

#### Introduction

Dental caries is the number one highly prevalent childhood chronic disease affecting children/infants through 18yrs of age.

#### Objectives

Explore factors that are impacting Dental Health in Infants and Children in the United States such as:

- Socio economic factors
- Inadequate Health Literacy
- Lack of adequate diet and nutrition
- Obesity and food insecurity

#### Method

Data Base searched:

- Medline
- American Dental Association
- American Pediatric Association
- World Health Organization
- Google Scholar
- Centers of Disease

Key Words used:

- Dental Caries
- Infant
- Children
- Tooth decay
- Toothache

The literature search was conducted over the last three months, with research conducted over the past five years considered for inclusion.

#### Themes

- Parents and caregivers may be uneducated regarding dental health
- Lower socioeconomic status can result in higher rates of dental decay and checkups
- Language barriers can impede education on dental health
- Lack of education in school systems on the importance of dental hygiene and regular brushing



Figure 4. Poor Oral Hygiene by Race/Ethnicity

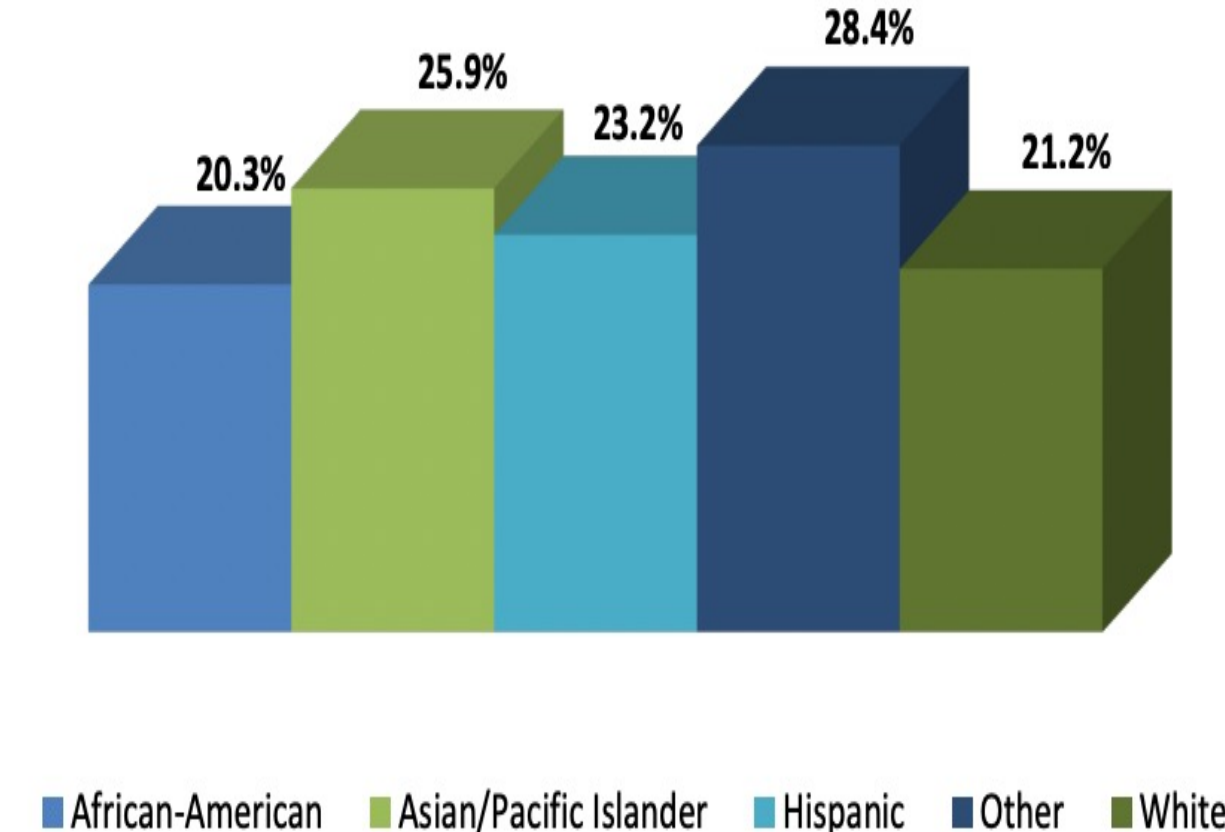


Chart above shows statistics of poor dental hygiene by race/ethnicity:

1. Other
2. Asian/ Pacific Islander
3. Hispanic
4. White
5. African-American

#### Massachusetts VS Missouri

##### Massachusetts

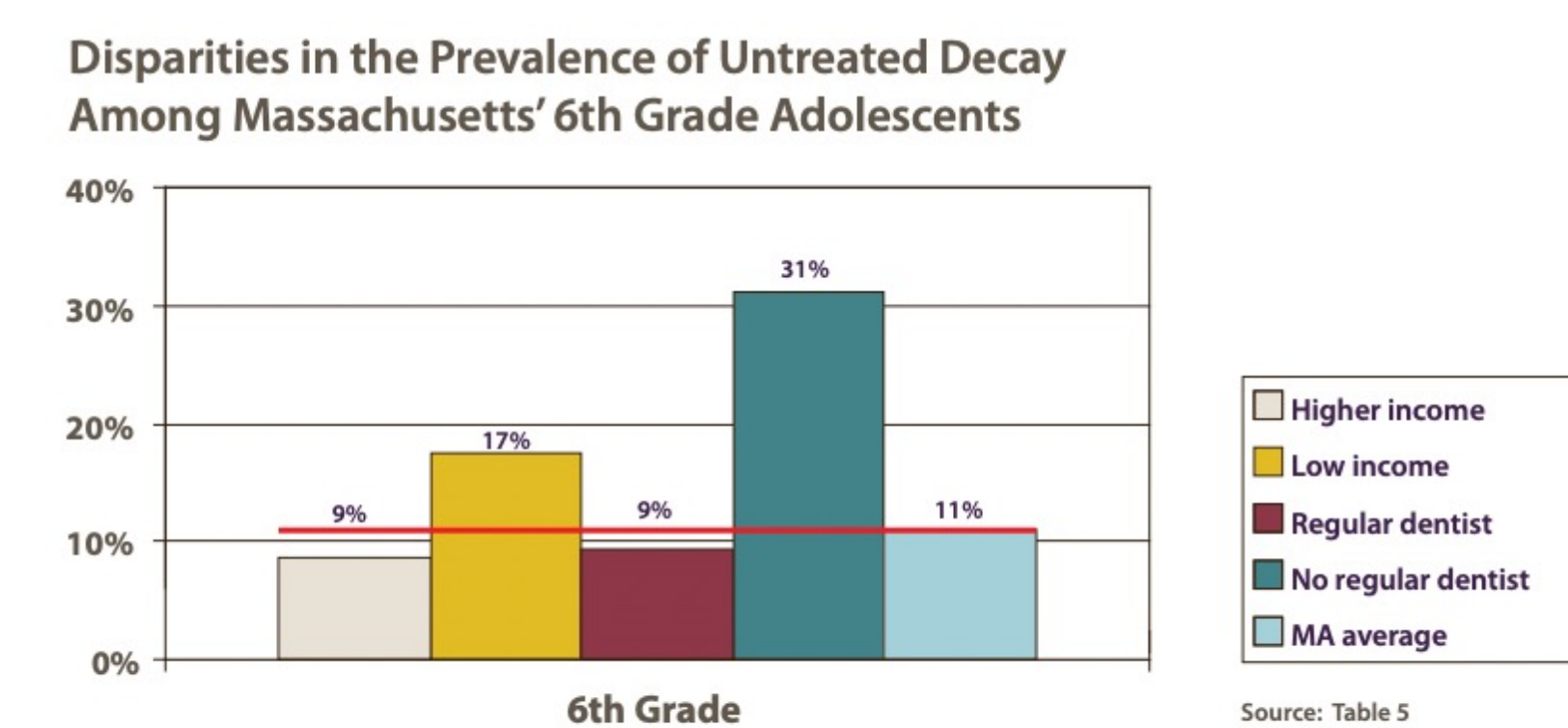
- 40% 3rd grade children have dental caries
- Half of these students receive treatment for the dental caries

##### Missouri

- 50% of 3rd grade students have dental caries
- Only 2/5 of these students receive treatment for dental caries

##### Untreated Decay

Children from low-income families and children from certain racial/ethnic groups not only have a much higher prevalence of oral disease but are also less likely to have had their dental caries treated. Among kindergarten children, the proportion of Hispanic children with untreated decay (23.5%) and the proportion of children from low-income families with untreated decay (25.7%) were at least double that of comparable groups.



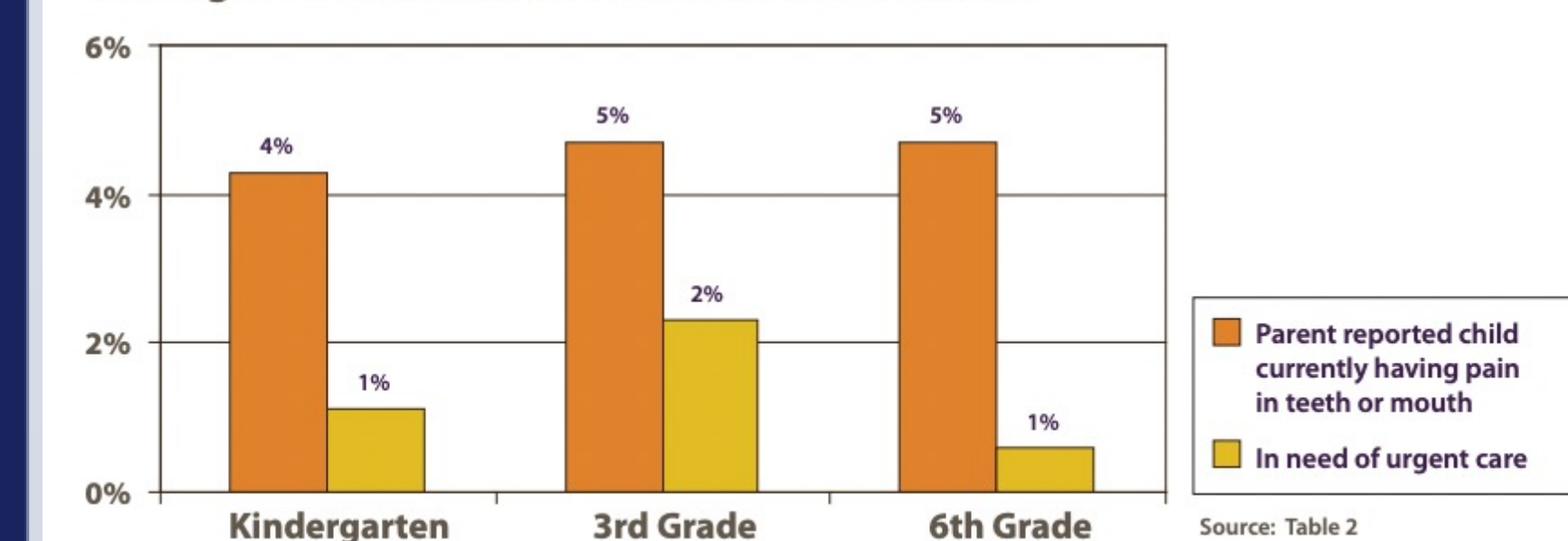
Among 3rd grade children, the proportion of non-Hispanic Black children (36.0%), Hispanic children (26.2%), and children from low-income families (32.2%) were significantly higher than comparable groups.

Among 6th grade adolescents, the proportion from low-income families with untreated disease (17.4%) was double that of adolescents from families with higher incomes.

##### Pain

Among kindergarten children, a higher proportion of Hispanic children (7.9%) and children from low-income families (8.1%) were at school with pain in their teeth or mouth, more than double that for comparable groups.

##### Prevalence of Pain and Treatment Urgency Among Massachusetts' Children and Adolescents



These disparities between states are attributed to a lack of dental education, reduced availability of providers, and issues with insurance coverage.

#### Conclusions

- The literature identified the following evidence-based strategies;
- Promotion of early prevention and detection of dental caries in children
- Promotion of a low sugar diet
- Use of topical fluorides in water and toothpaste
- Caries prevention programs adjusted to individual characteristics of each child, taking into consideration oral hygiene practices, dietary habits, and total fluoride intake

#### Recommendations

- Educate parents about having the infant seen at the dentist at 6 months of age with or without teeth
- Educate parents about the negative effect of water filters on fluoride content
- Require all dentists to accept Mass Health to improve access for lower socioeconomic communities

#### References

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