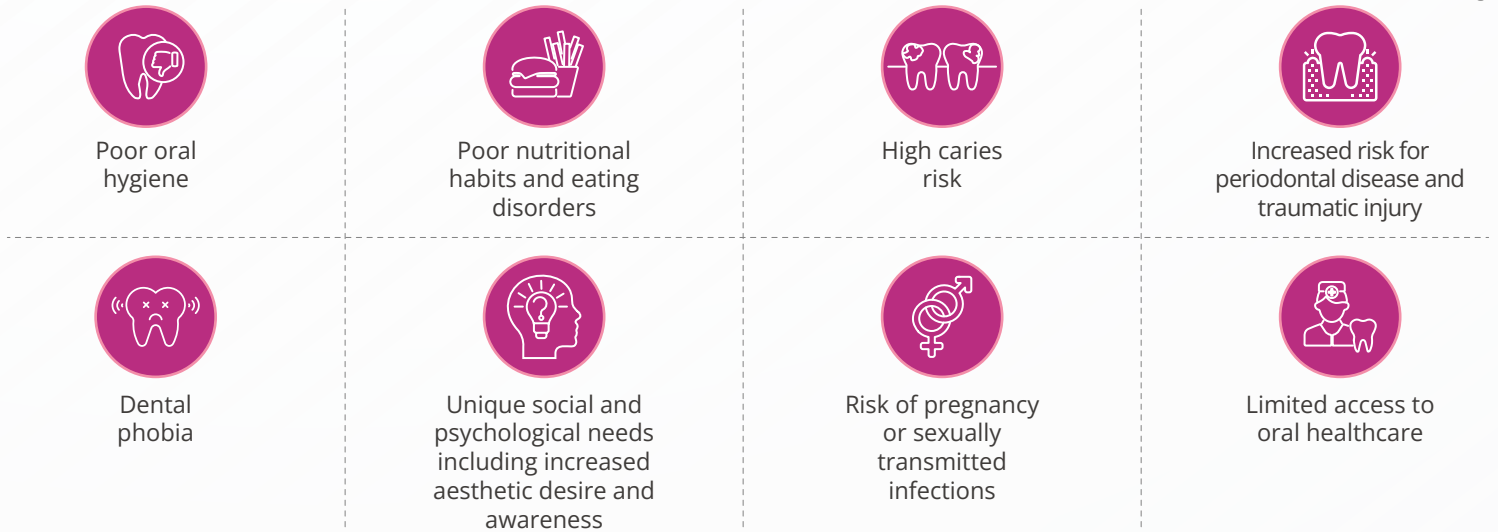


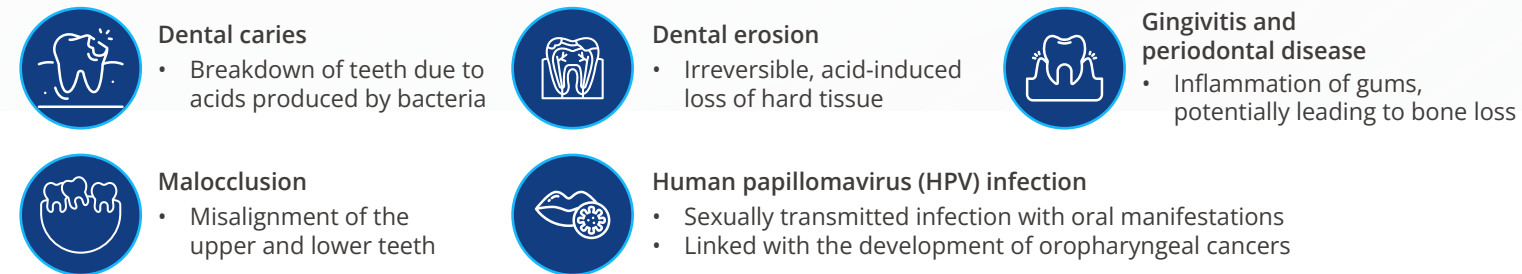
An overview of the role of dental professionals in managing oral diseases and complications arising from poor oral hygiene, trauma, substance use, opioid misuse, and poor dietary habits

## Oral health in adolescence

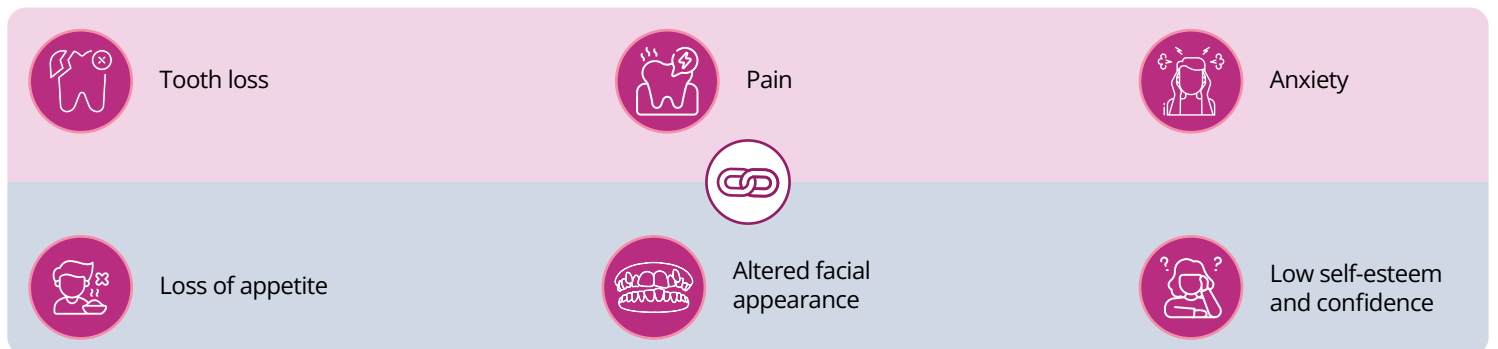
### Adolescents, aged 10 to 19 years<sup>1</sup>, have distinctive oral health-related concerns<sup>2</sup>



### Oral diseases prevalent in adolescents<sup>2,3</sup>



### Impact of oral diseases on adolescent health and well-being<sup>4</sup>



Adolescence is a decisive period when reinforcement of positive oral health habits, dental interventions, and dietary choices influence oral health far into adulthood<sup>3</sup>

## Risk factors with a negative impact on oral health<sup>3</sup>



### Dental trauma

Orofacial injuries from participating in contact sports, traffic accidents, or violence



### Malnutrition<sup>5</sup>

- Vitamin and mineral deficiencies
  - Oral lesions
  - Dental caries
  - Mucosal manifestations
- Increased intake of sugar and beverages with added sugar
  - Dental caries and erosion



### Opioid prescription misuse<sup>3</sup>

- High rates of addiction
- Increased risk of dental caries



### Alcohol and illicit drug use<sup>3</sup>

- Increased incidences of violence and motor vehicle accidents leading to oral trauma
- Increased risk of dental caries



### Oral piercings

Potential for complications such as infections, trauma, and bleeding



### Sociodemographic factors<sup>3</sup>

- Reduced parental control
- Income, gender, and ethnic inequalities
- Lack of parental knowledge of oral health
- Lack of dental insurance coverage

## Preventive and management strategies recommended for improving oral health



### Healthy eating habits<sup>3</sup>

- Include nutritious and balanced meals in the diet
- Avoid acidic drinks and beverages with high sugar content
- Include natural sugar sources like fruits instead of snacks with added sugar in the diet
- Avoid consumption of sweet foods and drinks before bedtime and between meals



### Oral hygiene measures<sup>3</sup>

- Brushing teeth twice a day for 2 minutes
  - Use a toothpaste with 1,450 ppm fluoride
- Electric toothbrushes<sup>6</sup>
  - Show consistently positive impact from 2–17 years of age
  - Effective even during ongoing orthodontic treatment
- Interdental cleaning devices to remove interdental biofilm (plaque) can be helpful after individual instructions



### Fluorides for adolescents with a high caries risk<sup>3,7</sup>

- Fluoride treatment
  - Toothpaste with 5,000 ppm fluoride is permissible for use only under prescription and usually restricted for children under 16 years in many countries
  - Recommended for individuals with increased caries risk
  - Suitable for individuals under treatment with fixed orthodontic appliances upon dental professional's advice
- Gels (professional use; 5,000–12,300 ppm fluoride), rinses [home or use at schools; (a) daily: 0.05% sodium fluoride (NaF) (225 ppm fluoride), (b) weekly: 0.2% NaF (900 ppm fluoride)], varnishes (professional use; typically, 22,600 ppm fluoride)
  - Professionally applied fluoride products (varnish, gel) are not only indicated for those at high risk but also for secondary prevention, arresting already existing lesions



### Dental sealants<sup>8,9</sup>

- Coating to protect pits and fissure surfaces of posterior teeth



### Dental visits<sup>2</sup>

- Regular check-ups and professional cleaning
- Controls caries progression
- Proactively diagnoses and treats ectopic eruption

## Role of professionals in managing adolescent oral health concerns



Dental professionals can provide oral hygiene education, counselling on the consequences of risk-taking behaviour, and counselling for HPV vaccinations

## Professional help can ensure oral health management in many ways



### Dental professionals involved in sports health teams can<sup>10</sup>:

- Introduce a comprehensive trauma prevention program
- Generate awareness and counsel on the potential for oral trauma
- Strongly recommend the use of age-appropriate, sport-specific, and properly fitted mouthguards, helmets, and preventive splints
- Respond immediately to dental injury



### Generate awareness about opioid misuse<sup>11</sup>

- Monitor for signs of misuse
- Use nonsteroidal anti-inflammatory drugs to manage acute dental pain



### Dental professionals should proactively counsel patients regarding<sup>3</sup>:

- Dangers of substance use
- Complications from piercing and use of oral jewellery
- Advantages of sealants in reducing the risk of dental caries



### Educate on HPV vaccination<sup>3</sup>

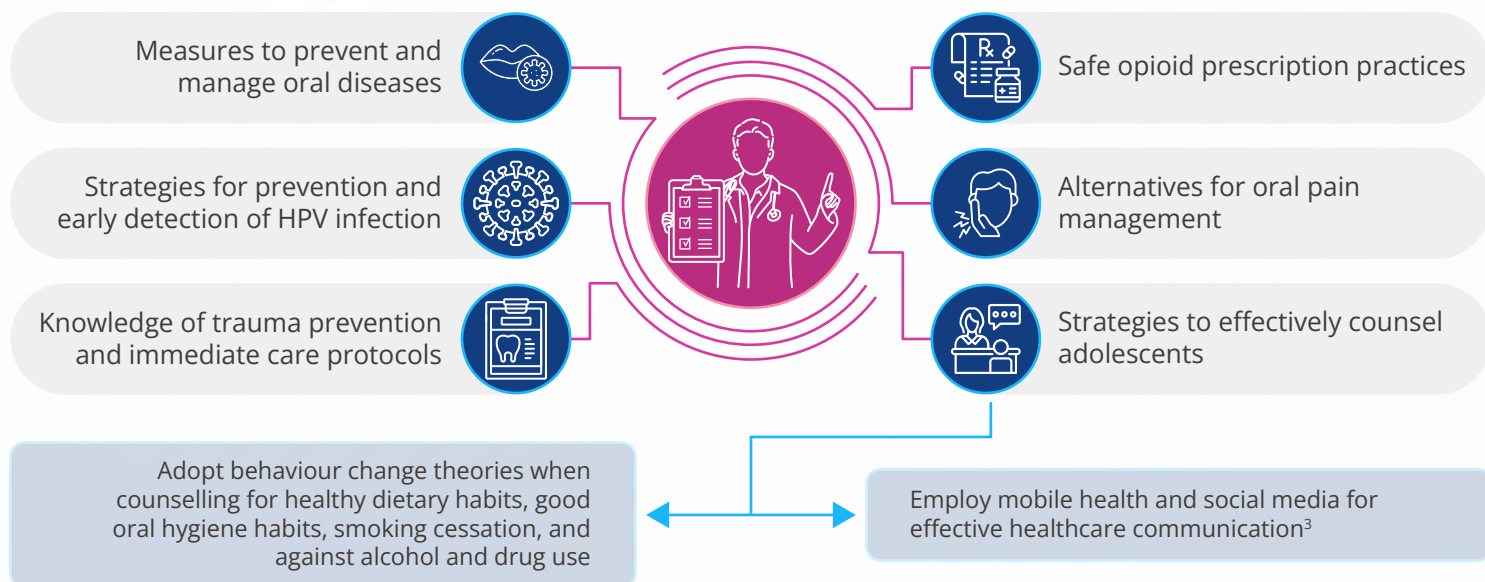
- Adolescence, before initiation of sexual activity, is a strategic period when HPV vaccination is the most effective
- Professionals can educate patients and parents on HPV prevention<sup>2</sup>
  - Generate awareness on HPV vaccination and HPV's link to oropharyngeal cancers
  - Educate on the risk of unprotected oral sex and preventive barrier techniques (e.g., condoms)
  - Screen for and identify oral signs of sexually transmitted diseases
  - Refer for counselling and treatment



### In school-based oral healthcare programs or community-based public health initiatives, professionals can provide<sup>3</sup>:

- Supportive social network
- Affordable and accessible dental care services

## For providing optimal oral care, dental professionals must be equipped with<sup>2,3</sup>:



## Advocating for integrated holistic health approaches can ensure improved outcomes for adolescent patients<sup>5</sup>



### Key messages

- ✓ A holistic approach integrating dental care, balanced nutrition, and healthcare is needed to address the unique oral health challenges of adolescents
- ✓ Dental professionals are uniquely situated to educate on oral hygiene best practices, provide information on the right nutrition, counsel against the use of alcohol and drugs, and generate awareness about the importance of HPV vaccinations
- ✓ In addition to providing professional services, dental professionals must emphasise the importance and positive impact of healthy oral habits on the long-term overall well-being of adolescents

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