

# Mouth and dental problems: Experience in Chile

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Mechelen, 25 October 2008





**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

Oral

Manifestations

QOL

Today

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# 1. Oral Manifestations

# Oral

## Manifestations

**EBS**

JEB

DEB

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

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

Oral

Manifestations

EBS

**JEB**

DEB

QOL

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# Limited Mouth Opening

Hypergranulation tissue

Oral

## Manifestations Amelogenesis Imperfecta

EBS

**JEB**

DEB

(Generalized Hypoplasia)

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

# Oral

## Manifestations

EBS

JEB

DEB

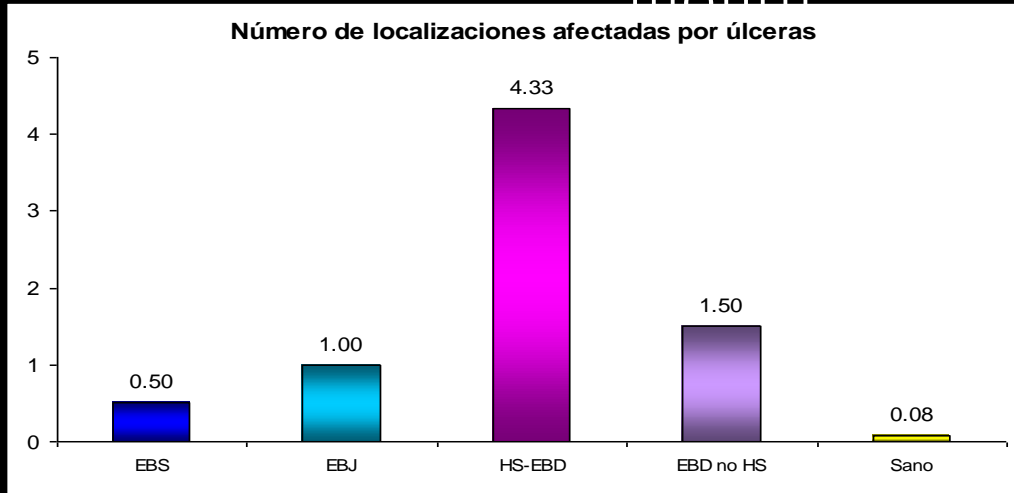
QOL

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## Bullae:

Number of affected sites inside the mouth



	EBS	EBJ	EBDr-HS	EBD-no-HS
EBJ	0.999			
EBDr-HS	<b>0.0001</b>	<b>0.003</b>		
EBD-no-HS	0.834	0.999	<b>0.0001</b>	
Grupo Control	0.999	0.999	<b>0.0001</b>	<b>0.025</b>

Oral

Manifestations

EBS

JEB

**DEB**

QOL

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Affected sites:

# Oral

## Manifestations

EBS

JEB

**DEB**

## Microstomia (Limited Mouth Opening)

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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)

Oral

# Manifestations

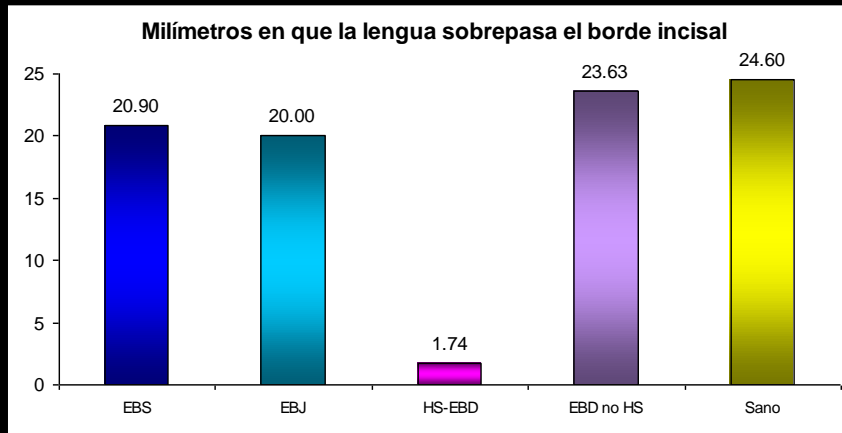
EBS  
JEB  
**DEB**

# Ankyloglosia

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	EBS	EBJ	EBDr-HS	EBD-no-HS
EBJ	0.999			
EBDr-HS	<b>0.0001</b>	<b>0.011</b>		
EBD-no-HS	0.999	0.999	<b>0.0001</b>	
Grupo Control	0.481	0.999	<b>0.0001</b>	0.999

Oral

Manifestations

EBS

JEB

**DEB**

Loss of the vestibular  
depth

QOL

Today

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Oral

Manifestations

EBS

JEB

**DEB**

QOL

Today

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Enamel abnormalities

# Oral

## Manifestations

EBS

JEB

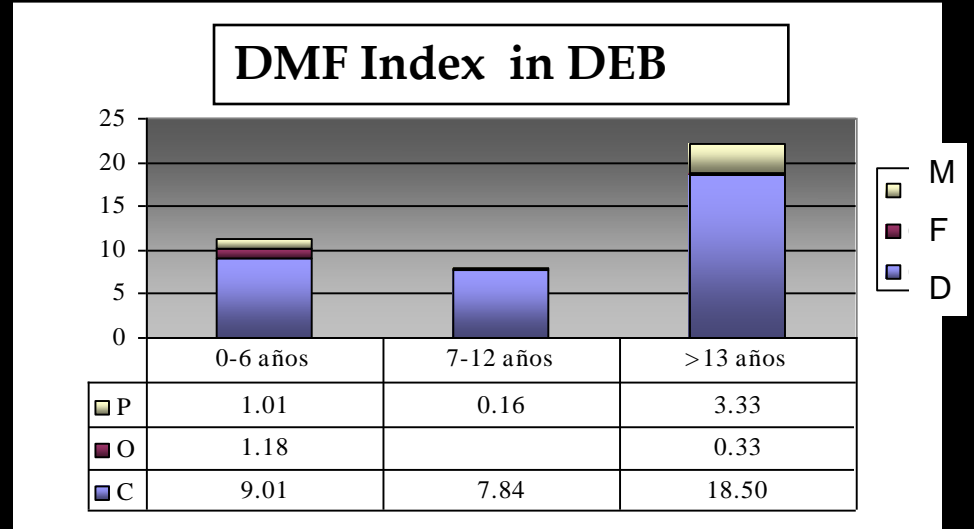
**DEB**

QOL

Today

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## Caries: DMF index





Oral Manifestations

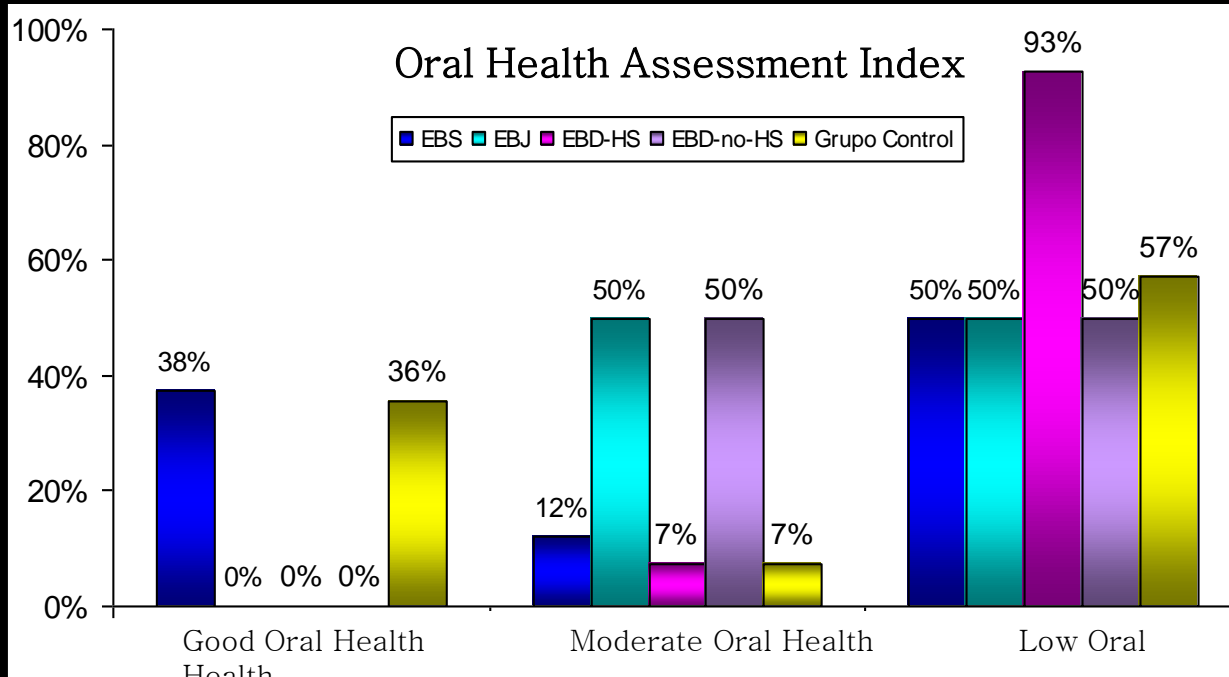
Quality of Life

Today

Research

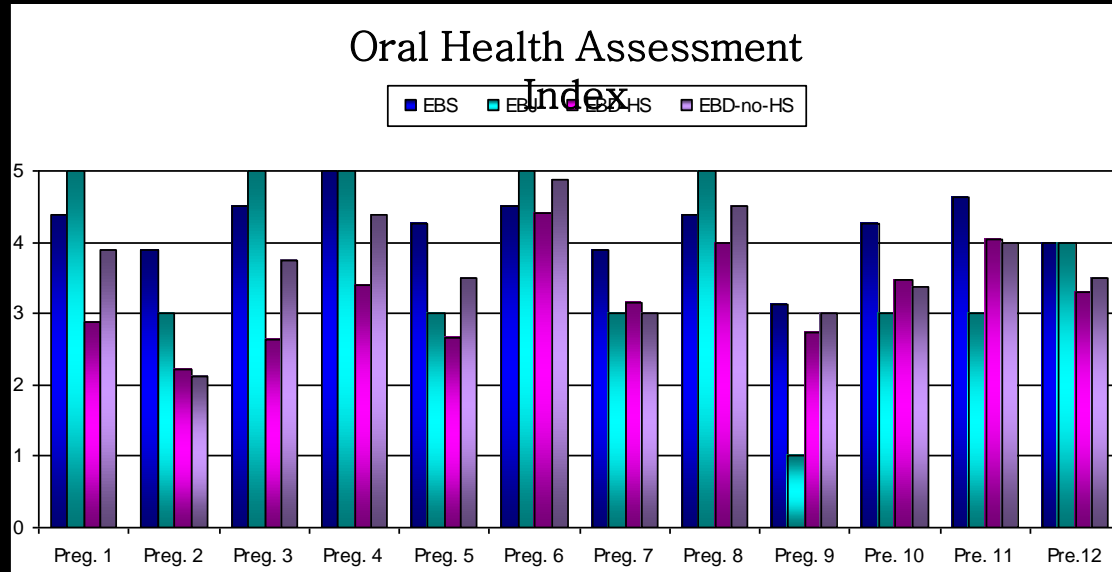
## 2. Oral Health related Quality of Life

# Oral Health Assessment Index



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

# Main oral health problems?



## Quality of Life

Today

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### **EBS:**

- They were “Sometimes” concerned 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 teeth and gums.

Oral Manifestations

QOL

Today

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# 3. Today:

# Dental Treatment Protocol

## DebRA Chile

# Goal:

# Prevention

# 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.

1. Oral  
Examination

# Early Referral !

Education

Treatment plan

2. Dental Clinic

3. General

Anaesthesia

4. Dental Clinic

# Education

5. Review

1. Oral  
Examination

Education

Treatment plan

2. Dental Clinic

3. General  
Anaesthesia

4. Dental Clinic

5. Review

# Education - Prevention

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

## More preventive measures:

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

1. Oral  
Examination  
Education  
Treatment plan

## Exercises:

# Mouth opening and tongue movement.

2. Dental Clinic

3. General  
Anaesthesia

4. Dental Clinic

5. Review

- 1. Oral
  - Examination
  - Education
  - Treatment plan**

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

2. Dental Clinic

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

3. General

- Anaesthesia

4. Dental Clinic

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

5. Review

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

1. Oral  
Examination  
Education  
Treatment plan

# Prevention: Sealants and Fluoride

## 2. Dental Clinic

3. General  
Anaesthesia

## 4. Dental Clinic

## 5. Review

1. Oral  
Examination  
Education  
Treatment plan

2. Dental Clinic

3. General  
Anaesthesia

4. Dental Clinic

5. Review

**Endodontics**

**Rehabilitation**

**Fillings**

**Surgery**

- 1. Oral Examination
- Education
- Treatment plan

# Crowns

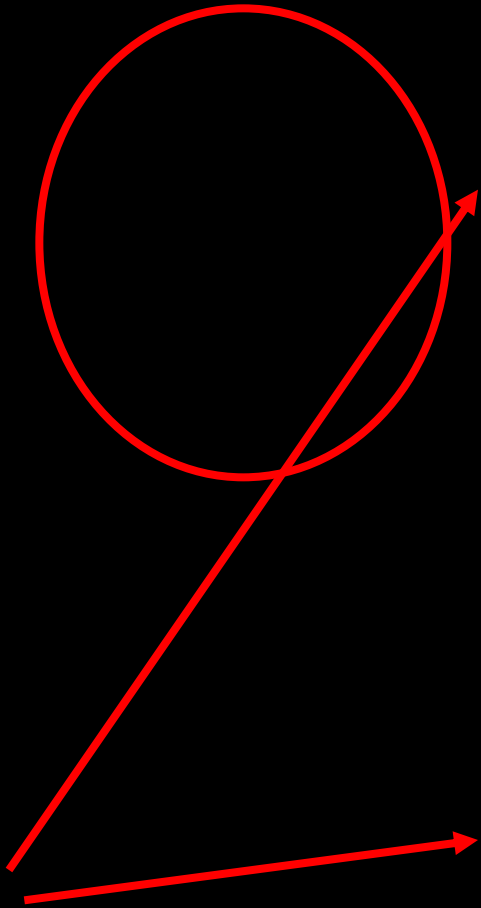
2. Dental Clinic

- 3. General Anaesthesia

4. Dental Clinic

5. Review

# Periodontal treatment



# Pulpotomies y multiple extractions

1. Oral  
Examination  
Education  
Treatment plan

2. Dental Clinic

3. General  
Anaesthesia

4. Dental Clinic

5. Review

# Oral Rehabilitation

1. Oral  
Examination  
Education  
Treatment plan

2. Dental Clinic

3. General  
Anaesthesia

4. Dental Clinic

5. Review

1. Oral  
Examination  
Education  
Treatment plan

2. Dental Clinic

3. General  
Anaesthesia

4. Dental Clinic

5. Review

Review every 3  
months

# 4. Research - Dentistry

# 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

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# Therapeutic Approaches for Increasing Mouth opening in severe generalized RDEB

Randomized controlled trial in clinical phase.

Results expected for September 2009.

