The state of oral health worldwide
Highlights from the Lancet Series on Oral Health

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Oral diseases are among the most prevalent diseases globally

- **Untreated caries in permanent teeth** - the most prevalent condition worldwide
- **Severe periodontitis** - the sixth-most prevalent condition in the world

3.5 billion people affected by oral conditions globally

- **Complete tooth loss** affects 2.3% or 158 million people worldwide
- **Lip and oral cavity cancers** are among the top 15 most common cancers worldwide, with 500 550 incident cases in 2018.

Estimated global prevalence of untreated dental caries in permanent teeth for 2017
Oral diseases are socially patterned

**Systematic reviews**
- Low socioeconomic position associated with
  - Experience of dental caries
  - Poor periodontal health, even after controlling for smoking
  - Oral cancer, even after adjustment for behavioural confounders

**Population-based birth cohort studies**
- Untreated dental caries and periodontal diseases in adulthood negatively associated with childhood socioeconomic status

**Marginalised groups**
- Have more untreated dental caries, tooth loss, toothache than the general population.
Extreme oral health inequalities exist for the most marginalised and socially excluded groups

Early childhood tooth decay affects between 68-90% of Indigenous children around the world.

People with lower socioeconomic status have poorer oral health.

*Mean number of decayed teeth among employed male adults ages 16-65 years in England, Wales, and Northern Ireland, in quintiles.
Impaired growth and impact on educational attainment
Functional limitations and impact on general health
Reduced self-esteem, anxiety and social isolation
Pain, discomfort and sleepless nights
Time off work/school to attend clinics
Reduced productivity of the workforce
Treatment costs (societal and individual)

Individual and societal impact of oral diseases
Estimated costs of health conditions across EU

- € 119 billion: Diabetes
- € 111 billion: Cardiovascular diseases
- € 90 billion: Dental diseases
- € 86 billion: Cancer
- € 78-83 billion: Dementia
- € 57 billion: Respiratory diseases

Cost of diseases

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Determinants of Oral and Overall Health

Structural determinants
(Socioeconomic, political, and environmental context)
- Macro-economic policies
- Social and welfare policies
- Trade policies
- Overseas development policies
- Globalisation
- Urbanisation

Intermediate determinants
(Social position and circumstances)
- Social class
- Income
- Education
- Gender
- Ethnicity

Material circumstances
- Social relationships
- Psychosocial factors
- Health service availability or use
- Environmental setting

Proximal determinants
(Behaviours and biological factors)
- Diet
- Alcohol consumption
- Tobacco use
- Physical activity
- Hygiene

Outcomes
- Inflammation
- Infection
- Immune response
- Oral disease and NCD burden

Commercial determinants—corporate strategies
- Political and economic power and influence
- Lobbying to influence policy
- Corporate citizenship
- Targeted and tailored marketing and promotion strategies
- Influence on research agenda
- Influences on social norms and local policies
- Media influence to distract attention and cause confusion
- Influence on consumers’ choices and behaviours
The power and influence of Big Sugar

Sugar is the primary cause of tooth decay. Sugary drinks consumption is highest in high-income countries, but substantial growth in sales is expected in many low-income and middle-income countries.

Coca-Cola to spend $12 billion on marketing their products across Africa by 2020*

PepsiCo to spend $5.5 billion on its Indian operations by 2020*

WHO’s total budget for 2017 was $4.4 billion

Limitations of current dental care systems

- Treatment focus
- Mismatch between need and availability and location of services
- Payment systems
- Dental silo
- Poor planning
- Downstream prevention
Key recommendations

- Better epidemiology and oral health surveillance systems
- Addressing commercial determinants of oral diseases & NCDs
- Reform of oral health-care systems & modernised workforce
- Tackling inequalities: inclusive access + broader determinants
- Moving upstream to maximise oral health improvement
- Amplifying global advocacy
THE LANCET COMMISSION ON ORAL HEALTH

Key priorities

- Governance & advocacy for global oral health
- Equity, social justice & oral health
- Health system reform, governance and transformation
- Commercial determinants

Responsive service & policy
Social empowerment
Universal challenges, locally oriented
Intersectoral integration
Capacity building
Research & policy integration

Cross-cutting themes
Lancet Series on Oral Health:
https://www.thelancet.com/series/oral-health

Lancet Commission on Oral Health:

Additional References

Thank you!