

# Challenges and experiences in implementation of an individual prevention program based on Nexø model

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### Objectives

Based on the Nexø model<sup>1</sup>, an individual preventive dental health program named 'Non Operative Caries Treatment and Prevention (NOCTP)' was introduced in the Netherlands in 2013<sup>2</sup>. This program proved to be cost-effective in preventing dental caries in children aged 6-12. Convinced of these positive outcomes, several Dutch dental professionals have tried to implement this program in daily practice, with different success. By means of a qualitative study we identified barriers and facilitators for implementation of the NOCTP program in general dental (hygiene) practices.

#### Methods

8 semi-structured interviews

n= 6 dental professionals with Nexø experience n= 2 dental professionals with no Nexø experience

- Verbatim transcription
- Thematic coding and analysis with MaxQDA 10

A framework was used for data gathering and analysis. Main themes were: 1) innovation, 2) patients, 3) context and 4) healthcare professional <sup>3</sup>.

"...The importance of prevention is very large, this should actually be taken for granted ... (D3)"



#### Results

#### Barriers

- Current payment system not adequate
- Decline in income expected
- Problems with planning, facilities and opening hours of dental practice because of shorter recall intervals
- No software available for documentation

"...NOCTP is time consuming and a burden on planning. Sometimes the agenda is so full that children can not get an appointment when needed..."(DH2)

### "...Every oral health professional can score and document the same way. This will offer more structure in treatment..." (D1)

Context theme

Innovation

# theme

Oral health professionals theme

## **Patients** theme

"...As a dental hygienist I think: I'm not going to seal this molar. Six months later the same molar is neatly sealed by the dentist. Yes, we ran against it..." (DH1)

#### **Barriers**

- Major time-investment needed
- No implementation plan available
- Not enough evidence for quiting biannual Fapplication

#### **Facilitators**

Clear and transparant protocols available

...Seeing is believing. Before we stop with biannual fluoride applications, more Dutch research is needed to support the NOCTP method... (D2)"

#### **REFERENCES**

- 1. Ekstrand, K. R., and M. E. C. Christiansen. "Outcomes of a non-operative caries treatment programme for children and adolescents." Caries research 39.6 (2005): 455-467.
- 2.. Vermaire, J. H., et al. "A threeyear randomized controlled trial in 6-year-old children on cariespreventive strategies in a general dental practice in the Netherlands." Caries research 48.6 (2014): 524-533.
- 3. Peters, M. A. J., et al. "Ruimte voor verandering." Knelpunten en mogelijkheden voor verandering in de patientenzorg (2003).

 In all classes it is expected to have a group of nonmotivated parents/children

#### **Facilitators**

Barriers

- No major problems expected
- Good information towards parents required

#### **Barriers**

- Good interview techniques essential
- Good communication between different oral health care professionals
- Change in preventive thinking

#### Conclusions

Despite the predominant positive attitude towards implementation of the NOCTP program, interviewees expect that implementation of the program will succeed even more when health care insurers reward preventive approach instead of curative treatment by a kind of 'Pay for performance system'. Other import barriers are the excellent communication and interview skills needed in the theme 'oral health professional' and the major time-investment for implementing NOCTP in the 'innovation' theme. Main facilitator for NOCTP method is that there are clear protocols available for each age group.