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Oral Health Training Among Graduating Pediatric Residents

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Background

- **Early Childhood Caries (ECC) is the most common chronic disease in American children**
 - 20% of infants and toddlers low income families
 - 40% of Asian and Native American children
 - As many as 6.4% of the total population of 1 yr old children
 - Disease prevalence increasing
- **ECC Risk factors**
 - Frequent and prolonged tooth exposure to sugars
 - Mutans Streptococcus (MS)
 - Oral health history of mother and older siblings



Background: Pediatricians' role

- Novel approach integrates oral health promotion activities in infants and young children pediatric care until they secure a permanent dental home



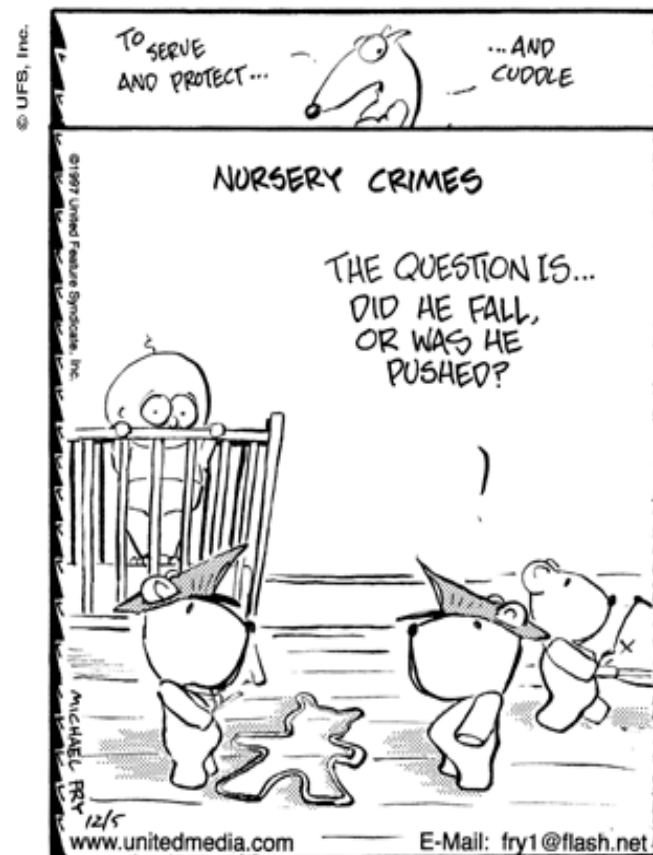
Background: Pediatrician's Role

- Assessment of early tooth decay risk, oral screening, anticipatory guidance regarding etiology of caries and disease prevention strategies, ± fluoride varnish, referral to dental provider



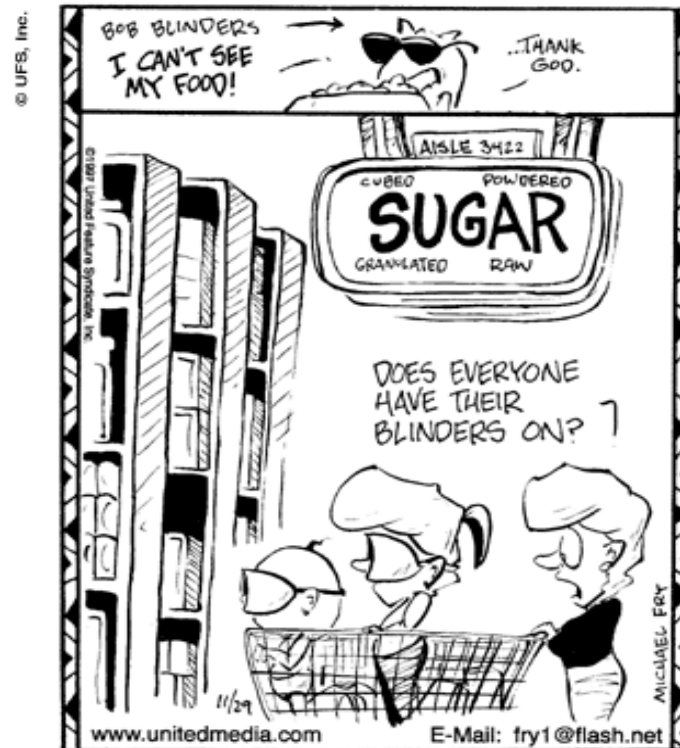
Background: Pediatrician's Role

Risk Assessment



Background: Pediatrician's Role

Proper nutrition



Background: Pediatrician's Role

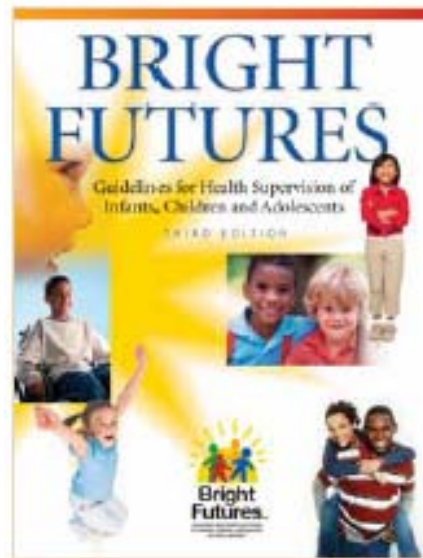
Oral Hygiene



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Background: Pediatrician's Role


- Oral Health Initiative: Partnership to Reduce Oral Health Disparities
- Third Edition of Bright Futures



Background: Pediatrician's Role

ORAL HEALTH RISK ASSESSMENT
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Objectives of the Study

To Assess Pediatric Residents:

- Beliefs regarding role of pediatrician in oral health promotion
- Amount of oral health instruction received
- Ability to determine oral disease risk and perform an oral screening
- Comfort in providing oral health anticipatory guidance

Study Design

- AAP's annual Survey of Graduating Pediatric Residents (2006)
- Random selection of residents from programs nationally
- Set of core questions and annual focus subject
- 1,000 surveys sent
- Response rate: 61.1% (n=611)
- Surveys sent both by US mail and via email link

Demographics

- 74% females
- 63% white non-Hispanic
- 5% African American
- 21 % Asian or Pacific Islander
- 22% international medical graduates
- 68% married or living with a partner
- 1/3 with children

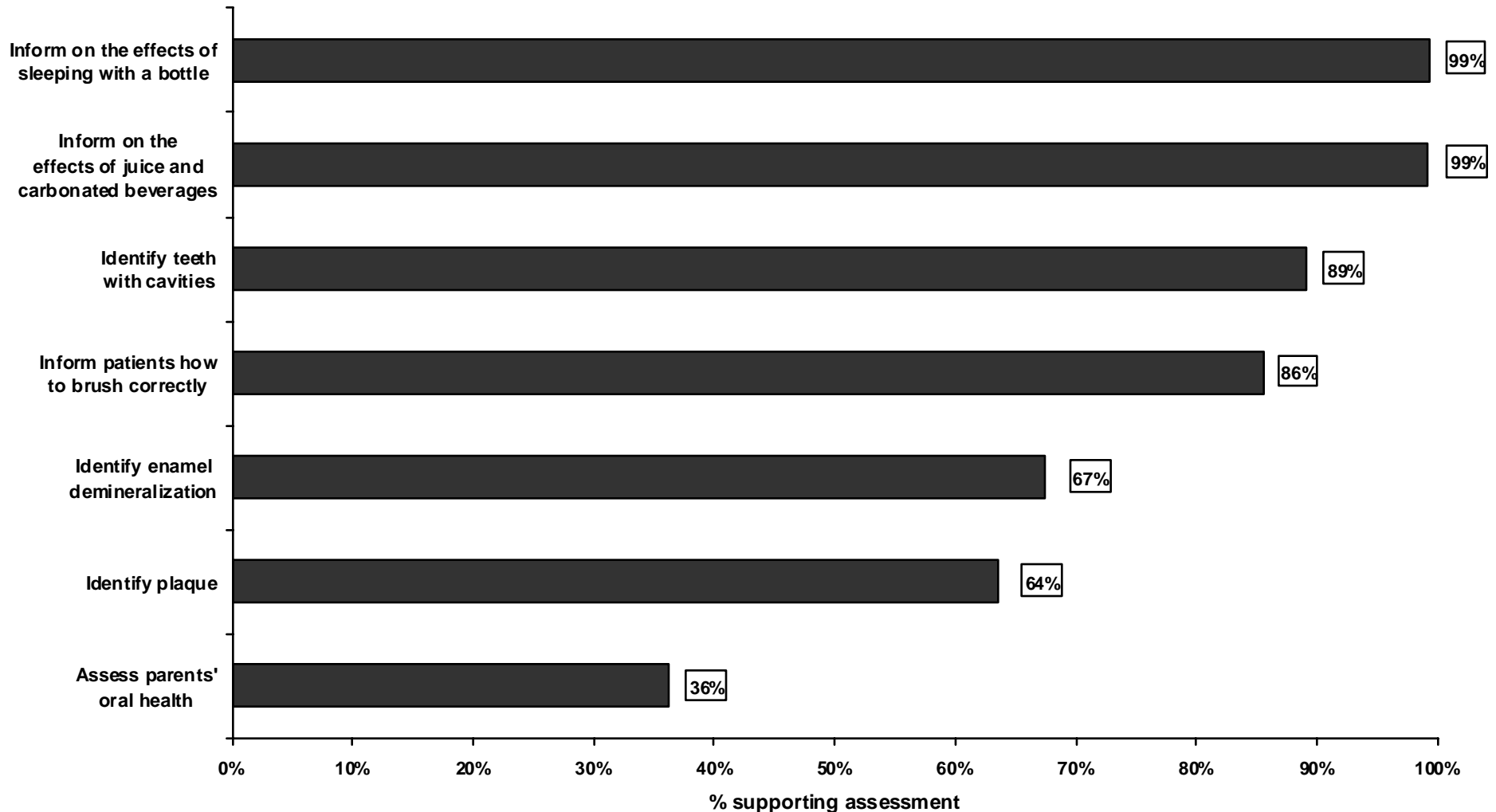
Oral Disease Prevalence Encountered in Patients

- 48% pediatric residents reported moderate to severe dental problems in 25%-50% of their patients
- 16 % reported moderate to severe dental problems in 51%-99% of their patients

Residents support the idea of pediatricians performing oral health assessment tasks

Survey question:

“Do you believe pediatricians should perform the following?”



Attributes of residents supporting pediatricians' involvement in oral health promotion

Dependent variable:

Score on a scale indicating attitudes on whether pediatricians should conduct oral health screenings

0 = should not, 6 = should

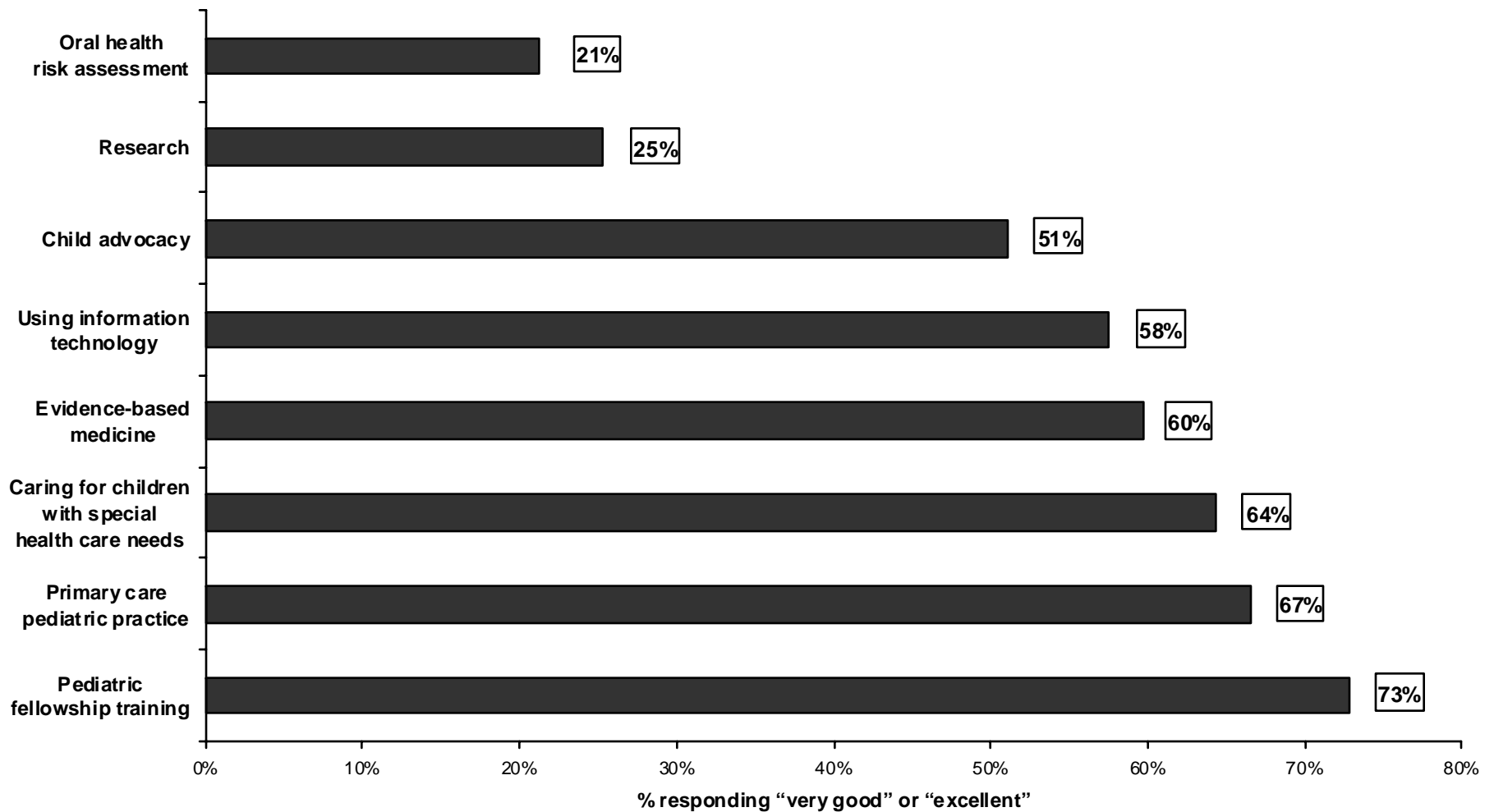
	<u>Coeff (S.E.)</u>	<u>p-value</u>
Received 3 or more hours of oral health training	.519 (.228)	0.011
Applied for jobs in the inner city	.419 (.178)	0.019
Career goal is primary care practice	.344 (.175)	0.050
Age	-.015 (.024)	0.646
(Constant)	4.831 (.757)	0.000

Residents' Oral Health Training

- 35% reported no oral health training
- 73% had less than three hours oral health education activities
- Only 14% had clinical observation time with a dentist
- Only 21% felt their residency was very good or excellent in preparing them to do an oral health assessment

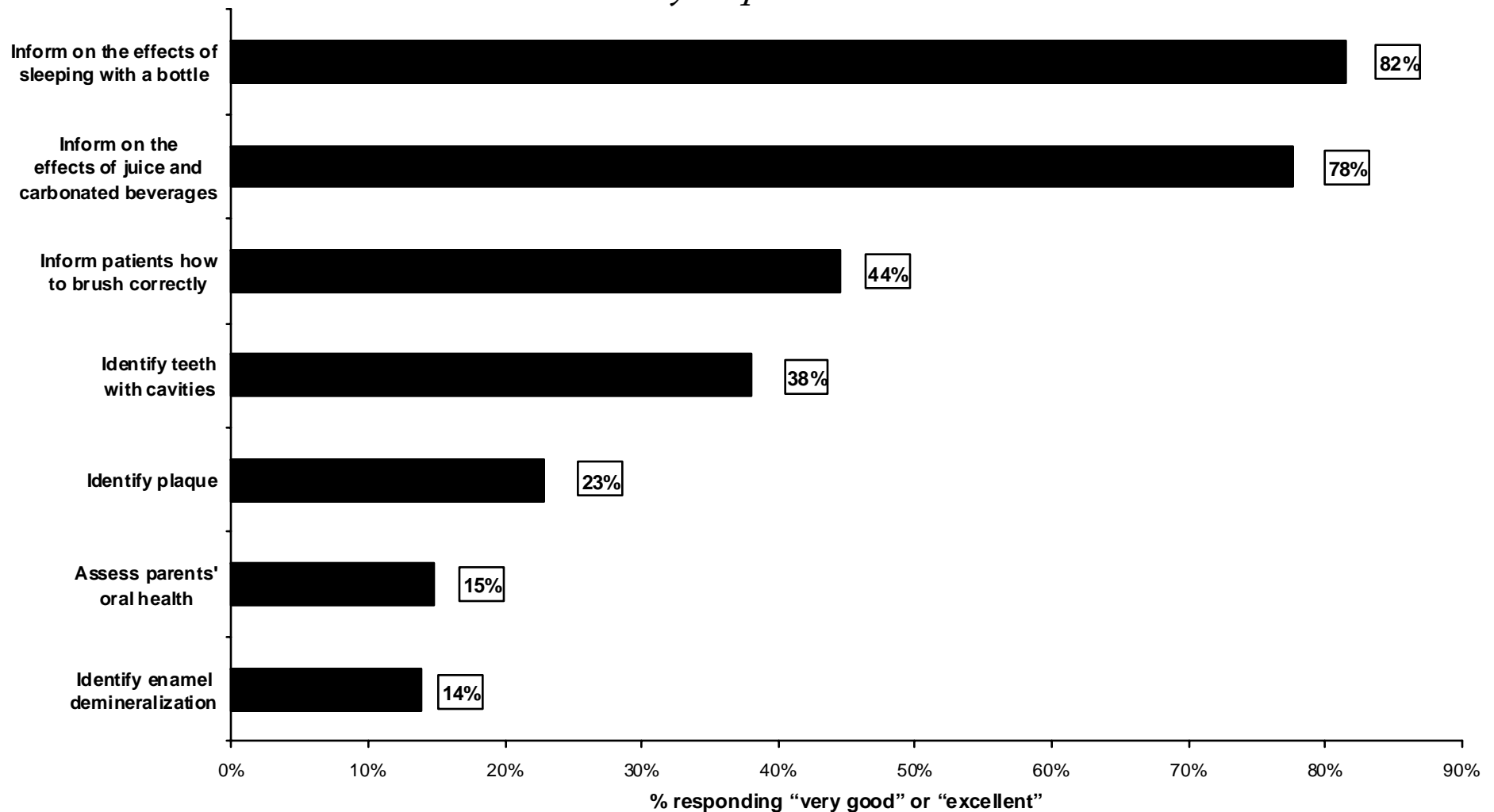
Satisfaction with oral health risk assessment preparation

Survey question: "Overall, how would you rate your residency in preparing you for each of the following activities?"



Self-confidence in performing oral health assessment tasks

Survey question: "For the following oral health assessments/tasks, how would you rate your ability to perform?"



Impact of Oral Health Training on Self-Confidence

	Amount of oral health training during residency		
	None	< 3 hours	≥ 3 hours
Inform on the effects of sleeping with a bottle	3.95	4.22 ^a	4.41 ^c
Inform on the effects of juice and carbonated beverages	3.89	4.13 ^a	4.40 ^{b,c}
Inform patients how to brush correctly	3.13	3.35	3.61 ^c
Identify teeth with cavities	3.03	3.16	3.59 ^{b,c}
Identify plaque	2.63	2.61	3.14 ^{b,c}
Assess parents' oral health	2.20	2.25	2.71 ^{b,c}
Identify enamel demineralization	2.18	2.28	2.89 ^{b,c}

The superscript a, b and c above mean that a post-hoc Scheffe test indicates that the difference between the mean self-efficacy scores is statistically significant ($p < .05$) for:

^a "none" vs. "< 3 hours of oral health training"

^b "< 3 hours of oral health training" vs. " ≥ 3 hours of oral health training"

^c "none" vs. " ≥ 3 hours of oral health training"

Conclusions

- Most graduating pediatric residents support a pediatrician's participation in oral health promotion activities
- Majority of current pediatric residency curricula lack adequate oral health training
- As little as 3 or more hours of oral health training can improve pediatricians' confidence in performing oral health promotion tasks

Future Directions

- Introduce oral health training in all pediatric residency curricula
- Increase opportunities for interdisciplinary interactions between dental and medical providers in training
- Address the barriers to pediatricians' involvement in oral health promotion (time, reimbursement, dental referral network)

In This I believe

If our American way of life fails the child,
it fails us all

Pearl S. Buck