

# Impact of health centre nurses on the reduction of Early Childhood Caries in Lima, Peru.

No registrations found.

<b>Ethical review</b>	Not applicable
<b>Status</b>	Pending
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON27605

### Source

Nationaal Trial Register

### Health condition

Early childhood caries

dental caries, health care system

## Sponsors and support

**Primary sponsor:** Radboud University Medical Centre, Nijmegen, the netherlands and University San Martin de Porres, Lima, Peru

**Source(s) of monetary or material Support:** World Dental Association

## Intervention

## Outcome measures

### Primary outcome

The intervention approach is intended to increase the knowledge of nurses about oral health and preventive measures, and increases the awareness about the importance of oral health for mothers who attend to the vaccination and well-child offices. It encourages nurses to look

inside babies and infants mouths and refer them to the dentist when it's necessary, and consider it normal practice within well-child programmes at health centres. As a result, the number of referrals to the dentist might increase and the nurses knowledge about dental care might rise. Moreover, ECC prevalence might reduce as a consequence of two factors: (1) the oral health preventive advices and check-ups by nurses and if a referral is indicated, (2) the early visit to the dentist for managing the risk factors available in infants and perhaps mothers / caretakers, as well as providing preventive treatments.

## **Secondary outcome**

Finally, the expected results would improve the quality of life of infants and young children, that of their mothers and might reduce the cost earmarked for treating oral health problems in infants.

# **Study description**

## **Background summary**

**Background.** Early Childhood Caries (ECC) is a widespread disease. Its prevalence among 36-47 months-old infants in Lima, Peru, is 65.5%. If proper oral hygiene measures are installed and if the sugar use in the diet is controlled, ECC can be prevented. Many families in deprived areas are not aware of the dangers of sugar-containing foods and beverages and the need to clean the teeth of infants from early age onwards. Dentists do not see these infants and their parents but nurses do. If nurses would be equipped with knowledge on good oral health behaviours and on recognizing signs of ECC in infants early, then they could assist parents in keeping infants' teeth healthy and referring infants with ECC to the health centre dentist for early treatments. The health care system in Peru offers a unique opportunity for integrating these oral health care measures into general health care. The primary aim of the study is to reduce the prevalence of ECC among infants through training them in delivering appropriate oral health care messages to the parents and to recognize signs of ECC in infants.

**Design and methods.** The study has been designed as a three arms randomized clinical trial. In the active intervention group, pregnant woman will receive oral health information as part of the common health messages in preparation for delivery; nurses will receive an oral health training and they will use a validated oral health card to assist them in providing tooth eruption time related instructions. The passive intervention group will receive the oral health card with instructions for use only while the nurses in the control group will be lectured on oral health once. In the three groups, nurses' knowledge will be evaluated using a validated questionnaire in a pre-post control group design; the pattern of referrals will be obtained from records available in the office of the health centre dentist; the ECC status among three year olds will be assessed at baseline and after three years using a validated caries assessment instrument (CAST) as will the infants' quality of life (B-ECOHIS). Investigators cannot be blinded but examiners will be kept blind as much as possible.

Expected impact of the study for public health. Surveillance of ECC at early age at the health centre using a structured oral health card as part of the ongoing well-child programme within the Peruvian health care system may reduce the prevalence of ECC and suffering. Integration of oral health into general health.

Expected impact. Reduction of ECC and become a model for use in other societies.

### **Study objective**

Public health nurses who are trained in providing oral health advices and in inspecting the mouth reduce the prevalence of ECC more than nurses that are not trained.

### **Study design**

Caries assessment at baseline and after 1, 2 and 3 years.

Knowledge of nurses assessment after pre- and post-training, after 3 and 9 month.

Quality of life at baseline and 3 years

### **Intervention**

- Pregnant mothers be instructed about good oral health behaviors
- Nurses receive training in diagnosis and preventive oral care (n =?).
- Use of oral health card.
- Caries, plaque and QoL examination for 3-yr olds

## **Contacts**

### **Public**

College of Dental Sciences <br>  
P.O. Box 9101  
J.E. Frencken  
Nijmegen 6500 HB  
The Netherlands  
+31 (0)24 3614050

### **Scientific**

College of Dental Sciences <br>  
P.O. Box 9101  
J.E. Frencken  
Nijmegen 6500 HB

## Eligibility criteria

### Inclusion criteria

newborns during July and September 2014

### Exclusion criteria

newborns outside this period

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)
Control:	Active

### Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-01-2013
Enrollment:	210
Type:	Anticipated

## Ethics review

Not applicable

Application type:

Not applicable

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

Register	ID
NTR-new	NL4370
NTR-old	NTR4510
Other	: FDI

## Study results

### Summary results

Barriers to adopting and implementing an oral health programme for managing early childhood caries through primary health care providers in Lima, Peru <br>

Eraldo Pesaressi, Rita S Villena, Wil JM van der Sanden, Jan Mulder and Jo E Frencken.  
BMC Oral Health 2014, 14:17.