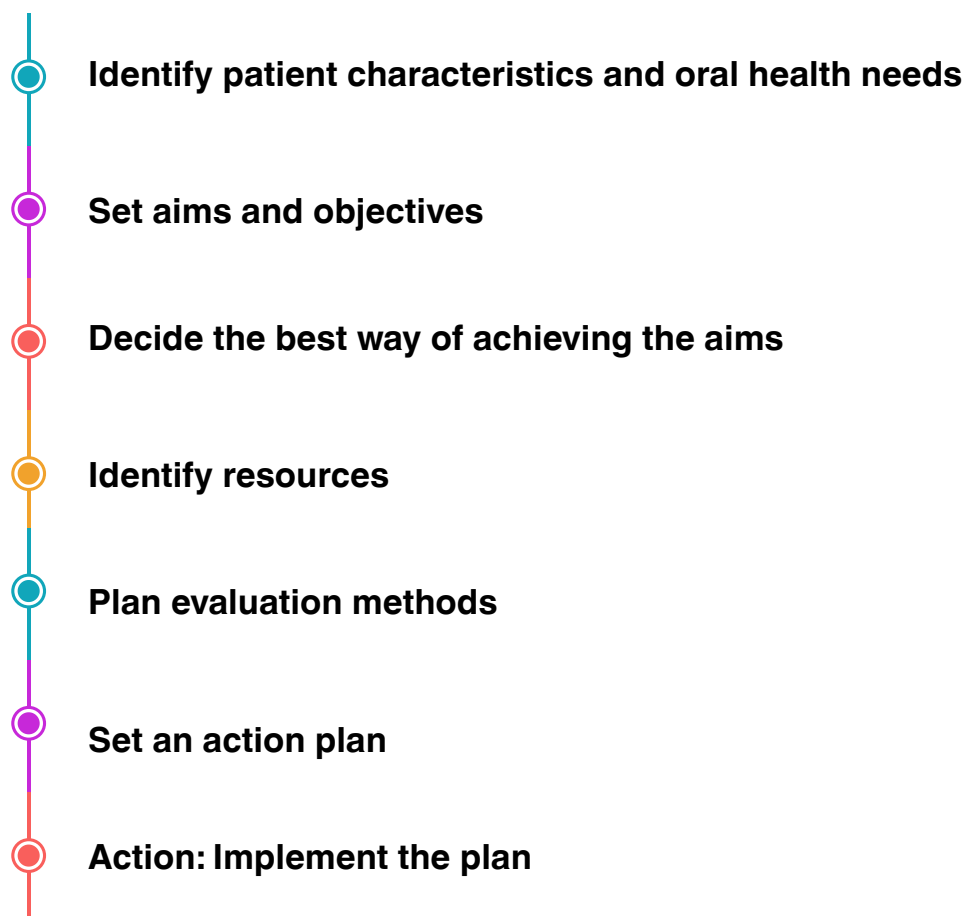
3.0 PLANNING AND STRATEGISING ORAL HEALTH EDUCATION

3.1

Planning Oral Health Education

Health education is a critical component of promoting well-being and preventing diseases. Effective health education requires thoughtful planning and consideration of the individual's needs and preferences. Spontaneity may not yield the desired outcomes. Proper planning ensures that health education initiatives are effective and impactful. Many health education planning models have been proposed.

A health education planning model by Ewles and Simnett (2003) provides a practical approach in designing and implementing effective health education. The model outlines a seven-step process for effective health education planning, whether for individuals or groups.



1. Identify patient characteristics and oral health needs

- **Patient characteristics:** When planning health education, it's important to identify patient characteristics, including socio-demographic background, complaint, medical and social history, oral health problem(s) of the patient, cause(s) of the oral health problem(s), and consequences of oral health problem(s) if intervention is not done.
- **Oral health needs:** Consider both the professionally defined needs based on clinical findings and the patient's individual perceived needs.
- **Example:**

Patient characteristics:

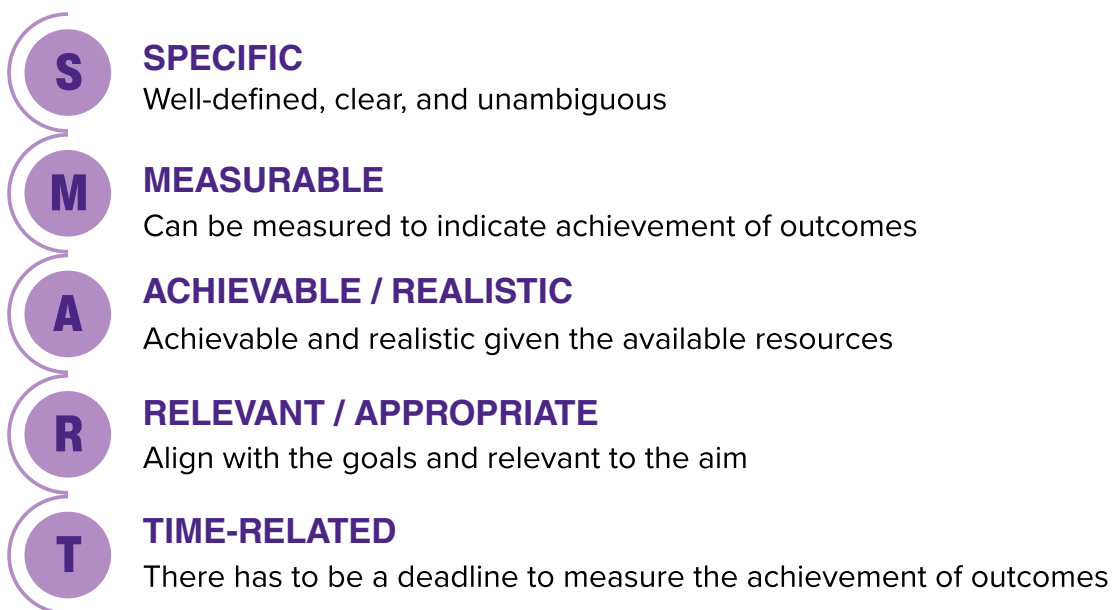
1. Socio-demographic background, complaint, and history:
Female, adolescent (16-year-old), complaint of bleeding gums and bad breath since the past 3 months. No medical history of concern.
2. Oral health problem(s):
Generalised moderate gingivitis with localised calculus build-up.
3. Cause(s):
Poor oral hygiene, ineffective toothbrushing technique, not flossing, and not using mouth rinse.
4. Consequences:
Periodontitis, dental caries.

Oral health needs:

1. Professionally defined needs:
Scaling and prophylaxis, plaque control.
2. Patient perceived needs:
Concern with bleeding gums and bad breath.

2. Set aims and objectives

- Based on the assessment of patient characteristics and needs, set an aim that specifies the desired overall change.
 - The aim represents the long-term desired achievement and provides a broad direction or purpose for the intervention.
 - The aim must be relevant to the patient's needs.
- Set the goals of health education.
 - Goals describe the desired outcomes in broad, positive, patient-centred terms.
 - They provide overall direction for the desired change and guide the development of specific objectives.
- Set the objectives of the health education intervention.
 - Objectives are the specific, actionable tasks required to achieve the goals.
 - Use of the SMART framework ensures that the objectives are well-aligned with the goals and can effectively operationalise them.



- **Example:**

Aim:

To restore and maintain a healthy periodontium and eliminate symptoms of bleeding gums and bad breath.

Goal:

To achieve good oral hygiene and healthy gingiva.

Objectives:

- 1) To reduce plaque accumulation of the patient from poor (score 2.0 – 3.0) to good (0.1 – 0.9) within 2 weeks measured using the Silness and Löe Plaque Index.
- 2) To reduce gingival inflammation of the patient from severe inflammation (score 2.1 – 3.0) to healthy (score 0) within 4 weeks measured using the Löe and Silness Gingival Index.
- 3) To improve knowledge, attitude, and behaviour of the patient regarding plaque control methods within 4 weeks measured using a self-administered questionnaire.

3. Decide the best way of achieving the aims

- **Decide the appropriate educational approach to accommodate the needs of the patient and the motivation for change.**

- **Example:**

A lecture-based instructional approach or oral health talk to improve patient's knowledge about plaque and the control methods, attitude about the importance of good plaque control, and oral hygiene practice.

Demonstration of the proper brushing and flossing techniques with opportunities for return demonstrations, allowing the patient to practise using the recommended technique that is appropriate for her clinical conditions and manual dexterity.

4. Identify resources

- Identify the resources needed to implement the intervention.
- Resources include health education materials such as leaflets, videos, and oral hygiene aids.
- If the intervention is done for groups, more resources would be needed such as financial support or funding, appropriate premises and facilities to conduct the intervention, and human resources or people to provide energy, ideas, skills, and expertise.
- Plan the content and methods in detail. The content and methods must be relevant and appropriate to the patient's characteristics and needs; and can achieve the set objectives.
- Example:

- 1) PowerPoint presentation for the oral health talk highlighting relevant key messages.
- 2) Tooth model, soft toothbrush and waxed dental floss.
- 3) A leaflet with diagrams showing steps of the recommended brushing and flossing technique.

5. Plan evaluation methods

- Health education intervention must be evaluated.
- Evaluation is done to assess whether the set aim, goals, and objectives have been achieved.
- Appropriate evaluation measures must be selected.
- Process evaluation measures the process involved in developing and implementing health education, particularly the quality of the implementation: Were the methods and materials used appropriate? Was the content adequate, accurate, systematically presented, appropriate and practical to the patient? Were the resources used efficiently?

- Outcome evaluation measures whether the objectives have been achieved. A range of methods can be used depending on the outcome being measured. For example, evaluation methods in relation to oral hygiene can include plaque score and questionnaire measuring knowledge, attitude, and behaviour on oral hygiene practices.

- Example:

Evaluate:

- 1) Oral hygiene using the Silness and Loe Plaque Index after 2 weeks, 1 month, and 2 months.
- 2) Gingival health using the Loe and Silness Gingival Index after 1 month and 2 months.
- 3) Knowledge, attitude, and behaviour regarding plaque control methods using a self-administered questionnaire after 1 month and 2 months.

6. Set an action plan

- An action plan serves as a blueprint, specifying the steps, tasks, and resources to achieve the goal and objectives.
- Its primary purpose is to provide a clear roadmap and direction for health educators.
- An action plan breaks down projects into manageable, actionable components.
- By breaking down projects into manageable components, it makes it easier to track progress and stay on course.
- If more than one person is involved in the health education intervention, an action plan can help foster accountability and coordination among team members by assigning responsibilities and deadlines.
- Additionally, an action plan helps with resource allocation, budgeting, and risk management.

- **Example:**

An action plan can be developed in various formats, customized for specific situations and goals as tabulated in Figure 3.1.

Goal:			
Objective(s):			
Action steps	Person(s) responsible	Resources needed	Completion data
What is needed to implement the oral health education?	Who is responsible to carry out the action step?	What are the resources needed?	When is the expected date of accomplishment?

Figure 3.1: Example of an action plan template

7. Action: Implement the plan

- Implement the health education intervention, including the evaluation.
- Review the whole process to draw out useful lessons for future use.

3.2

Strategising Oral Health Education

Recognising the need for planned, consistent, and integrated health education strategies, Sheiham and Croucher (1994) proposed the SPERMAID principles as a framework to support effective chairside communication and enhance motivation among adult patients, as follows:

S

SUPPORTIVE

P

PARTICIPATION

E

EARLY INTERVENTION

R

REDUCTION OF ANXIETY

M

MAKING HEALTHIER CHOICE THE EASIER CHOICE

A

APPROPRIATE GOALS

I

INTEGRATION

D

DIVERSE EDUCATIONAL APPROACHES

1. Supportive

- Intentional change involves gradual progression through five stages of changes rather than being an all-or-nothing phenomenon (Figure 3.2).

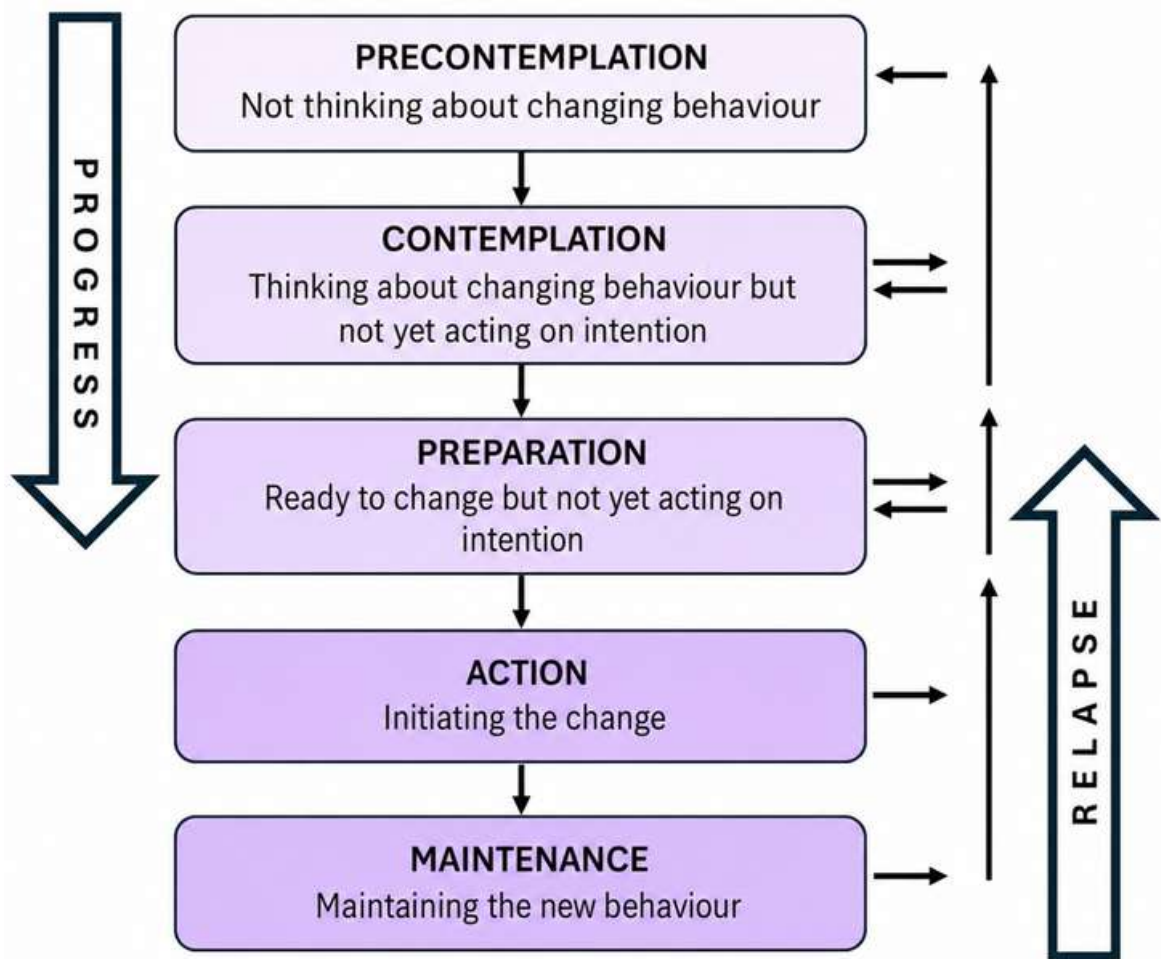


Figure 3.2: The Transtheoretical Model (Stages of Change)

- People are at different stages of change.
- Health education intervention must be tailored to the patient's stage and readiness to change, otherwise it will be less likely to succeed.
- Hence, prior to delivering oral health education, there is a need to identify the patient's stage of change and provide support appropriate for the stage (Table 3.1).

Table 3.1: Appropriate support according to the Stages of Change

STAGE	CHARACTERISTICS	SUPPORT
PRECONTEMPLATION	Unaware or not yet acknowledging that there is a problem behaviour that needs to be changed.	Create awareness of need for change.
CONTEMPLATION	Acknowledging the problem but not yet ready or sure of wanting to make a change, and uncertain if the problem behaviour is worthy changing.	- Motivate, encourage to make specific plans. - Focus on reinforcing reasons for change and acknowledging their uncertain feelings.
PREPARATION	- Acknowledging the benefits of behaviour change, hence understands why the change is needed. - Making plans to change by gathering information from various sources and started to set gradual goals.	- Determine a goal, assist in developing action. - Encourage small steps. - Identify barriers and consider solutions to overcome anticipated obstacles. - Assist the patient by setting up an action plan together.
ACTION	- Initiating actual behaviour change while continue to review the importance of change and evaluate the commitment to change. - High risk of relapse.	Assist with feedback, problem solving, social support, reinforcement.
MAINTENANCE	- Actively maintaining change. - More confident in the ability to sustain the positive behaviour changes. - Risk of relapse remains.	- Encourage, assist in coping, review goals. - Provide ongoing support and encouragement to prevent relapse.

● Interventions that try to move a patient too quickly through the stages of change are more likely to create resistance that will impede behaviour change.

● It is important to remember that the Stages of Change model is a circular, not linear model.

● Some people will exit, relapse, and return to one of the earlier stages of change.

● If there is relapse:

Evaluate the trigger(s) for relapse

Reassess motivation and barriers

Plan stronger coping strategies

● Some people will "recycle" through the stages several times before the changes become fully established.

2. Participation

- It is essential to view patients as active participants rather than passive recipients of oral health education.
- Active participation of patients in the learning process will foster mutual understanding and respect.
- Patient concerns, perceived needs and desires must be considered.

3. Early Intervention

- Early interventions generally produce more effective outcomes.
- Initiating preventive measures promptly tends to lead to more favourable results.
- This principle highlights the importance of timely, proactive action.

4. Reduction of Anxiety

- People learn more easily and effectively if they are not anxious.
- Creating a supportive and calm environment contributes to optimal learning experiences.
- This includes reducing barriers that can create anxiety (e.g., keeping to time, smiling, using a patient's name, talking, giving information, being sensitive, and sharing control).

5. Making Healthier Choice the Easier Choice

- The goal of this principle is to make it easier for people to make changes and choose the healthy behaviour.
- Explore practical ways to incorporate the recommended behaviours into the patient's daily life.
- Remember that individual preferences and circumstances play a role – adapt these options as needed so that the new behaviour can be easily and effectively practised.
- Example:

Set an annual reminder on the phone or calendar for an annual dental checkup, keep fresh fruits accessible as snacks instead of sugary processed foods, drink plain water instead of sugary drinks at the end of a meal to help wash, dilute and clear dietary sugars from the mouth.

6. Appropriate Goals

- Set goals that are relevant to the patient's current problems and behaviours.
- Goals should be positive, realistic, and meaningful to the patient. These broad goals are then operationalised through SMART objectives.
- Example:

To achieve good oral hygiene and healthy gingiva.

7. Integration

- Oral diseases share common modifiable risk factors with other chronic diseases or conditions.
- For example, a high sugar diet is a risk factor for dental caries, cardiovascular disease, diabetes and other non-communicable diseases, and tobacco smoking is associated with periodontal disease, dental caries, oral cancer, cardiovascular disease, stroke, and lung cancer.
- Instead of targeting each disease separately, dental practitioners can address the common risk factors to improve both oral health and general health simultaneously.
- This approach, the common risk factor approach (CRFA), can impact a wide range of diseases by tackling only a small number of disease determinants.

8. Diverse Educational Approaches

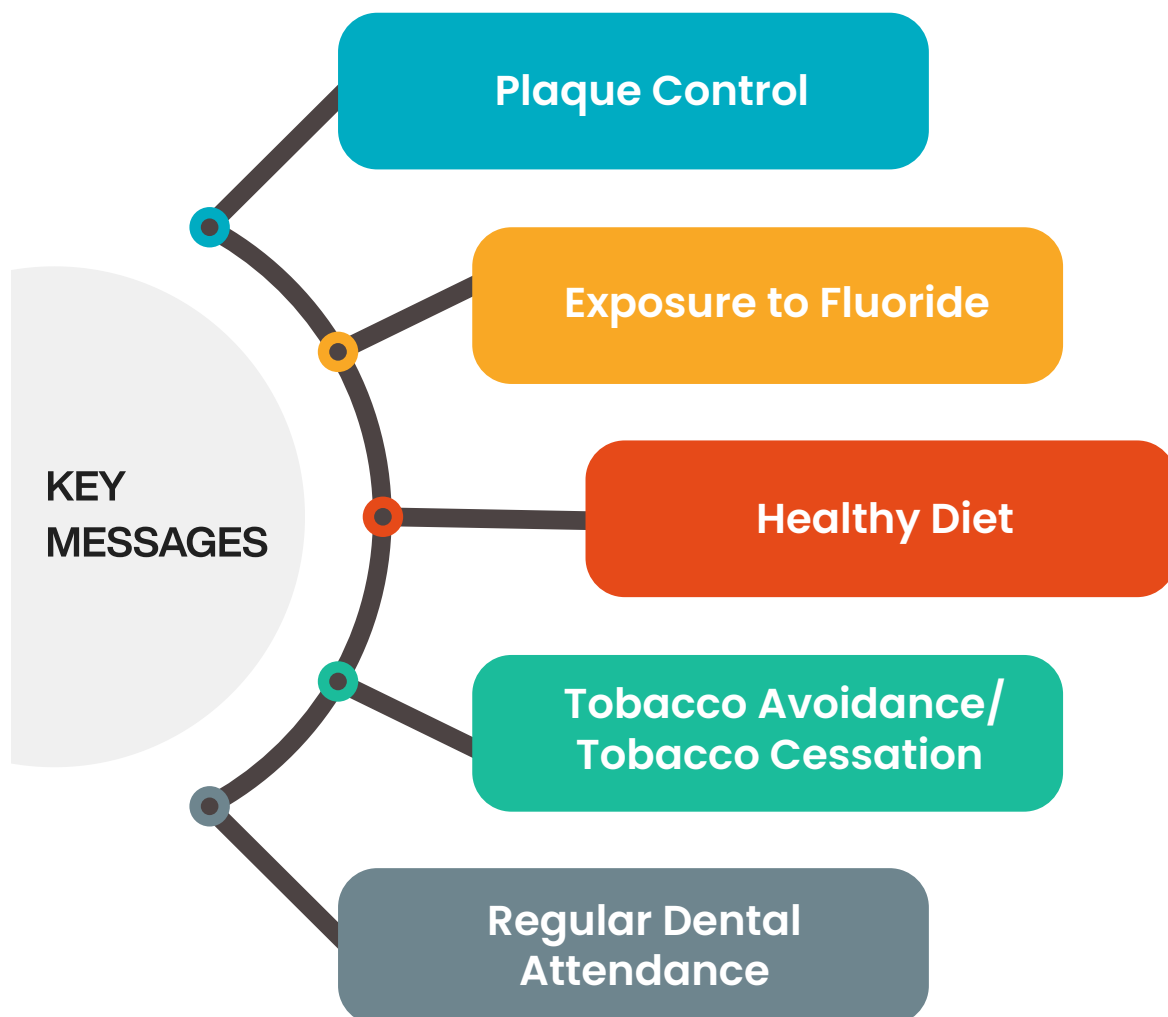
- Educational approaches should be diversified to address the needs of patients across differing stages of change, and educational methods should be cumulative and consistent to support the patient throughout the behaviour change.
- Example:

A patient who is at the precontemplation stage of flossing behaviour

- A lecture-based instructional approach or health talk can first be used to raise the patient's awareness about the importance and the consequences of not flossing.
- Incorporation of an animated video showing interproximal caries development due to plaque accumulation can help increase patient's understanding, perceived susceptibility, and perceived threat, which can help the patient become aware of the problem and consider the possibility of starting to floss.
- Other approaches and methods can be used to highlight the perceived benefits of changing, motivate, increase self-efficacy, and reduce perceived barriers as the patient progresses towards the subsequent stages of change such as introducing the patient to the various types of floss and demonstrating the proper flossing techniques with opportunities for return demonstrations, allowing the patient to practise using the recommended floss and technique that is appropriate for his/her clinical conditions and manual dexterity.

4.0 ORAL HEALTH EDUCATION MESSAGES

Health education messages should be consistent, scientifically correct, and evidence based. There are five key oral health messages that serve as the foundation for all oral health education. These messages are essential for promoting good oral health practices and preventing oral diseases.



4.1

Plaque Control

Dental plaque is a community of microorganisms found on tooth surfaces as biofilm, embedded in a matrix of polymers of host and bacterial origin.

The aim of plaque control education is to provide patients with adequate knowledge and skills to facilitate his/her compliance with the recommended plaque control measures.

Self-performed plaque control can be achieved by mechanical and chemical means.

Mechanical Plaque Control

Mainly performed by toothbrushing, using either manual or powered toothbrushes, and interdental cleaning using appropriate interdental cleaning aids such as dental floss, interdental brushes, and oral irrigators.

Chemical Plaque Control

Involves using antiplaque agents to inhibit dental plaque formation. It is used as an adjunct, complementing the mechanical means rather than replacing them. Toothpastes and mouthwashes are the most common modes of application.

MECHANICAL PLAQUE CONTROL

1

Manual versus powered toothbrushes

- Both manual and powered toothbrushes are effective at removing dental plaque.
- Manual and powered toothbrushes each have their own benefits:

MANUAL TOOTHBRUSHES

Easy to use

Variety of shape, design and size

More affordable

Easily available

POWERED TOOTHBRUSHES

More effective at removing dental plaque

Far more costly than manual brushes
but they are particularly helpful for individuals with limited manual dexterity, such as people with arthritis, elderly, and parents who brush their children's teeth

2

Toothbrushing - What to tell your patients?

- It should be established as a daily routine from the time of tooth eruption, usually about 6 months of age.
- For children, parents should assist with brushing or supervise until the children can do it effectively, usually by the age of 10 years.
- A soft-bristled toothbrush is recommended. A soft-bristled toothbrush has fine and flexible bristles to gently remove plaque without being abrasive and harsh on the gingival tissues and tooth surfaces.
- The size of the toothbrush head should be appropriate to the user, but a smaller head will give better access to those hard-to-reach surfaces that a large-headed brush cannot reach.
- Toothbrush handle should be large enough to provide a firm, comfortable grip with sufficient flexibility to avoid exerting excessive pressure to the gingiva and tooth.
- Do not share a toothbrush.
- Thoroughly rinse toothbrushes with tap water after brushing.
- Store the brush in an upright position and allow the toothbrush to air-dry until used again.
- Do not cover toothbrushes or store them in closed containers.
- If more than one brush is stored in the same holder or area, keep the brushes separated (Figure 4.1).



Figure 4.1: Keep the toothbrushes in an upright position, separated from one another.

- Replace toothbrushes when the bristles become worn or splayed, which is approximately every 2 to 3 months with twice daily usage (Figure 4.2).
- The same goes to powered toothbrushes. The bristles do wear out and the head needs to be replaced accordingly.



Figure 4.2: A toothbrush with frayed bristles should be replaced.

3

Toothbrushing Technique

- At least twice daily toothbrushing is recommended, most importantly before bedtime.
- Do not brush teeth immediately after a meal, especially after consumption of acidic foods or drinks. Acid softens the enamel, and brushing too soon can be counterproductive. Instead, wait at least 30 minutes before brushing to avoid causing additional tooth wear.
- Several toothbrushing techniques have been developed and shown to be effective in removing dental plaque. These include the Bass method, the Charters method, the Stillman method and the Fones method.
- Of these techniques, the modified Bass technique provides significantly better plaque control, and hence recommended.

MODIFIED BASS TOOTHBRUSHING TECHNIQUE



Position the toothbrush bristles at a 45° angle towards the gingival line.

The bristles are gently pressed to slightly enter the sulcus.

Move the toothbrush in short back and forth motion, described as a horizontal jiggle, then roll the brush towards the occlusal surface to remove the plaque.

Using the same manner, brush all the buccal and lingual surfaces of both upper and lower teeth.



To clean the palatal and lingual surfaces of the upper and lower anterior teeth respectively, place the toothbrush in vertical position and make several outward movements.



For the occlusal surfaces of the posterior teeth, use a rapid up-and-down vibratory motion to force the bristles into the pits and fissures. Long, sweeping horizontal strokes are contraindicated.



Do not forget to clean the tongue.

4

Interdental Cleaning

- Interdental cleaning should be done at least once daily.
- Selection of interdental cleaning aids depends on the following conditions and risk factors:

1. Contour and consistency of the gingival tissues

2. Probing depths

3. Gingival attachment levels

4. Size of the interproximal embrasures

5. Tooth position and alignment

6. Condition and types of restorative work present

7. Susceptibility of the patient to oral diseases

8. Level of dexterity and ability to use the cleaning aid

9. Patient motivation

10. Cost, safety, and effectiveness of the cleaning aid

11. Patient preference

- Dental floss is the most frequently recommended for cleaning proximal tooth surfaces with normal gingival contour and embrasure spaces (Type I embrasures when interdental spaces are fully covered by papilla).
- Floss is available in a variety of types: waxed dental floss, unwaxed dental floss, dental tape, and tufted floss (Figure 4.3).



Figure 4.3: Various types of dental floss

- The choice of which dental floss to use is influenced by the tightness of the contact area, contour of the gingival tissue, roughness of the interproximal surface, and patient's manual dexterity.
- Unwaxed or waxed floss can be used in most situations as both can slip easily through tight contact although unwaxed floss tends to fray or tear easily if used against the margins of rough tooth surfaces and restorations.
- Dental tape is a waxed floss that is broad and flat, recommended to clean broad interproximal space that does not have tight contact points.
- Tufted dental floss or super floss is designed with three continuous segments: a relatively rigid nylon needle capable of being threaded underneath dental bridges and implant prosthesis, a shorter segment of nylon meshwork to clean larger proximal surface areas, and a length of unwaxed or waxed floss used in areas of normal gingival contour.
- There are two main flossing techniques:

1. Spool technique

2. Loop technique

SPOOL TECHNIQUE



Cut off a section of floss approximately 45 cm long, which is roughly from tip of the finger to the elbow.



Wind most of one end of the floss around one of the middle fingers. Wind the remaining floss around the middle finger of the opposite hand.



Hold the floss with the thumb and the index finger of each hand so that there is about 2-5 cm of floss between the two fingers.



Insert the floss between the teeth towards the gingiva past the contact point using a gentle sawing motion, taking care not to traumatise the gingival tissues.

For maxillary teeth: guide the floss with two thumbs or one thumb and one index finger.

For mandibular teeth: guide the floss with two index fingers.



Curve the floss around one side of the tooth to form a C-shape, then move it up and down several times against the tooth surface, from just below the gingival margin to the contact point.



Repeat the same motion on the adjacent tooth surface.

Finally, gently slide the floss back out through the contact point.



Unwind a fresh section of floss and wind the used section of the floss onto the middle finger of the other hand.

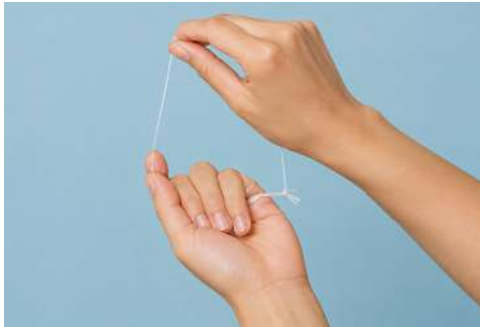


Do the same for every contact point, as well as the back of the last molar, using a clean section of floss.

LOOP TECHNIQUE



Cut off a section of floss approximately 45 cm long, which is roughly from tip of the finger to the elbow.



Tie both ends of the floss together, forming a loop.

Hold the floss using the index fingers and the thumbs to guide during flossing.

For the upper teeth use the two thumbs or thumb and index finger, and for the lower teeth use the index fingers.



Like the spool technique, ease the floss between the teeth towards the gingiva past the contact point, wrap the floss around the tooth in a C shape, and gently slide the floss under the gingival line.



Move the floss up and down against one side of the tooth.

The loop is rotated to move to the clean section of the floss

- Alternatively, a floss holder can be used to eliminate the need for placing fingers in the mouth (Figure 4.4) - recommended for individuals who lack the dexterity for handheld floss, have limited mouth opening and strong gag reflex. A disposable type is also available (Figure 4.5).



Figure 4.4 : Floss holder



Figure 4.5 : Disposable floss

6

Interdental Brushes

- It is recommended for interproximal areas where the papilla is missing or shortened (type II and type III embrasures).
- They are essential where interdental recession has progressed to expose proximal root furrows, which cannot be adequately cleaned by floss.
- Useful for individuals with diastema, concave or irregular proximal tooth surfaces.
- Can also be used to clean around orthodontic appliances and fixed prostheses.
- Selection of interdental brush shape and size should be suitable to the patient's needs. Straight interdental brush is more suitable to remove dental plaque at the interproximal area of anterior teeth, while angled interdental brush for posterior teeth (Figure 4.6).

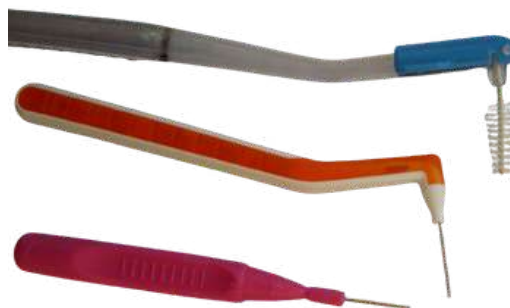


Figure 4.6 : Interdental brushes in various shapes and sizes

- The normal anatomical structure of the tongue contributes to the need for the tongue cleaning.
- The large papillary surface area of the tongue dorsum favours the accumulation of oral microorganisms and oral debris.
- Anatomically, the varying heights and formations of the papillae on the tongue create elevations and depressions that can entrap debris and harbour microorganisms, making the tongue an ideal location for bacterial growth.
- Besides bacteria, the tongue coating contains nutrients, desquamated epithelial cells, and blood cells.
- Tongue cleaning can reduce tongue coating and breath odour associated with it, and thus recommended as a part of daily oral hygiene practices.
- A tongue scraper (Figure 4.7), a tongue cleaner (Figure 4.8) or a soft, end-rounded toothbrush can be used.



Figure 4.7 : A tongue scraper



Figure 4.8 : A tongue cleaner

HOW TO CLEAN THE TONGUE?

1. Protrude the tongue as far as possible.
 2. Place the tongue scraper/cleaner/toothbrush on the dorsal surface of the tongue at the terminal sulcus (Figure 4.9).
 - If using a tongue scraper, hold it across the tongue.
 - If using a tongue cleaner, hold the handle parallel to the midline of the tongue.
 - If using a toothbrush, hold the handle of the toothbrush at a right angle to the midline of the tongue.
 3. If using a tongue scraper/cleaner, pull the scraper/cleaner forward with a sweeping motion to skim across the tongue surface.
 4. If using a toothbrush, roll the toothbrush forward, gently and with light pressure.
- Take care not to scrub the tongue.
4. Repeat the respective procedures.



Figure 4.9 : Positioning the tongue scraper, cleaner and toothbrush

CHEMICAL PLAQUE CONTROL

- Chemical plaque control is used only as an adjunct, and not as a replacement to the mechanical means.
- The antiplaque agents, commonly found in toothpastes and mouthwashes, function to either remove or disrupt existing biofilms or prevent the formation of new ones by interfering with biofilm composition and metabolism.
- Commonly used antiplaque agents include cetylpyridinium chloride, chlorhexidine gluconate, essential oils, and triclosan (Figure 4.10-4.13).

Drug Facts	
Active ingredient	Purpose
Cetylpyridinium chloride 0.07%.....	Antigingivitis/Antiplaque
Uses:	
• helps control plaque that leads to gingivitis and bleeding gums	

Figure 4.10 : Cetylpyridinium chloride in mouthwash

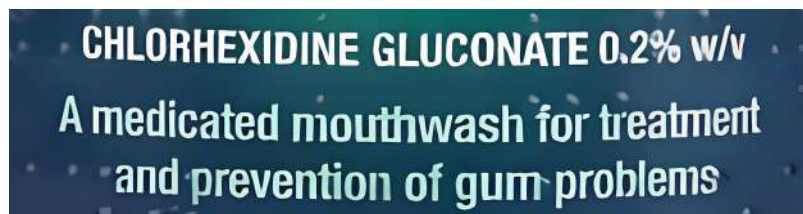


Figure 4.11 : Chlorhexidine gluconate in mouthwash

Drug Facts	
Active ingredients	Purposes
Eucalyptol 0.092% Menthol 0.042% Methyl salicylate 0.060% Thymol 0.064%	Antiplaque/antigingivitis
Uses helps prevent and reduce: • plaque • gingivitis	

Figure 4.12 : Essential oils in mouthwash

Drug Facts	
Active ingredients	
Sodium fluoride 0.24% (0.14% w/v fluoride ion).....	
Triclosan 0.30%.....	

Figure 4.13 : Triclosan in toothpaste

4.2

Exposure to Fluoride

ROLE OF FLUORIDE IN CARIES PREVENTION

- Fluoride is widely acknowledged for its significant role in preventing dental caries and even reversing early-stage carious lesions.
- The most important mechanism by which fluoride works in caries prevention is enhancing remineralisation.
- The fluorapatite crystals formed in the presence of fluoride in saliva are also stronger and more acid resistant.
- The two commonly used self-care approaches for fluoride delivery are fluoride toothpaste and fluoride mouthwash.
- Fluoride concentration in toothpastes and mouthwashes is expressed as percentages or parts per million (ppm).

FLUORIDE IN TOOTHPASTE

- Toothpaste is an inclusive term used to describe pastes, gels, or powders used with a toothbrush to aid in the removal of plaque biofilm and stain from teeth and soft tissues.
- The common formulations of fluoride in toothpaste are sodium fluoride (NaF), sodium monofluorophosphate (MFP), and stannous fluoride (SnF₂).
- Fluoride toothpastes available in the market are commonly found in two concentration ranges: Adult toothpastes containing 1,000–1,500 ppm (Figure 4.14) and children toothpastes containing lower fluoride concentrations at 500–600 ppm (Figure 4.15).



Figure 4.14 : Sodium fluoride in adult toothpastes

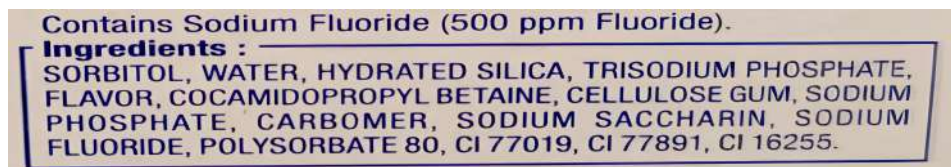


Figure 4.15 : Sodium fluoride in children's toothpastes

1

Recommended concentration and amount of fluoride in toothpaste

- There is evidence that toothpastes with higher fluoride concentrations are more effective in preventing cavities when used regularly.
- The minimum effective concentration of fluoride is 1,000 ppm, while the lower fluoride concentrations (500–600 ppm) used normally in children's toothpaste have been shown to be ineffective at controlling caries.
- Therefore, use of a fluoride toothpaste containing at least 1,000 ppm of fluoride is recommended as an effective way of preventing caries including in children (Figure 4.16).



Figure 4.16 : 1,000 ppm of sodium fluoride in children's toothpastes

- Considering the risk of enamel fluorosis when using a high concentration fluoride toothpaste during tooth development, only a smear or rice-sized amount of toothpaste containing 1,000 ppm fluoride is recommended for children less than three years of age (Figure 4.17).

- For children over three years old and adults, toothpaste containing a higher concentration of fluoride at 1,350-1,500 ppm is recommended, and a pea-sized amount should be used (Figure 4.18).



Figure 4.17 : Smear amount of toothpaste for children less than 3 years old



Figure 4.18 : Pea-sized amount of toothpaste for children over 3 years old and adults

- There is currently no evidence to support the optimal frequency of fluoride toothpaste use. However, most professional dental organisations recommend that toothbrushing with fluoride toothpaste should occur at least twice daily, with one of the times being before bedtime.

- To maximise the beneficial effects of fluoride in the toothpaste, it is preferable to simply spit out the excess paste. Rinsing after brushing should be minimised or completely avoided.

- **Caution!** Fluoride neutralises the antibacterial effect of chlorhexidine gluconate. Thus, a person brushing with a fluoride-containing toothpaste should wait for at least 30 minutes before using chlorhexidine gluconate-containing product.

2

Parental supervision for their children's toothbrushing

- Parents should assist or supervise their child's toothbrushing to ensure that an appropriate amount of toothpaste is used, and that the child does not ingest the toothpaste from the tube or swallow an excessive amount from the brush (Figure 4.19).
- Supervision should continue until the child can brush their own teeth effectively, usually by the age of 10 years, although some children may need supervision beyond this age.



Figure 4.19 : Parents should assist or supervise their children's tooth brushing

FLUORIDE MOUTHRINSE

- Fluoride mouthwash is recommended as an adjunctive preventive measure to twice-daily brushing with 1,350-1,500 ppm fluoride toothpaste and daily flossing for individuals aged 6 years and above.
- Common fluoride formulations used in mouthwashes include sodium fluoride (NaF), acidulated phosphate fluoride (APF), and stannous fluoride (SnF₂).
- Fluoride concentrations in mouthwashes typically range from 0.05% to 0.20%.
- Mouthwashes containing 225–230 ppm (0.05%) fluoride are intended for daily rinsing, whereas those containing 900 ppm (0.20%) fluoride are used for weekly rinsing.
- Fluoride mouthwashes for daily use that are available over-the-counter in most retail outlets may be used without specific instructions from dentists, whereas weekly fluoride mouthwashes for individuals at high caries risk, as well as therapeutic mouthwashes – such as chlorhexidine gluconate formulations used for periodontal management or post-operative care – require professional guidance.
- Fluoride mouthwashes are not suitable for children under 6 years of age, as swallowing reflexes may not be fully developed, and accidental ingestion of large amounts may lead to adverse effects. Furthermore, evidence for the effectiveness of fluoride mouthwashes in preventing caries in primary dentition remains limited.
- Similarly, fluoride mouthwashes are not recommended for individuals with swallowing difficulties or those unable to swish and expectorate effectively.

GENERAL INSTRUCTIONS FOR DAILY RINSING

1. Fluoride mouthwash for daily rinsing should be used once or twice daily.
2. Fluoride mouthwash should not be used immediately after toothbrushing so as not to wash away the beneficial fluoride residue left from the toothpaste.
3. Pour the amount of mouthwash indicated by the directions on the bottle into the cap. The cap is usually marked.
4. Do not dilute the mouthwash.
5. Swish the product around in the mouth for 30 seconds to one minute (depending on instructions) and then spit it out.
6. The mouth should not be rinsed out with water after rinsing.
7. Do not brush, eat, or drink for 30 minutes after using the mouthwash.

4.3

Healthy Diet

- Of all the diet-related factors, sugars are the most crucial contributing factors in oral diseases, and the type of sugars most concerning are free sugars.
- The most important general message on diet for oral health is:

“Reduce the amount of consumption and frequency of intake of drinks, confectionary and foods with free sugars”

WHAT ARE FREE SUGARS?

- Sugars (monosaccharides and disaccharides) added to foods and beverages by manufacturer, cook, or consumer.
- Sugars naturally present in honey, syrups, fruit juices, and fruit juice concentrates.

FREE SUGARS DO NOT INCLUDE:

Sugars naturally present in whole fruit and vegetables
(intrinsic sugars)

Stewed fruits, dried fruit and fruit canned in water, but not canned in sugar syrup

Sugars naturally present in milk (lactose and galactose)

- Sugars that are naturally present in foods (e.g., whole fruits, vegetables, milk and whole grains) are consumed together with beneficial parts of the foods (fibres, vitamins, mineral, etc.) and are relatively unimportant as a cause of caries. These items contribute to a healthy balanced diet.
- Fruit juice drink and fruit drink products sold in the market are considered as sugar-sweetened beverages rather than real fruit juice and should be avoided because they are primarily composed of water with added sugars. Plain water and milk are the safest drink as far as the teeth are concerned.

- The World Health Organisation (2015) recommends limiting the amount of free sugars intake to less than 10% of total energy intake and ideally even further, to less than 5% to minimise the risk of dental caries throughout life.

MALAYSIAN DIETARY GUIDELINES 2020

5% of total energy intake translates into approximately
6 teaspoons (112 kcal) for male adults and
5 teaspoons (92 kcal) for female adults (aged 18 to 29 years)
with moderate physical activity level.

Estimated daily energy requirements:

2,240 kcal (male)

1,840 kcal (female)

1 teaspoon of free sugars = 20 kcal

- Frequent intake of sugars leads to longer periods of demineralisation over remineralisation of the enamel surface. If this imbalance persists over a period of time, the loss of mineral may lead to enamel breakdown and the formation of a cavity.
- Sugar-sweetened foods and drinks, if consumed as part of a meal, are less harmful to teeth than if taken between meals because salivary flow rate is highest during mealtime. Saliva helps to neutralise acids and wash away sugars, while calcium, phosphate, and fluoride in saliva promote remineralisation of the enamel surfaces. The greater the salivary flow, the greater the clearance and buffering capacity, thus reducing the risk of caries.
- If snacking between meals is unavoidable, the snacks and drinks should be free of added sugars, whenever possible. Whole fruits are preferable as they contain fibre, and the action of chewing stimulates saliva flow.
- Frequent consumption of acidic drinks (such as fruit juice, squashes or carbonated drinks) should be avoided to prevent dental erosion.
- Encourage patients to study the nutritional labels of food and drinks and avoid frequently consuming those with high levels of sugars. The ingredient of greatest amount is always listed first, and the words used to describe sugars include glucose, maltose, fructose, hydrolysed starch, invert sugar, corn syrup, and honey. If one of these is near the top of the list of ingredients, the food or drink is likely to be high in sugars.

DIETARY ADVICE FOR CHILDREN UNDER FIVE YEARS

- Breastfeeding up to 12 months is associated with reduced caries risk and helps in the development of the teeth and prevents malocclusion.
- However, breastfeeding beyond two years may increase risk of developing caries.
- Formula milk may contain free sugars other than lactose.
- Never let children fall asleep with a bottle of milk or any sugar-sweetened drinks in the mouth due to caries risk from prolonged pooling of milk or sugary drinks around the teeth.
- Baby bottles should be given up completely by the age of one. Prolonged contact time between the sugar in drinks and the teeth is a cause of early childhood caries (ECC).
- Children's normal fluid intake should mostly be plain water or milk.
- Encourage infants to use an open cup as soon as the child is ready at approximately six months and stop bottle feeding by the age of one.
- If children are on a long-term medication, parents/carers should request for sugar-free medicines.

DIETARY ADVICE FOR ELDERLY

- Older people are prone to dry mouth (xerostomia) and may try to stimulate salivary flow by sucking sweets or frequently sipping drinks. Ensure to replace them with sugar-free sweets and mints.
- Frequent sipping of cold water provides the most relief.
- Problems related to teeth, gums and dentures can affect diet intake.
- Swellings or oral ulcers lasting more than two weeks should have immediate professional attention.

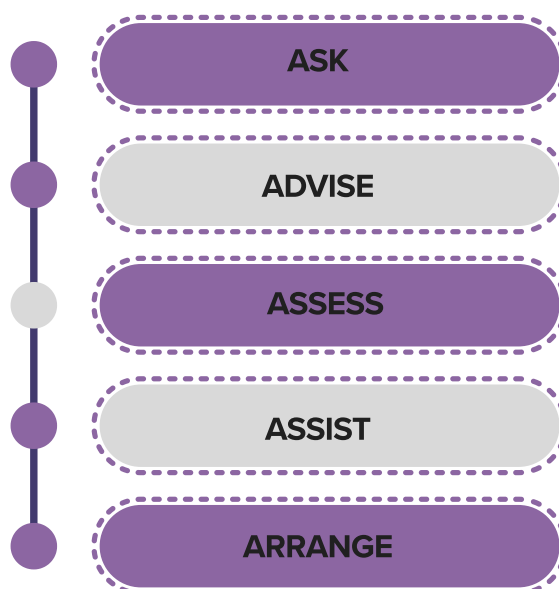
4.4

Tobacco Avoidance/ Tobacco Cessation

ROLES OF DENTISTS IN TOBACCO AVOIDANCE / TOBACCO CESSATION

- The prevalence of tobacco use, including cigarette smoking and vaping, continues to be a significant public health concern, with implications extending to oral health.
- Oral diseases strongly linked to tobacco use are periodontal disease and oral cancer.
- In addition, tobacco use has been associated with increased risk for dental caries, reduced function of the salivary glands resulting in the reduced amount and poorer quality of saliva, and impaired wound healing causing complications after tooth extraction and surgeries.
- The risk of periodontal disease and oral cancer can be reduced and prevented by changes in behaviour – tobacco avoidance or tobacco cessation.
- Evidence suggests that dentists are in a good position to identify, prevent, and provide effective tobacco cessation guidance.
- The 5A's technique can be used by dentists to guide conversations related to smoking cessation.

5A's TECHNIQUE





5A's TECHNIQUE

This is the most recognised and widely used technique for smoking cessation counselling.

ASK

- i) A patient's tobacco use status can be established from history taking and clinical examination which may reveal the oral signs associated with tobacco use.
- ii) A patient can be an active smoker, a former smoker, a passive smoker, or a non-smoker.
- iii) Following confirmation of smoking status, further questions can be asked to active smokers regarding their smoking practice such as duration of tobacco use, reason for started smoking, amount and type of tobacco use, and quit attempt.
- iv) Passive smokers should also be asked about their exposure to tobacco.

ADVISE

- i) Advise active smokers to quit in a clear, strong, and personalised manner.
- ii) Advise the passive smokers and the non-smokers to avoid exposure to second-hand smoke.

ASSESS

- i) Determine the level of nicotine dependence of active smokers – the Modified Fagerstrom Test can be used.
- ii) Assess the patient's willingness to quit using the Transtheoretical Model (Stages of Change) (Figure 3.2).
- iii) If the patient is ready to make a quit attempt, proceed to ASSIST and ARRANGE.
- iv) If the patient is not willing to quit, use the 5R's strategy to increase their motivation to quit. Patients' unwillingness to quit may be due to lack of information about the harmful effects of tobacco, fears or concerns about withdrawal symptoms, or demoralised due to previous relapse.

ASSIST

- i) Assist the patient with a quit plan which include providing behavioural and/or pharmacotherapy intervention, OR
- ii) Refer the patient to a smoking cessation clinic such as that provided by the Ministry of Health for further management.

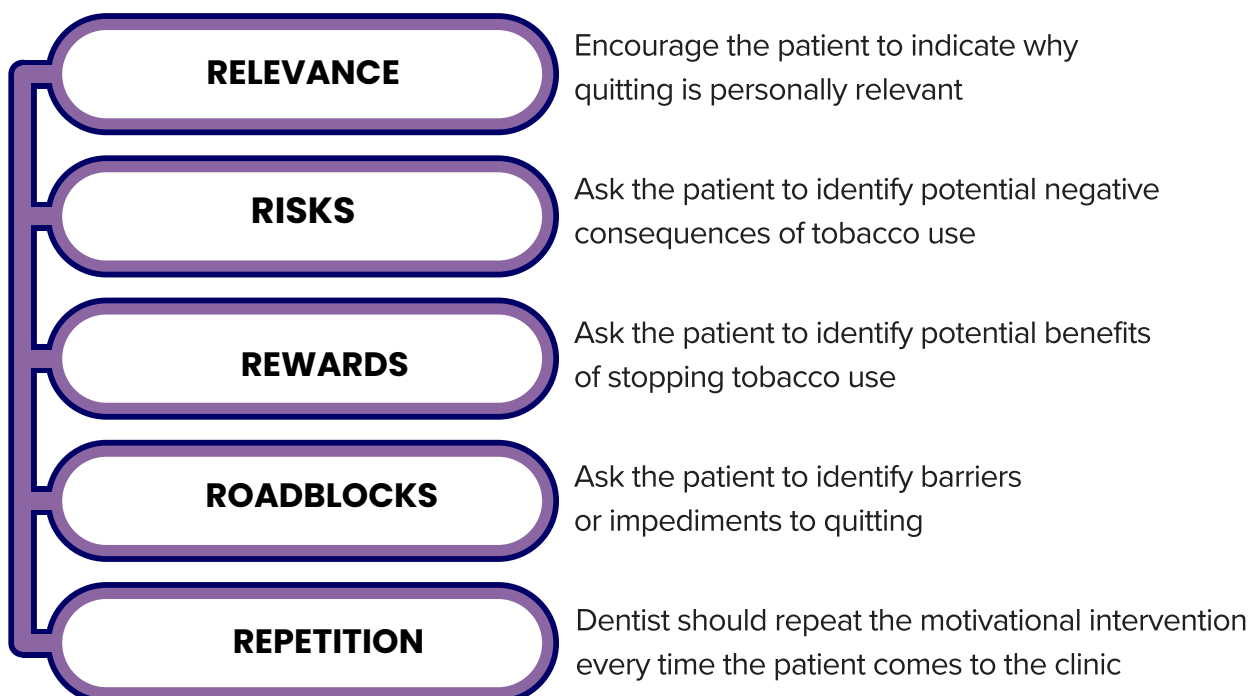
ARRANGE

- i) Arrange a follow-up for patients who are making the quit attempt within the first week after the quit date.



5R's STRATEGY

The 5R's strategy uses motivational interviewing technique to encourage tobacco users to consider quitting.



PATIENT COMMUNICATION

In communicating with patients, it is important to utilise open-ended questions, adopting a non-judgemental approach, and employing motivational interviewing techniques to encourage patients to discuss their tobacco use openly and honestly.

EXAMPLES OF OPEN-ENDED QUESTIONS

- How do you feel about your smoking?
- What are your recent thoughts about quitting smoking?
- What do you know about smoking and your family's health?
- What do you think it would be like to stop smoking?
- What are your concerns about quitting?
- What holds you back from trying to stop smoking?
- What do you imagine it would be like if you weren't a smoker anymore?
- What have been your past experiences with quitting smoking?
- What do you think you would need to successfully stop smoking?
- What is it like for you to be talking about this?

4.5

Regular Dental Attendance

IMPORTANCE OF REGULAR DENTAL ATTENDANCE

- Regular dental attendance is crucial for maintaining good oral health and overall well-being.
- Evidence of moderate to high quality revealed that regular dental attendance had a positive impact on clinical and self-reported oral health outcomes, less dental caries experience, fewer missing teeth and better oral health related quality of life.

REASONS FOR REGULAR DENTAL ATTENDANCE

1

Prevention of oral health problems

Regular check-ups allow dentists to detect, identify and address any potential issues early, before they escalate into more serious problems. This includes detecting early signs of dental caries, periodontal disease, precancerous oral lesion, and other conditions that may not be immediately noticeable to the patient.

2

Preventive treatments

Dentists may recommend preventive treatments such as fluoride applications or dental sealants to protect teeth from dental caries. These treatments are most effective when administered regularly during dental check-ups.

3

Professional dental cleaning

Professional dental cleaning includes scaling to remove calculus (tartar) followed by polishing (oral prophylaxis) to smooth the tooth surfaces and remove remaining plaque and stains. Together, these procedures help reduce the risk of periodontal disease and other oral health problems.

**4**

Oral hygiene education

Dentists and dental therapists provide valuable education on proper oral hygiene techniques tailored to individual needs. This includes guidance on brushing, flossing, and dietary habits to maintain good oral health.

**5**

Early detection of systemic health issues

Oral health problems can indicate underlying systemic health issues such as diabetes, cardiovascular disease, and immunocompromised conditions. Regular dental visits can help identify these signs early, allowing for timely intervention and management.

**6**

Preservation of teeth

By addressing dental issues promptly and maintaining good oral hygiene practices, regular dental attendance can help preserve teeth and prevent the need for extensive dental treatment or tooth loss.

**7**

Support for overall health and well-being

Oral health is closely linked to overall health and well-being. Poor oral health has been associated with various systemic conditions, including cardiovascular disease, respiratory infections, and adverse pregnancy outcomes. By prioritising regular dental attendance, individuals can contribute to their overall health and quality of life.

**8**

Updating dental records for future use

Regular dental attendance ensures that dental records such as charting, radiographs, and documentation of oral conditions are kept accurate and up to date. Maintaining current records supports a range of future uses, including continuity of care, monitoring disease progression, and contributing to population-level assessments such as disease burden estimation and resource planning. These records may also be used for legal purposes, such as forensic identification. Keeping comprehensive and updated dental information therefore benefits both individual patient management and broader public health and administrative needs.

RECOMMENDATIONS FOR DENTAL RECALL INTERVAL

The recommended interval for dental check-up can vary depending on factors such as individual oral health needs and status, and risk factors for oral diseases. Some individuals may require more frequent visits, such as those with a history of certain medical conditions that can affect oral health.

The following are some general recommendations:

Infants

The American Academy of Pediatric Dentistry (AAPD) recommends that children should have their first dental visit by their first birthday or within six months after their first tooth erupts. This early visit allows the dentist to assess oral health, provide guidance on oral hygiene practices, and monitor dental development.

Toddlers & Children

After the initial visit, children should have regular dental check-up every six months, or as indicated by their risk for oral diseases. These visits are essential for preventive care, monitoring growth and development, and addressing any emerging oral health issues.

Adolescents and Adults

For adolescents and adults without significant risks for oral diseases, regular dental check-up are typically recommended once every year. These visits include oral examinations, and screenings for oral health problems such as dental caries, periodontal disease and oral cancer.

Elderly

Older adults may have unique oral health concerns, including periodontal disease, dry mouth, tooth wear, and denture-related issues. Regular dental check-ups are important for maintaining oral health and addressing age-related dental issues as well as medical conditions and medications that affect oral health.

The recommended interval for dental check-ups underscores the importance of early intervention and preventive care in promoting lifelong oral health. Dentists will establish a personalised schedule for dental visits based on individual needs.

RECALL INTERVAL BASED ON RISK ASSESSMENT

- A patient's recall interval should be tailored to the individual patient's needs, in particular the patients' risk for oral diseases.
- When deciding on the recall interval, dentists should consider risk factors that may have a negative impact on the patient's oral health and protective factors that may promote patient's oral health.
- Caries risk assessment (CRA), the process for evaluating the likelihood of an individual developing carious lesions, can help dentists to tailor preventive measures, including the recall intervals.
- Several methods or guidelines have been developed by various dental institutions, professional bodies, and researchers to estimate the likelihood of a patient developing carious lesions by combining factors associated with the initiation and progression of dental caries.
- Factors that are commonly used include preventive behaviours (e.g., oral hygiene habits, dietary habits, fluoride exposure), general health condition (e.g., systemic diseases and conditions, physical or mental disabilities, medications), socioeconomic factors (e.g., income, education, oral health literacy), and clinical findings (e.g., oral hygiene, caries experience, presence of appliances and restorations, saliva quantity and quality, teeth alignment and occlusion).



- Combination of factors may vary between different methods or guidelines and often reflect local considerations relevant to a country or region, such as eligibility for government programmes or immigrant status. The inclusion of laboratory-based indicators such as mutans streptococci or lactobacilli counts or saliva buffering capacity also depends on the availability and feasibility of these tests, which are not widely accessible in most settings.

- The methods or guidelines may be age specific. For example, the American Dental Association (ADA) provides separate CRA forms for patients aged 0–6 years and those older than 6 years, while the American Academy of Pediatric Dentistry (AAPD) divides its forms into 0–5 years and 6 years and older. In addition, the AAPD has developed a CRA tool specifically for physicians and other non-dental healthcare providers to assist in assessing caries risk in children aged 0–3 years.

- Each factor is assessed according to the protocol or instructions provided, which classify the risk as low, moderate, or high. However, the overall risk level may be adjusted based on the dentist's clinical judgment or additional contributing factors that are not included in the original method or guideline.

- Following assessment of all listed factors, a patient's overall risk of developing caries is categorised as low, moderate or high. Some methods or guidelines include an additional category to distinguish between high-risk and extremely high-risk patients.

- Overall risk assessment of an individual is commonly based on the predominance of the factors measured. For example, low risk individuals are exposed to only low risk factors, exposure to moderate risk factors with or without low risk factors will place an individual as having moderate risk, while the presence of one or more high risk factors indicates a high-risk individual.

- The common recall intervals based on CRA are as follows:

LOW RISK

Every 6 to 12 months

MODERATE RISK

Every 6 months

HIGH RISK

Every 3 months

EXTREMELY HIGH RISK

Every 1 to 3 months

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