

**Karies-epidemiologi**

6 semester

Asbjørn Jokstad  
Institutt for klinisk odontologi  
Universitetet i Oslo

---

---

---


---

---

---

---

---



**Hva er epidemiologi?**

- w Utbredelse av:
  - Sykdommer i befolkninger
  - Helse i befolkninger
- w Identifisering av faktorer som forklarer variasjon i utbredelse

---

---

---


---

---

---

---

---



**Hvorfor epidemiologi?**

- w Identifisere etiologiske og forebyggende faktorer som forklarer variasjon
- w Kartlegge behov for behandling
- w Studere effekten av profylaktiske eller terapeutiske intervensjoner
- w Rettferd - fordeling
  - Årsaksfaktorer
  - Behandling

---

---

---

---

---

---

---

---

**Stomatognathic Diseases - Medical Subject Headings (MESH)**

- w Jaw Diseases
- w Mouth Diseases
- w Pharyngeal Diseases
- w Stomatognathic System Abnormalities
- w Temporomandibular Joint Disorders
- w **Tooth Diseases**

---

---

---

---

---

---

---

---

---

---

**Stomatognathic Diseases - Medical Subject Headings (MESH)**

- w Jaw Diseases
- w Mouth Diseases
- w Pharyngeal Diseases
- w Stomatognathic System Abnormalities
- w Temporomandibular Joint Disorders
- w **Tooth Diseases**

Malocclusion  
 Tooth Abnormalities  
 Tooth Abrasion  
 Tooth Ankylosis  
 Tooth Attrition  
**Tooth**  
**Demineralization**  
 Tooth Discoloration  
 Tooth Erosion  
 Tooth Eruption, Ectopic  
 Tooth, Impacted  
 Tooth Injuries  
 Tooth Loss  
 Tooth Resorption  
 Tooth, Unerupted  
 Toothache

Bruxism  
**Dental Deposits**  
 Dental Leakage  
 Dental Pulp Diseases  
 Dentin Sensitivity  
 Fluorosis, Dental  
 Focal Infection, Dental  
 Hypercementosis

---

---

---

---

---

---

---

---

---

---

**Stomatognathic Diseases - Medical Subject Headings (MESH)**

- w Jaw Diseases
- w Mouth Diseases
- w Pharyngeal Diseases
- w Stomatognathic System Abnormalities
- w Temporomandibular Joint Disorders
- w **Tooth Diseases**

Malocclusion  
 Tooth Abnormalities  
 Tooth Abrasion  
 Tooth Ankylosis  
 Tooth Attrition  
**Tooth Demineralization**  
 Tooth Discoloration  
 Tooth Erosion  
 Tooth Eruption, Ectopic  
 Tooth, Impacted  
 Tooth Injuries  
 Tooth Loss  
 Tooth Resorption  
 Tooth, Unerupted  
 Toothache

Bruxism  
**Dental Deposits**  
 Dental Leakage  
 Dental Pulp Diseases  
 Dentin Sensitivity  
 Fluorosis, Dental  
 Focal Infection, Dental  
 Hypercementosis

**Dental Deposits**  
 Dental Calculus  
 Dental Plaque

**Tooth Demineralisation**  
 Dental Caries  
 Dental Fissures  
 Root Caries

---

---

---

---

---

---

---

---

---

---



### Hensikter med kariesepidemiologi

1. Studere trender i oral helse og sykdom over tid
2. Allokering av forebyggende tiltak
3. Evaluering av programmer
4. Kartlegging av behandlingsbehov
5. Oral helse på dagsorden

---

---

---

---

---

---

---

---



### Hvordan skal karies registreres?

---

---

---

---

---

---

---

---



### Diagnostikk

Bestemme en sykdoms art, alvorlighetsgrad og årsaksforhold

1. Registrering: hvor og hvordan karies?
2. Aktivitet: hvor fort utvikler kariesprosessen seg ?
3. Årsak: hvorfor har pasienten et kariesproblem?

---

---

---

---

---

---

---

---



### 1. Kariesregistrering

- w lokalisasjon
- w utseende
- w konsistens
- w utstrekning
- w penetrasjon og dybde
- w antall

---

---

---

---

---

---

---

---



### 2. Kariesaktivitet

Den hastighet som sykdommen utvikler seg med i øyeblikket.

- utseende og lokalisasjon
- insidens
- frekvens

---

---

---

---

---

---

---

---



### 3. Karies - Årsaksforhold

- w Kostvaner -sukrose, frekvens spising
- w Fluoridbruk
- w Munnhygienevaner
- w Sykdom og medikamenter
- w Nedsatt salivasjon/bufferevne

---

---

---

---

---

---

---

---

**Diagnostikk vs epidemiologi**

Bestemme en sykdoms art, alvorlighetsgrad og årsaksforhold

1. Registrering: hvor og hvordan karies?
2. Aktivitet: hvor fort utvikler kariesprosessen seg?
3. Årsak: hvorfor har pasienten et kariesproblem?

---

---

---

---

---

---

---

---

**Hvordan skal karies registreres?**

---

---

---

---

---

---

---

---

**Hvordan skal karies registreres?**

Hvilken undersøkelsesmetode?

Beskrivelse?

- utseende
- konsistens
- utstrekning
- penetrasjon og dybde
- lokalisasjon
- antall
- "behandlingskrevende"
- aktiv - passiv

---

---

---

---

---

---

---

---





## Kariesregistrering - stikkord

- Kvantitativt
  - Antall
- Kvalitativt
  - Omfang, størrelse, beliggenhet
  - Grad 1 kritttkaries til grad 4 dyp dentinkaries
- Over-, under- registrering
- Inter-, intra- individuell variasjon

---

---

---

---

---

---

---

---



## Mål for karies

---

---

---

---

---

---

---

---



## Karies - terminologi

- Karies prevalens (forekomst)
  - individprevalens (person / populasjon)
  - tannprevalens (flater /person) (flateprevalens)
- Karies insidens (tilvekst)
- Karies aktivitet (intensitet)
  - Den hastighet som sykdommen utvikler seg med i øyeblikket - vanskelig målbar

---

---

---

---

---

---

---

---

## Mål for karies

- w Antall kariesangrepne individer
- w ---" " --- i forhold til totalpopulasjon  
= karieshyppighet eller individprevalens
- w Kariesutbredelse hos det enkelte individ
  - Antall kariesangrepne tenner  
(Ingen informasjon om gjennomgått/behandlet sykdom)
  - DMF indeks
  - Rotkaries indeks

---

---

---

---

---

---

---

---

## DMF-indeks

- w (D)ecayed, (M)issing, (F)illed
- w DMF(T)eeth, DMF(S)urfaces, dmft, dmfs
- w I relasjon til normal antall tenner (evt. %)
- w Enkeltkomponentene sier noe om bruk/valg av pleie i tillegg til tannhelsesituasjonen.
- w Stor interindividuell variasjon
- w Ny kariestilvekst gir lite tillegg i DMFT
- w Registrer "behandlingskrevende" karies
- w Klein, Palmer & Knutson, 1938

---

---

---

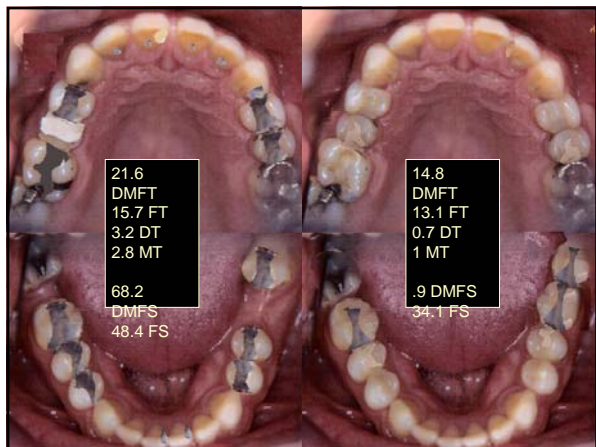
---

---

---

---

---




---

---

---

---

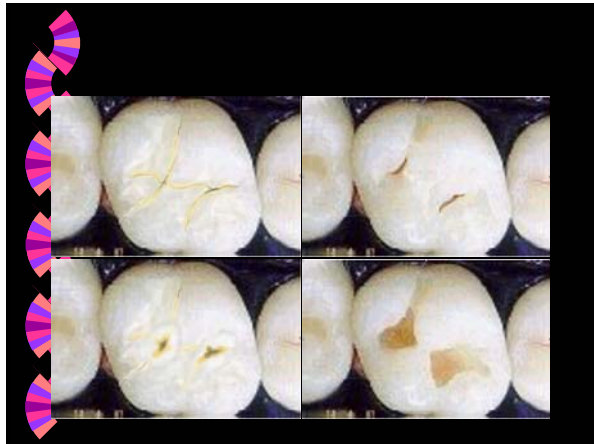
---

---

---

---






---

---

---

---

---

---

---

---




---

---

---

---

---


---

---

---

**RCI – indeks (Katz, 1980)**  
 etterhvert en viktig indeks

- (R)oot (C)aries (I)ndex
- Representerer reell sykdomsrate ved å relatere til antallet rotoverflater at risk
- Forutsetter at gingiva er retrahert




---

---

---

---

---

---

---

---