Children’s Oral Health and Use of Dental Services

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Children’s Oral Health Status

Oral conditions in children

- Tooth Decay: most prevalent disease of US children
- Periodontal diseases
- Malocclusions
- Developmental disturbances
- Mucosal lesions
- Traumatic injuries
- Oral manifestations of systemic diseases
Children’s Tooth Decay Status

What we know

- **Overall highly prevalent & increase with age**
- Disparities by race & income
- Disparities by special needs
- Long term trend may be negative

![Graph showing % of Children with Tooth Decay Experience 1999-2004 (NHANES III)](chart.png)
Children’s Tooth Decay Status

What we know

- Overall highly prevalent & increase with age
- **Disparities by race & income**
- Disparities by special needs
- Long term trend may be negative

How we know it

Tooth Decay Experience by Race and Income
2-11 year olds 1999-2004 (NHANES III)
Children’s Tooth Decay Status

What we know

• Overall highly prevalent & increase with age
• Disparities by race & income
• **Disparities by special needs**
• Long term trend may be negative

How we know it

*As reported by parents of CSHCN*
Children’s Tooth Decay Status

What we know

- Overall highly prevalent & increase with age
- Disparities by race & income
- Disparities by special needs
- Long term trend may be negative

How we know it

Increase in tooth decay among 2-5 year olds 1988-94 to 1999-04 (NHANES III)
Accuracy of Parental Reports of Oral Health Status

Parents are good-to-optimistic reporters of their children’s oral health status

- Children: “A parent questionnaire is less effective than visual screening for evaluating oral health status in children.”
  Beltran et al JPHD 1997

- Teens: “Parents and adolescents exhibited only modest concordance on … adolescent’s oral health status and need for … treatment. Parents tended to rate their adolescent’s oral health … as better than did the adolescent.”
  Weyant et al CDOE 2007

![Bar chart showing parent report of unmet need for dental care compared to untreated cavities and lack of visit in a year (NHIS, NHANES III, and MEPS 2004)]
Accuracy of Pediatrician Reports of Oral Health Status

Small study of pediatricians showed that after a 2 hour training course they accurately identified good oral health but were less able to identify problems.

![Graph showing the accuracy of pediatricians in identifying children's oral health status](image_url)
Children’s use of dental services

What we know

• **Overall about half of children receive a dental visit in a year**

• Disparities by race & income

• Disparities by special needs

• Parents overstate dental visits

How we know it
Children’s use of dental services

What we know

- Overall about half of children receive a dental visit in a year
- Disparities by race & income
- Disparities by special needs
- Parents overstate dental visits

How we know it

% US Children with Dental Visit (MEPS 2004)
Children’s use of dental services

What we know

• Overall about half of children receive a dental visit in a year
• Disparities by race & income
• **Disparities by special needs**
• Parents overstate dental visits

How we know it

Unmet need for preventive dental care
CSHCN (NSCSHCN 05-06) and all children (NSCH 03)

- Overall, about half of children receive a dental visit in a year.
- Disparities exist by race and income.
- Disparities are particularly evident for children with special needs.
- Parents tend to overstate the number of dental visits their children receive.

The bar chart shows the unmet need for preventive dental care among CSHCN and all children, stratified by income level (less than 100% FPL, 100-200% FPL, 200-400% FPL, >400% FPL). The data indicates a higher unmet need among CSHCN compared to all children across all income levels.
Children’s use of dental services

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How we know it

Percent of children with dental visit in last year: MEPS versus NSCH

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<th>preschool</th>
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percent

0 10 20 30 40 50 60 70 80 90 100

preschool  school age  adolescent
National sealant prevalence

Sealant rates are increasing nationally for all children. Rates are lowest for poor children who experience the most cavities. Fewer than 50% of US children have sealants by time they are teens.
Subpopulations of interest

Take Home Messages

• Children with greatest oral health needs have least access to dental care
• Particularly impacted are the poor, very young, & CSHCN
• Early prevention intervention is the key to reducing disease burden
Subpopulations of interest

Take Home Messages

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Data use in policymaking and programming

Sound data presentations are a necessary but not sufficient argument for progressive MCH oral health programming & policymaking
Making oral health data useful for program management & policymaking

1. Identify data most useful for program/policy issue under consideration
2. Identify data most relevant to the particular managers/policymakers involved
3. Present the data clearly, succinctly, & accurately
4. Frame the data in terms most useful to support the program/argument and most defensible to challenge by opponents
5. Never, ever, even remotely stretch the data to support the program/cause
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