## Mouth and dental problems:

Experience in Chile



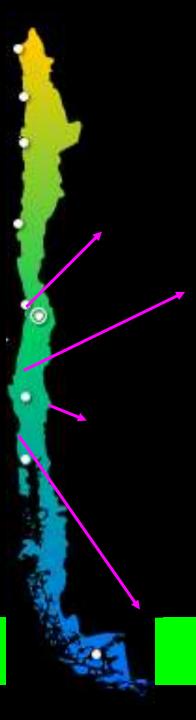


**Population:** 16.763.470 **GPD per capita:** 14.400 USD

#### **Debra Chile:**

- Provide treatment
  - Education
  - Research





#### **EB** in Chile

162 Diagnosed cases in Chile

85 EBS 9 JEB

**68 DEB** 

#### **Dental treatment in Chile**

- ➤ Dental Health Care provided by the national health system:
  - √ 6 year old
  - √ 60 years old
  - ✓ Cleft lip and palate
  - ✓ Pregnant women
  - √ Emergency dental treatment



Oral Manifestations

QOL

Today

Research

## Mouth and dental problems

- 1. Oral Manifestations
- 2. Oral Health related Quality of Life
- 3. Today: Treatment protocol
- 4. Research



#### Manifestations

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## 1. Oral Manifestations



#### Manifestations

**EBS** 

JEB DEB

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May present with episodes of oral ulceration 2 – 3 times monthly. Heal without scaring.

One patients with EBS (K5:A22G) and with Generalized Hypoplasia, main feature of JEB.



#### Manifestations

#### Limited Mouth Opening

**EBS** 

**JEB** 

DEB

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Hypergranulation tissue



Manifestations Amelogenesis Imperfecta

EBS
(Generalized Hypoplasia)

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**DEB** 

100% patients with JEB present Amelogenesis Imperfecta, which can differ between hypoplastic, hypomature or hypocalsified type.



#### Manifestations

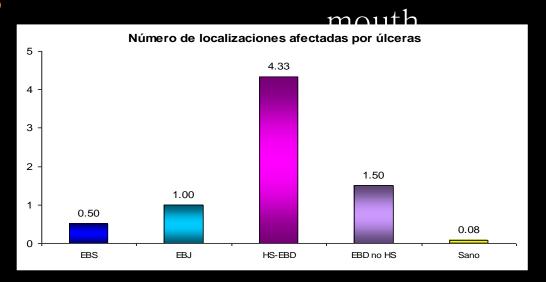
#### Bullae:

EBS
JEB **DEB** 

Number of affected sites inside the

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	EBS	EBJ	EBDr-HS	EBD-no-HS
EBJ	0.999			
EBDr-HS	0.0001	0.003		
EBD-no-HS	0.834	0.999	0.0001	
Grupo Control	0.999	0.999	0.0001	0.025



#### Manifestations

EBS JEB

**DEB** 

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Today

Affected sites:

#### Manifestations

EBS
JEB **DEB** 

Microstomia (Limited Mouth Opening)

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Today

Research

**Progressive** 

0-6 years (n=6) : 24.2mm

7-12 years (n=6): 22.1mm

> 13 years (n=6): 20.2mm

Normal mouth opening

(45 - 55mm)



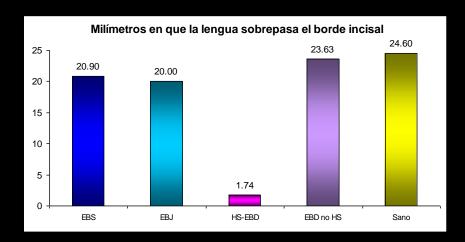
#### Manifestations



## Ankyloglosia

QOL

Today



	EBS	EBJ	EBDr-HS	EBD-no-HS
EBJ	0.999			
EBDr-HS	0.0001	0.011		
EBD-no-HS	0.999	0.999	0.0001	
Grupo Control	0.481	0.999	0.0001	0.999



#### Manifestations

EBS JEB Loss of the vestibular depth

**DEB** 

QOL

Today



#### Manifestations

EBS JEB

**DEB** 

QOL

Today

Research

Enamel abnormalities



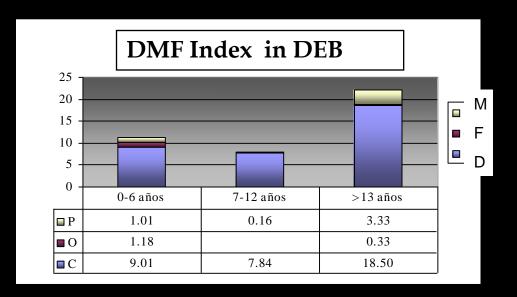
#### Manifestations

Caries: DMF index

EBS
JEB **DEB** 

QOL

Today





Oral Manifestations

#### Quality of Life

Today

Research

# 2. Oral Health related Quality of Life

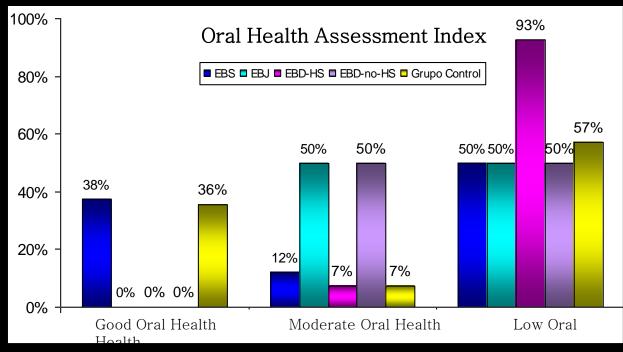


Oral Manifestations

#### Quality of Life

#### Oral Health Assessment Index

Today



	EBS	EBJ	EBDr-HS	EBD-no-HS
EBJ	0.392			
EBDr-HS	0.003	0.056		
EBD-no-HS	0.091	0.999	0.005	
Grupo Control	0.899	0.192	0.004	0.030

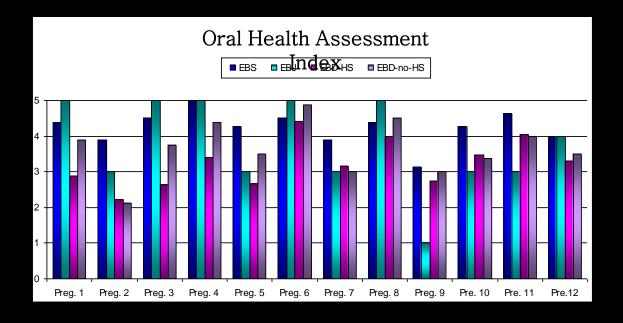


#### Quality of Life

Today

Research

### Main oral health problems?





#### Oral Manifestations

#### Quality of Life

#### Today

#### Research

#### EBS:

- They were "<u>Sometimes</u>" <u>concerned</u> about problems with teeth and gums.
- "Seldom" they had troubles biting or chewing.

#### JEB:

- They were "always" concerned about problems with their teeth and gums.
- "Sometimes" they had troubles biting or chewing.

#### Severe generalized RDEB:

- "Often" they had troubles biting or chewing.
- "Seldom" they were able to swallow comfortably
- "Seldom" they were able to eat without feeling discomfort.

#### Other DEB subtypes:

- "Often" they had troubles biting or chewing.
- "Sometimes" they were concerned about problems with tee gums.

Oral Manifestations

QOL

Today

Research

# 3. Today: Dental Treatment Protocol Debra Chile

Goal: Prevention



QOL

#### Today

## **Dental Treatment Scheme**

- 1. Oral Examination, Education, Treatment Plan.
- 2. Dental Clinic
  - > Emergency.
  - All treatment starting with anterior segment.
- 3. General Anaesthesia
  - Extractions
  - More complex treatment
- 4. Dental Clinic
  - Fillings and crowns, according to the treatment provided under GA.
- 5. Review
  - Review every 3 months.



#### Examination

## Early Referral!

Education

Treatment plan

- 2. Dental Clinic
- 3. General
  Anaesthesia
- 4. Dental Clinic

#### Education



Examination

#### **Education - Prevention**

Education

Treatment plan

2. Dental Clinic

3. General
Anaesthesia

#### • Tooth brush:

- Small head.
- Short and soft bristle.
- Handle easy to grab.

#### 4. Dental Clinic

### More preventive measures:

- High dose fluoride tooth paste.
- Fluoride mouth wash.
- Chlorhexidine mouth wash.



Examination

**Exercises:** 

Education

2. Dental Clinic

Treatment plan

Mouth opening and tongue movement.

3. General

Anaesthesia

4. Dental Clinic



1. Oral
Examination
Education
Treatment plan

## Some aspects dentists, patients and parents need to be aware of:

- 2. Dental Clinic
- 3. General
  Anaesthesia
- 4. Dental Clinic
- 5. Review

Start working on the anterior segment, to give time to increase mouth opening.

Explain to the patient and carer that during the dental treatment some ulcers can appear.

Suction tip should be leaned against tooth surface. If the suction tip touched the mucosa it can produce an

ulcer.

Examination

Education

#### **Prevention:** Sealants and Fluoride

Treatment plan

#### 2. Dental Clinic

3. General
Anaesthesia

4. Dental Clinic



Examination

Education

Treatment plan

#### 2. Dental Clinic

3. General Anaesthesia

4. Dental Clinic





Examination

Education

Treatment plan

#### Crowns

2. Dental Clinic

3. General
Anaesthesia

4. Dental Clinic

5. Review

Periodontal treatment





1. Oral Examination

Education

## Pulpotomies y multiple extractions

Treatment plan

2. Dental Clinic

3. General Anaesthesia

4. Dental Clinic



Examination

Oral Rehabilitation

Education

Treatment plan

- 2. Dental Clinic
- 3. General
  Anaesthesia
- 4. Dental Clinic
- 5. Review



Examination

Education

Treatment plan

2. Dental Clinic

3. General

Anaesthesia

4. Dental Clinic

5. Review

## Review every 3 months



## 4. Research - Dentistry



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Today

## Scientific literature today

#### Research

- Only 2 case series published (1991 [NEBR], 2003 [C. Serrano])
- Most literature available: case reports
- Actual interest:
  3 reports about Implants (2000, 2007, 2008)

### Future

• Therapeutic Approaches for Increasing Mouth opening in severe generalized RDEB.



Oral Manifestations

QOL

Today

Therapeutic Approaches for Increasing Mouth opening in severe generalized RDEB

Research

Randomized controlled trial in clinical phase.

Results expected for September 2009.





