

# **SAME NEIGHBORHOODS / DIFFERENT SCHOOLS - SOCIOECONOMIC FACTORS AND CHILDREN'S ORAL HEALTH**

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# **BACKGROUND: CHILDREN & ORAL HEALTH**

**Dental caries is the single most common chronic childhood disease**

- **5 x more common than asthma**
- **7 x more common than hay fever**
- **14 x more common than chronic bronchitis.**

**(Surgeon General Report on Oral Health,  
2000)**

# **BACKGROUND:**

## **CHILDREN & ACCESS TO CARE**

- **Need for oral health care is the most prevalent unmet health care need of children (Newacheck et al, 2000).**
- **Children from poor and / or minority families are especially vulnerable - 80% in 20% (U.S. General Accounting Office, 2000; Vargas et al, 1998).**

# **BACKGROUND: CHILDREN & OHRQoL**

**Poor oral health affects children's oral health-related quality of life (Filstrup et al., Pediatric Dentistry 2003).**

- They have functional impairments – problems when eating sweet, hot / cold, or tough food.**
- They live with pain / discomfort.**
- It interrupts their lives: example, not sleeping through night.**
- They have social problems.**

# **BACKGROUND: ORAL HEALTH & SCHOOL PERFORMANCE**

**Poor oral health leads to**

- Impaired school performance (Peterson et al, 1999; Ramage, 2000) and**
- Days missed from school (Gift et al, 1992; U.S. General Accounting Office, 2000).**

# OBJECTIVES

The objectives are to explore how elementary school children in socio-economically disadvantaged neighborhoods differ from children in less socio economically disadvantaged schools in the same county in their

- (a) oral health,
- (b) oral health care utilization, and
- (c) oral health-related quality of life.

# METHODS: Respondents

- **Face to face interviews were conducted with 3,871 children in 35 elementary schools in Flint, MI, and surrounding Genesee County.**
- **Oral health data were collected from 3,549 children:**
  - **51.4% girls / 48.6% boys**
  - **Average age = 7.74 years (4 to 12 years)**
  - **53.6% black / 42.1% white**
  - **% of free school lunches ranged from 31.70% to 97.50%. 43.3% of the children attended schools with less than 75% of children on free school lunches.**

# Methods: Procedure

- **School wide screenings were conducted in the 35 elementary schools between October 2004 and May 2005.**
- **Pediatric graduate students and staff dentists from the pediatric dental clinic at Mott CHC performed the oral exams.**
- **Dental assistants conducted the face to face interviews.**



# Background characteristics of children in schools with < 75% vs. > 75% of children with free school lunches

	<75% (N=1,492)	=>75% (N=1,759)
<b>Ethnicity / Race:</b>		
Black	25.8%	75.3%
White	71.3%	19.6%
<b>Gender:</b>		
- Female	49.8%	52.4%
- Male	50.2%	47.6%

# **RESULTS:**

## **Oral Health Differences**

	<b>&lt;75%</b>	<b>=&gt;75%</b>	<b>p</b>
<b>dft score for primary teeth</b>	<b>1.52</b>	<b>1.49</b>	<b>NS</b>
<b>DMFT score for permanent teeth</b>	<b>.48</b>	<b>.56</b>	<b>.026</b>
<b>% w/ abscessed primary teeth</b>	<b>1.4%</b>	<b>3.0%</b>	<b>.006</b>

# **RESULTS:**

## **Oral Health Care Utilization**

	<b>&lt;75%</b>	<b>=&gt;75%</b>	<b>p</b>
<b># primary filled teeth</b>	<b>.89</b>	<b>.73</b>	<b>.002</b>
<b># permanent filled teeth</b>	<b>.24</b>	<b>.22</b>	<b>NS</b>
<b># crowned teeth</b>	<b>.33</b>	<b>.29</b>	<b>NS</b>
<b># sealed teeth</b>	<b>.39</b>	<b>.25</b>	<b>&lt;.001</b>

# RESULTS:

## Oral Health-Related QoL

	<75%	=>75%	p
Teeth hurt now	14.2%	19.3%	<.001
Hurt hot / cold	31.1%	39.6%	<.001
Hurt sweet food	19.6%	26.3%	<.001
Hurt chew / bite	25.4%	35.5%	<.001
Hurt open wide	13.5%	18.0%	<.001
Hear noise	22.1%	27.8%	<.001
Chew tough food	21.7%	25.6%	.003
Wake up at night	16.3%	23.6%	<.001
Stop from playing	14.3%	20.0%	<.001
Tooth hurts in school	22.3%	28.2%	<.001
Keep from school	10.2%	14.5%	<.001
Keep from learning	6.7%	8.7%	.017
Not paying attention	8.3%	11.3%	.003
Nice smile	93.5%	95.4%	.017

# CONCLUSIONS

**These data suggest that the socio-economically most disadvantaged children are:**

- More likely to suffer from poor oral**
- Less likely to receive care**
- Have a significantly poorer oral health-related quality of life**

**than less socio-economically disadvantaged children in the same county.**

# OUTLOOK

- **These oral health-related data show how vulnerable the socio-economically most disadvantaged students are.**
- **An analysis of general health indicators such as asthma diagnosis and treatment might complement this finding.**
- **Advocacy for increased oral health treatment and prevention services is needed for high risk children.**

THANK YOU!



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