

بنام الله



ارتقاء سلامت دهان

- تعریف
- شاخصهای ارتقاء سلامت دهان
  - مثالهای عملی
- سابقه فعالیتهای ارتقاء سلامت دهان در ایران
  - پیشنهادات

#### تعریف سلامت دهان

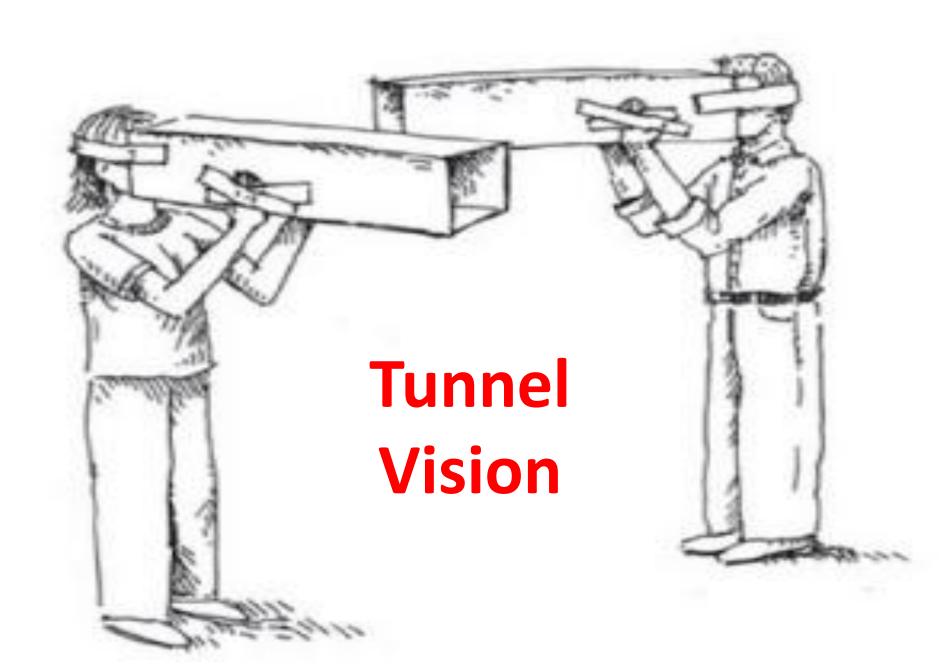
تعریف سلامت دهان کار آسانی نیست. تعریف بیولوژیکی سلامت دهان یعنی عدم وجود بیماری تلقی خاص نبود پوسیدگی دندان و بیماری پریودنتال بدنبال می آورد.

در حالیکه سازمان جهانی بهداشت سلامت دهان را اینگونه تعریف می نماید.

A natural, functional, acceptable dentition which enables an individual to eat, speak, and socialise without discomfort, pain or embarrassment, for a lifetime, and which contributes to general well being (WHO 1982).









#### تعریف

- فرایند توانمند سازی مرده برای افزایش کنترلشان بر سلامت خود و بهبود سلامت خود
- تمرکز فعالیتهای ارتقاء سلامت بر جمعیتهاست تا تک
   تک افراد
  - تمام جمعیت، گروه هدف هستند؛ نه تنها افراد بیمار
  - تمرکز فعالیتها بر تغییر عوامل اساسی تعیین کننده سلامت
    - نیازمند همکاری همه بخشها و مشارکت خود مرده

### شاخصهای ارتقاء سلامت دمان

- پوسیدگی دندان و بیماریهای پریودنتال (لثه) مهمترین و شایعترین بیماریهای دهان و دندان
  - هردو وابسته به سبک زندگی و قابل پیشگیری
    - شاخص اندازه گیری یوسیدگی: DMFT
  - شاخص اندازه گیری بیماریهای یریودنتال: CPI
  - در هردو بیماری کاهش شاخص هدف برنامه های ارتقاءسلامت دهان

#### مثالهای عملی از ارتقاء سلامت دمان جامعه

- برنامه درمان غیر ترمیمی پوسیدگی دندان
- A Non-Operative Caries Treatment Program (NOCTP); the Nexo study
  - برنامه پیشگیری از پوسیدگی مبتنی بر نیاز وارملند

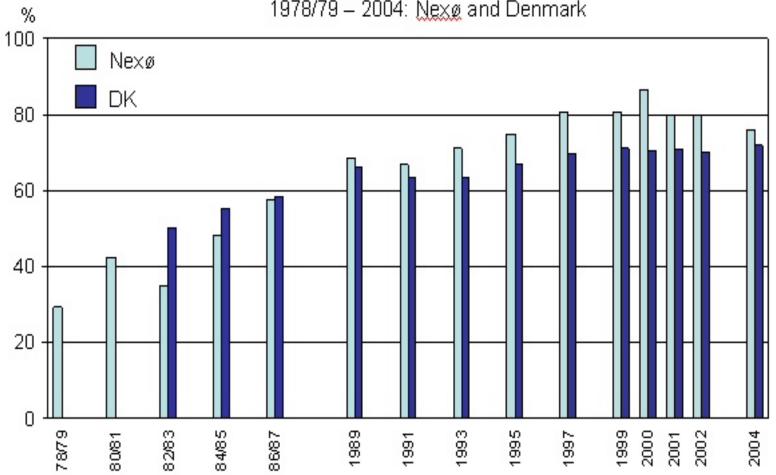
Varmland Needs-based Caries Preventive Programme

• Aim:

# to maintain sound teeth using the fewest resources possible.

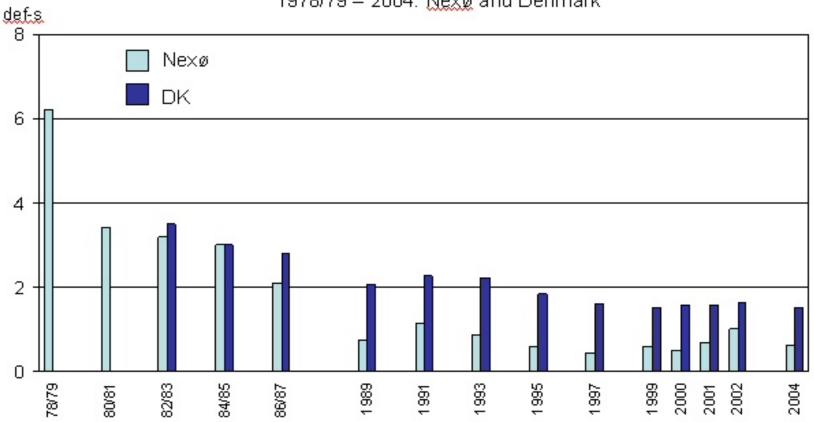
# NOCTP; Nexo study: % of 5-yr-olds with no caries

Fig 1: % of cohorte 5-yr-olds with def-s=0 1978/79 – 2004: Nexø and Denmark



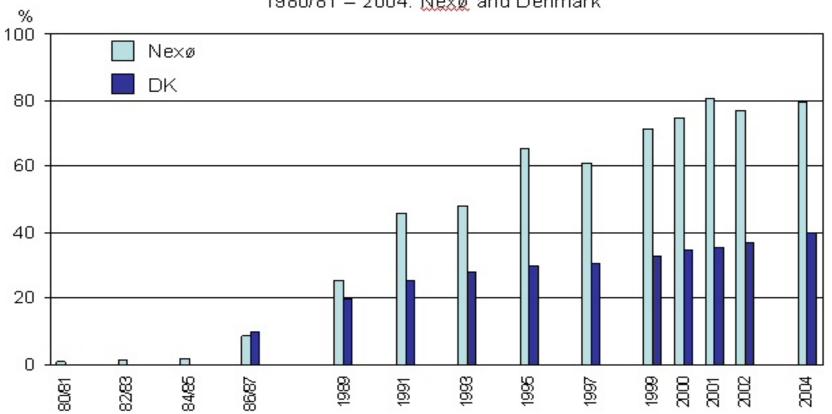
# NOCTP; Nexo study: dmf 5-yr-olds

Fig 2: def-s 5-yr-olds 1978/79 – 2004: Nexø and Denmark



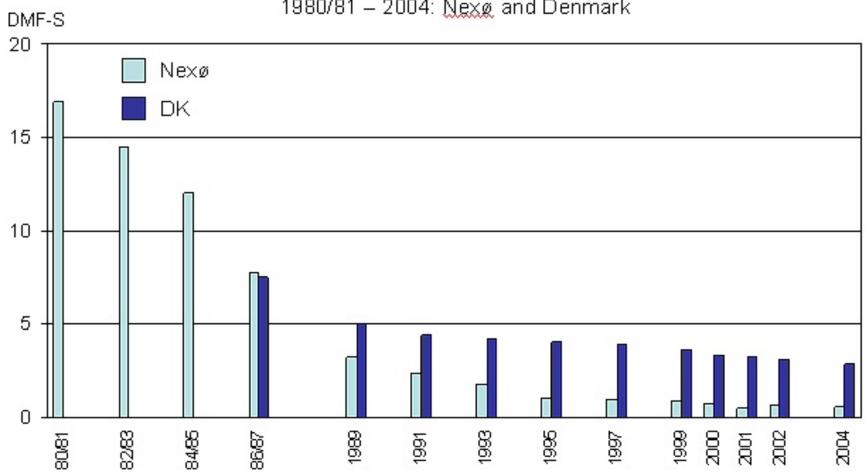
# NOCTP; Nexo study: % of 15-yr-olds with no caries

Fig 3: % of cohorte 15-yr-olds with DMF-S=0 1980/81 – 2004: Nexø and Denmark



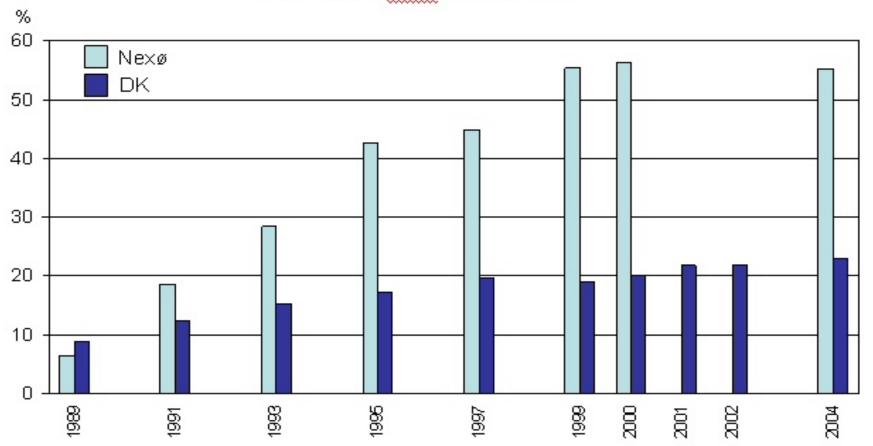
# NOCTP; Nexo study: DMF 15-yr-olds

Fig 4: DMF-S, 15-yr-olds 1980/81 – 2004: Nexø and Denmark



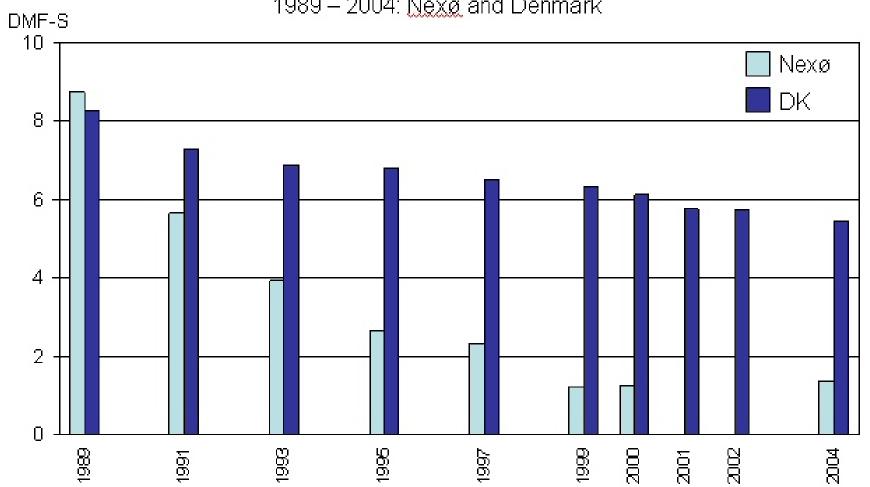
# NOCTP; Nexo study: % of 18-yr-olds with no caries

Fig 5: % of cohorte 18-yr-olds with DMF-S=0 1989 – 2004: Nexø and Denmark



# NOCTP; Nexo study: DMF 18-yr-olds

Fig 6: DMF-S, 18-yr-olds 1989 – 2004: <u>Nexø</u> and Denmark



How they achieved such a health gain?

The treatment program is based on 3 principles:

- Education of parents, children and adolescents in understanding dental caries as a localized disease.
- Intensive training in home-based plaque control.
- Early professional non-operative intervention.

# NOCTP; Nexo study **PRIMARY DENTITION**

**Aim:** To keep caries progression at a level where no fillings will be needed.

#### **Method**:

- Education of parents starts when the child is 8 months old and called to the clinic for the first time.
- Training in home based plaque control:
   Demonstration of plaque.
   Education in plaque removal.

## NOCTP; Nexo study **PRIMARY DENTITION**

- Early professional non-operative intervention:
   Plaque removal by means of toothbrush or rubber cup and dental floss.
   Surface drying.
- Diagnosing:
   Visual examination for indications of caries progression.
- In case of progression:
   Further education and training in plaque removal.

   Topical application of fluoride.
- Assessment of recall interval

### Principles for individual assessment of recall intervals based on diagnosis and risk assessment

Cooperation of	Inadequate	2 points
parents	Good	1 point
Caries		
progression	Yes	2 points
within the	No	1 points
dentition		

4 points: 1-3 months interval

3 points: 4-8 months interval

2 points: 8-12 months interval

#### Aim:

To keep caries progression at a level where no fillings and as few fissure sealants as possible will be needed.

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To keep caries progression at a level where no fillings and as few fissure sealants as possible will be needed.

#### Method:

**Education** is given to parents' right after the emergence of permanent first molars.

Additional education is given at meetings for parents of 6-yr-olds.

The children are given lectures involving them in the subject of the permanent first molars.

#### **Method:**

- Early professional non-operative intervention:
   Plaque removal by means of rubber cup, rotating tuft and dental floss.
   Surface drying.
- Diagnosing:
   Visual examination for indications of caries progression. Radiographic examination, if required.
- In case of progression:
   Further education and training in plaque removal.

   Topical application of fluoride.
- Assessment of recall interval.

### Principles for individual assessment of recall intervals based on diagnosis and risk assessment

Cooperation of parents	Inadequate Good	2 points 1 point
Caries progression within the dentition	Yes No	2 points 1 points
Stage of eruption of permanent first molars	Partly erupted Full occlusion	2 points 1 point
Occlusal surfaces of permanent first molars	Caries progression Caries free or arrested lesions	2 points 1 point

8 points: 1 months interval

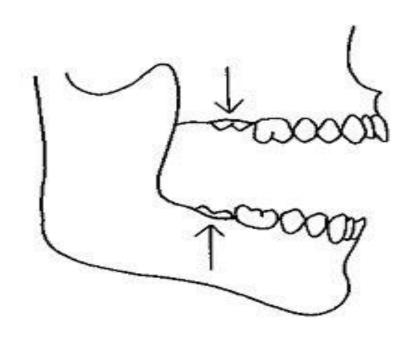
7 points: 2 months interval

6 points: 3 months interval

5 points: 4 months interval

4 points: 6-12 months interval

# NOCTP; Nexo study PERMANENT SECOND MOLAR



Arrows indicate the emergence of the permanent second molars. The figure shows the difficulty in reaching them with a toothbrush.

# NOCTP; Nexo study PERMANENT DENTITION

#### Aim

The adolescents should have achieved knowledge that enables them to keep caries progression at a level, that requires minimal use of dental materials, and gingiva free of inflammation.

### NOCTP; Nexo study **PERMANENT DENTITION**

- Education is continued at the clinic.
- Training in home based plaque control:
   Demonstration of plaque.
   Education and training in toothbrushing and the use of dental floss where needed.
- Early professional non-operative intervention:
   Plaque removal by means of rubber cup, rotating tuft and dental floss.
   Surface drying.

**Diagnosing**: Visual examination for indications of caries progression and gingival inflammation. Radiographic examination, if required. In case of caries progression or gingival inflammation: Further education and training in plaque removal.

In case of caries progression: Topical application of fluoride.

Assessment of recall interval.

### Principles for individual assessment of recall intervals based on diagnosis and risk assessment

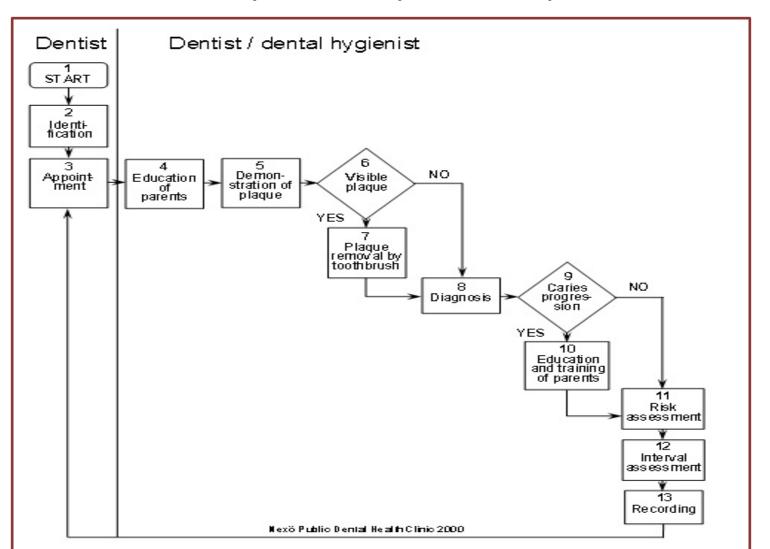
Cooperation of	Inadequate	2 points
parents	Good	1 point
Caries		
progression	Yes	2 points
within the	No	1 points
dentition		

4 points: 1-3 months interval

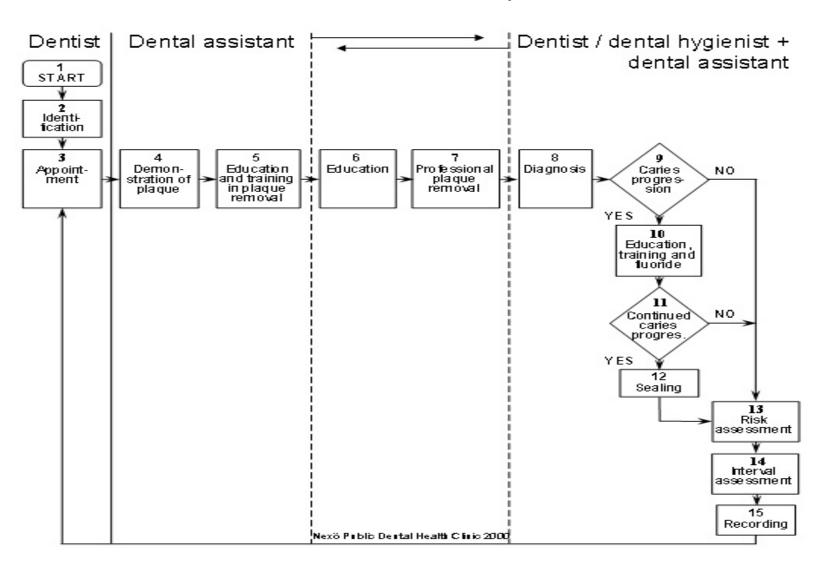
3 points: 4-8 months interval

2 points: 8-12 months interval

#### Primary teeth, 0 to 5-yr-olds:Clinical process



#### **Permanent dentition: Clinical process**

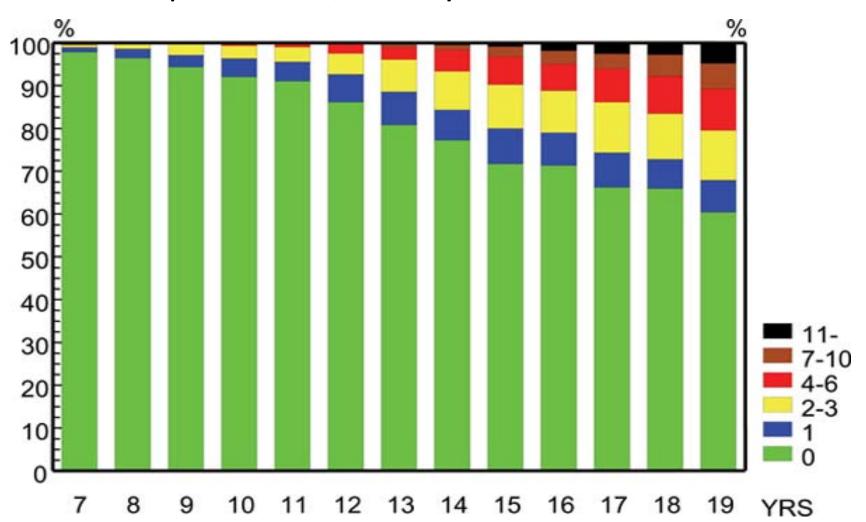




 a needs-related caries preventive program was introduced for all 0–19-year-olds in the county of Värmland, Sweden, in 1979

- Aim:
- 1. To have no approximal restorations.
- 2. To have no occlusal amalgam restorations.
- 3. To have no approximal loss of periodontal attachment.
- 4. To motivate and encourage individuals to assume responsibility for their own oral health.

Caries prevalence, County of Värmland 1999. DFS



Caries free experience %		
	1979	1991
3 years old		
Varmland	51	94
Sweden	68	88
5 years old		
Varmland	27	72
Sweden	35	60

Varmland DFS* scores		
	1979	1990
12 yr	6	1
15 yr	12	3.5
19 yr	24.3	6.5

Cost-effectiveness is established by comparing the average treatment time per child per year - dentists are paid more than dental assistants:

	1979	1990
Varmland	1.8 hour (dentist)	0.8 hour (dentist) + 0.4 hr (preventive assistant)
Sweden	1.7 hour (dentist)	1.1 hour (dentist) + 0.4 hr (assistant)

- Caries incidence was reduced more than 90% in all age groups.
- More than 90% did not develop any new caries lesions in 1999.

- In 19-year-olds the mean number of approximal DFS was <1,</li>
- and only 0.5 had to be filled.
- The mean number of occlusal DFS was <1.</li>

- The effect of the program is evaluated once every year on almost 100% of all 3–19-yearolds in a computer-aided epidemiologic program from 1979.
- Most of the individualized preventive program was carried out by dental hygienists or prophy dental assistants at clinics in the elementary schools.

#### References

- http://www.nexodent.com/
- Axelsson P. The effect of a needs-related caries preventive program in children and young adults - results after 20 years. BMC Oral Health. 2006 Jun 15;6 Suppl 1:S7.

