

# GLOBAL HEALTH STARTER KIT FOR DENTAL EDUCATION

#### Module 7 COVID-19: Global Lessons for a Global Profession

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### **Competencies:**

1.2.3. Identify and describe reciprocal links among oral diseases, systemic diseases, and general health.

3.1.2. Recognize the different roles and responsibilities of medical and non-medical professionals in oral health promotion, disease prevention, and, if applicable, treatment, care, and referral.

2.3.2. Identify and advocate to address specific oral health needs and reduce inequities and health care system deficits.



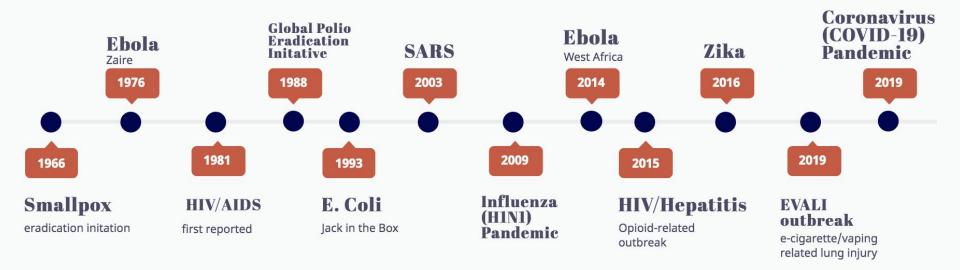
## Learning Objectives

By the end of this module, students should be able to do the following:

- Describe the reciprocal links between oral health and COVID-19 risk and severity
- Evaluate the impacts of the pandemic on the dental workforce and global oral health.
- **Identify** shortcomings within the oral healthcare system and opportunities for growth highlighted by COVID-19.

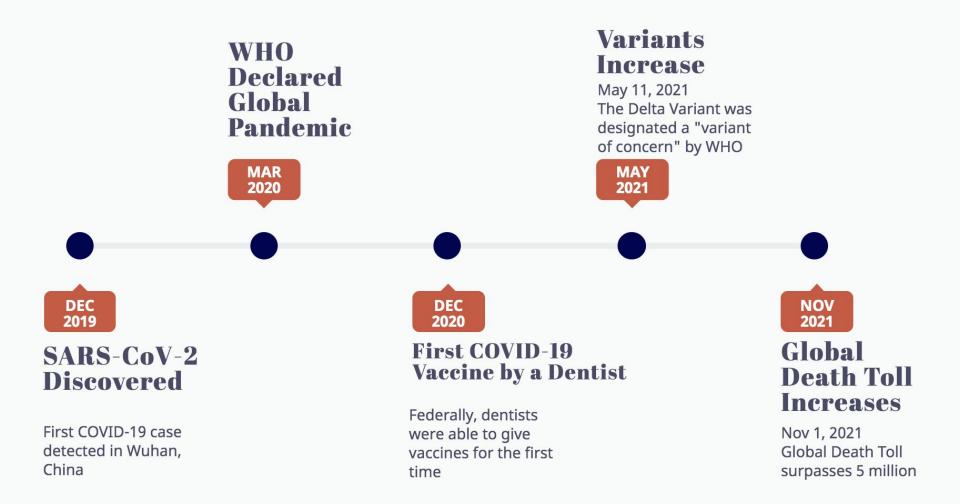


## **Timeline of Major Outbreaks**





### COVID-19: a brief overview





### **Transmission and Symptoms**



#### Transmission

Via infected secretions (respiratory and saliva droplets)

- Think aerosols in dental practices



### **Transmission and Symptoms**



#### Transmission

Via infected secretions (respiratory and saliva droplets)

- Think aerosols in dental practices



#### Symptoms

Fever, chills, dry cough, fatigue, shortness of breath, muscle pain and diarrhea

Ageusia: loss of taste + smell → implications of oral mucosa



## **Transmission and Symptoms**



Transmission

Via infected secretions (respiratory and saliva droplets)

- Think aerosols in dental practices



Symptoms

Fever, chills, dry cough, fatigue, shortness of breath, muscle pain and diarrhea

Ageusia: loss of taste + smell → implications of oral mucosa



Mortality

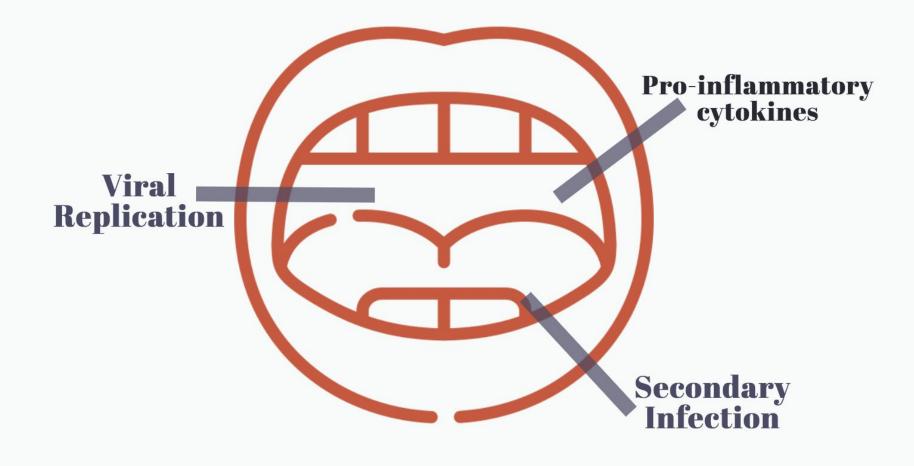
Severe pneumonia and acute respiratory distress syndrome (ARDS)

Linked with cytokine storm



### **Oral Health Affects COVID-19**

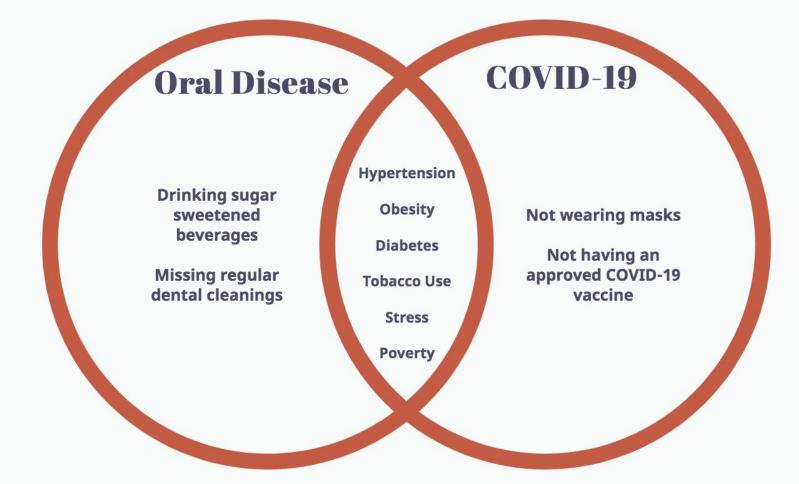
The oral cavity is a source and reservoir for:





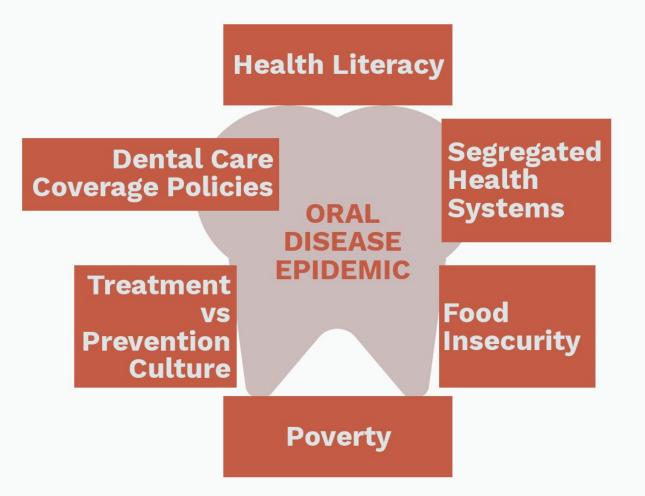
### **COVID-19 and Social Determinants**

### Risk Factors for worse outcomes for Oral Disease & COVID-19

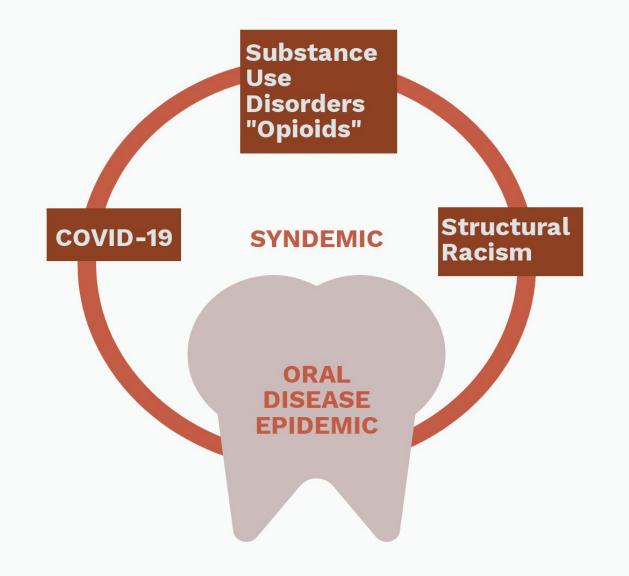




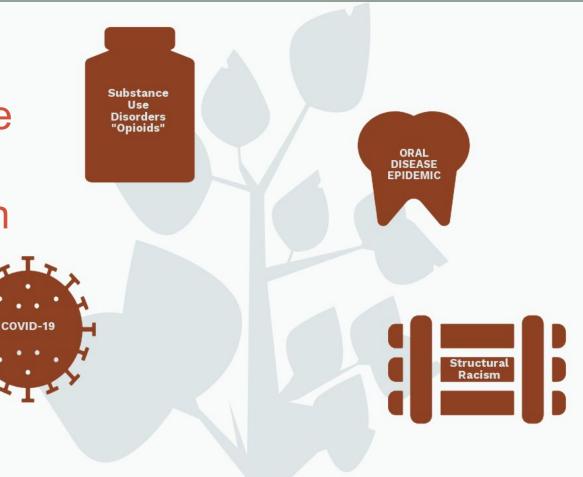
## **Oral Disease Epidemic**



### **Oral Health and Synergistic Epidemics**



"Infodemic" an overabundance of misinformation and disinformation



### INFODEMIC



## **Oral Care During a Pandemic**

### Emergency Department Utilization

Pediatric Dental Care Utilization

Dental Infection



### **COVID-19 and Population Oral Health**

### **Structural**

Unable to access care



### **COVID-19 and Population Oral Health**

### Structural

Unable to access care

Delaying or neglecting care

Social



### **COVID-19 and Population Oral Health**

### Structural

Unable to access care

Increased cost of dental treatment

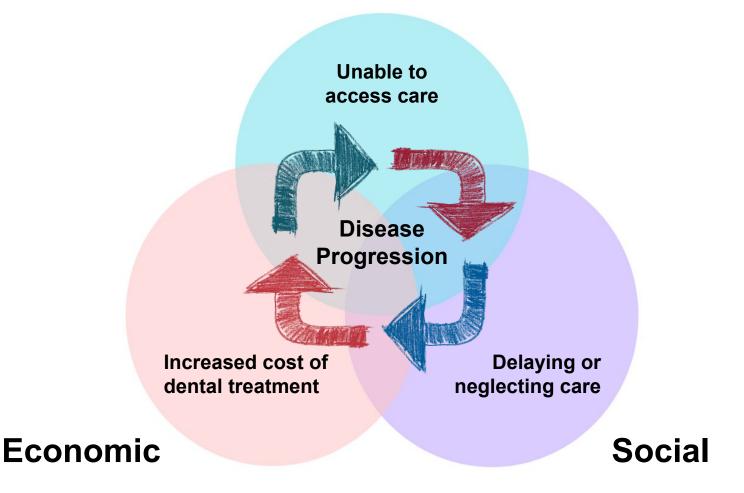
Delaying or neglecting care

### Economic





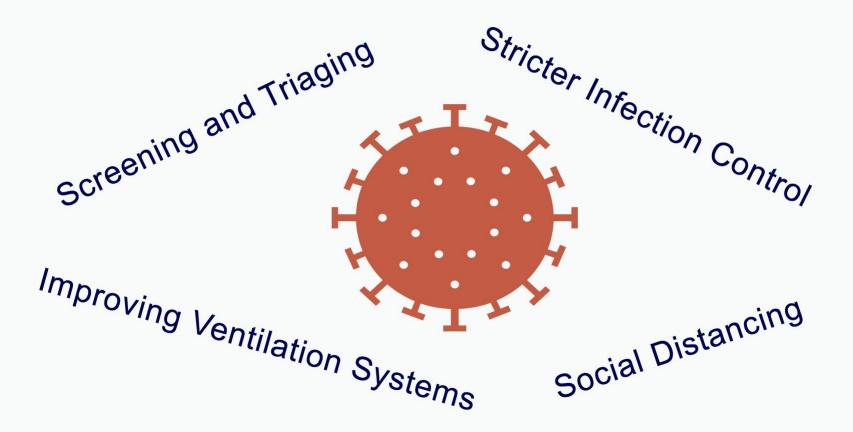
### COVID-19 and Population Oral Health Structural





### **COVID-19: Provision of Dental Care**

Innovations from COVID-19





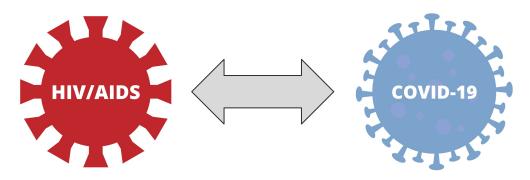
### A Case Study of Canada vs Nigeria

	Canada	Nigeria
Universal Healthcare	Provides treatment for health care (dental) providers exposed to COVID-19	No UHC
Governing Body for guidelines	Canadian Dental Association (non-regulatory authority)	Federal Ministry of Health of Nigeria
Reopening Process	Reopened early May, when curve was flattened	Reopened May, 4 2020 when cases were increasing (forced by socioeconomic issues)
Routine Dental Care	Recommended that routine dental visits should not be delayed	Recommended that all non-emergency visits (routine dental) should be postponed
HVAC (Heating, ventilation, and air conditioning)	Guidelines set by Canadian Standards Association. Dentists encouraged to consult HVAC specialist	No guidelines



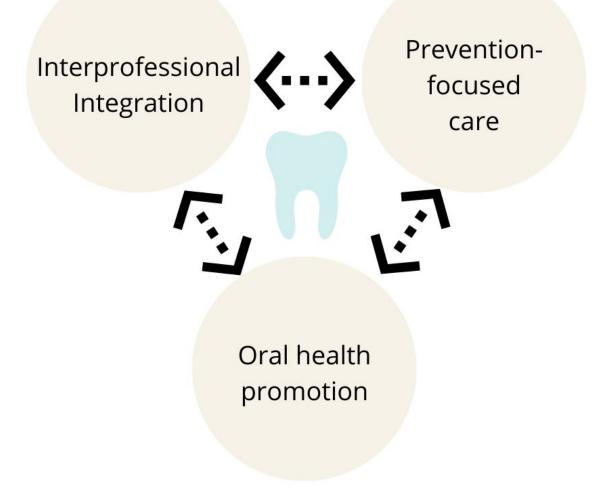
### **COVID-19 and HIV: Lessons Learned**

	HIV/AIDS	COVID-19
Infection Control	Barehanded dentistry → Introduction of PPE and UP	Additional PPE & disfinection, staggered scheduling, triaging, teledentistry
Education and Awareness	Improved understanding of bloodborne transmission	Improved understanding of aerosol + droplet transmission
Lockdowns	No global collapse/lockdown	Global lockdown → teledentistry (virtual evaluations)
Social Unrest	Blaming gay men	Blaming Chinese community (anti-Asian sentiment)





### **COVID-19: Opportunities for Growth**





### Interprofessional Integration

**Dental Nurses** Dieticians Midwives **Dental Care** Patient Advocates Pharmacists Hygienists Primary Care **Dental Therapists** Nurses and PAs **Community Health Workers** Pediatricians & Geriatricians Social Workers Counselors Care Coordinators

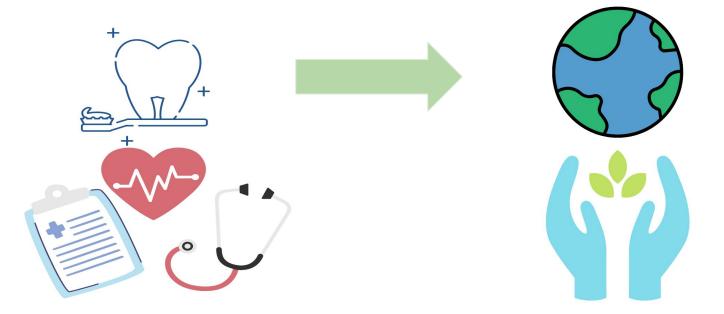
### **Behavioral Health Care**

Psychiatrists

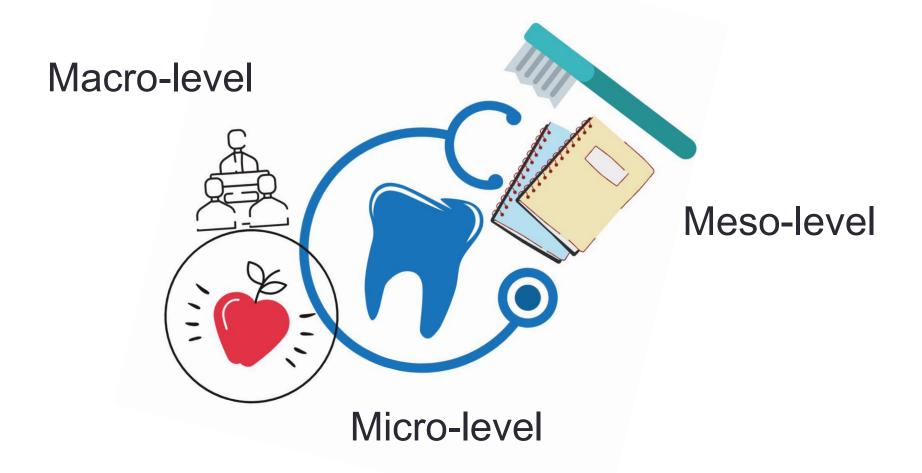
### **Prevention-focused Care**

Minimum Intervention Dentistry

### Resource Conservation



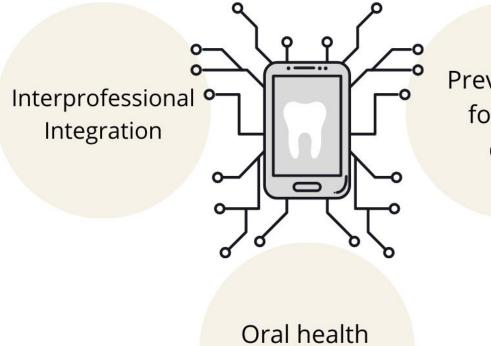
### **Oral Health Promotion**





## **COVID-19 and Digital Oral Health**

### Teledentistry



Preventionfocused care

Oral health promotion



### Case Study: mOral Health





### An Interconnected Future





### Takeaways and Reflection

