

Workshop 2

Pediatric Case Study: Instructor Copy

This case study was obtained from the U.S. Department of Health and Human Services, Health Resources and Services Administration. Oral Health in Primary Care. Rockville, Maryland: U.S. Department of Health and Human Services, 2012.

Accessed from:

<http://www.hrsa.gov/publichealth/clinical/oralhealth/primarycare/oralhealthprimarycare.pdf>

We have highlighted the portions of the case study that correspond to specific sections of the AAP Oral Health Risk Assessment Tool.

Patient and Family Profile

Tomas is the head of the household. He is a day laborer. He and his wife, Danita, have four children: 2-year-old Bella, 4-year-old Jacob, 9-year-old Jasper, and 13-year-old Maria. The mother brings the four children to the pediatric primary care office for initial routine physical examinations prior to starting the new school year and the day care center for the youngest child.

The family does not have dental insurance and the children have never been to the dental provider. They have income-based medical insurance that requires a copay, so the family limits health care visits to those required for the children, and they occasionally use the emergency room when they deem necessary.

History and Physical Examination

Present Medical History: The mother reports that all children have been well but that they are all picky eaters and prefer sweets before mealtime and always want dessert. The mother reports that she does not have control over their eating behaviors because of her work schedule and that the grandmother often feeds the children sugary snacks before she gets home. The children like cookies, candy, and other snacks that stick to the teeth, such as raisins and bananas.

Even though the mother tries to restrict candy in her home, the children frequently receive candy from their father and grandmother as rewards for good behavior.

Past Medical and Family History: The family is healthy and the children are up-

to-date in immunizations with **no chronic health issues**. The family history is significant for type II diabetes mellitus in the maternal and paternal grandparents and one maternal aunt. **Neither parent receives regular dental care, nor have they been to the dentist in the past 5 years.**

Social History: The family **does not have dental insurance** and **cannot afford to pay for routine dental visits**. All the children **drink soda daily** and the younger children **drink a lot of juice each day**. They participate in the **free school breakfast** and lunch program and their choices favor **high-calorie starches**. The children drink one glass of milk each day in the morning before leaving home. The **children brush their teeth once a day without adult supervision**. The family prefers to drink **nonfluoridated bottled water over tap water**.

Today's Examination Findings

The initial assessment reveals that all the children have a BMI between the 85th and 90th percentile.

The oral examination of each individual child reveals the following:

- Bella, the 2-year-old, has all 20 primary teeth erupted; they are free of white spots and there is no evidence of decay.



Figure 6. White spots on tooth surface

- Four-year-old **Jacob's** examination reveals **white spots** on the central incisors (**enamel demineralization**) and **decayed areas** on the **lower molars**.

Family Concerns

The mother is concerned about the family's ability to pay for dental services. The mother also states that her husband makes all decisions concerning family health care.

Dental Home: No dental home has been established.

Below are discussion items for this case study.

Case Summary

This case study presents a child with no oral health issues—Bella— but who is at high risk due to the family's lack of financial resources for oral health insurance, lack of knowledge on home oral hygiene practices, lack of access to affordable dental care, lack of understanding of both the value of a dental home for the family's oral health care needs and the nutritional needs of children that support healthy growth and healthy teeth.

Your role in addressing the child with subtle high-risk oral health factors early on and providing anticipatory guidance to the family could help prevent tooth decay and lead to better oral health.

Family Oral Health Assessment and Recommendations

The youngest child is considered at risk for caries development since her eating patterns, oral health care behaviors, and family history place her in the at-risk category for developing dental caries in the primary teeth, even though she has no evidence of caries at this time. Thus, you must remember to consider not only the presenting clinical evidence (no dental caries) but the confounding family variables that place this child at risk for future dental caries.

Implementing preventive strategies at this visit for the youngest child should be a high priority. All of the children are at high risk for dental caries based on poor oral hygiene habits on a daily basis, their dietary habits, their lack of prior dental visits, and the lack of a dental home and dental insurance. In addition, the parents' lack of knowledge of the importance of oral health care also puts the family at high risk.

Management and Treatment

Today's Plan

- Address the mother's concern regarding her ability to pay. Have the office dental champion assist the family with finding affordable or free dental coverage options. If no dental champion is available, offer the family your assistance.
- Have the appointed dental champion assist the Cullen family with scheduling an appointment for a primary dentist.

- Provide the Cullen family with a Dental Referral Form to bring to the dentist and back to you after the first visit or have the dentist fax/send the form back to you.
- Offer patient education about oral hygiene.
- Provide the following oral health anticipatory guidance for the Cullen family regarding their oral health care, including:
 - Choose snacks with less sugar and those that don't stick to the teeth.
 - Drink more fluoridated water and less sugary beverages.
 - Minimize frequent between-meal snacks, especially ones high in sugar.
 - Promote use of fluoridated toothpastes.
 - Promote regular toothbrushing.
 - Promote regular dental visits and establishment of a dental home.
- Discuss the importance of supervised home oral health hygiene to ensure each child brushes his or her teeth at least two times each day and uses proper brushing technique. For example:
 - Bella and Jacob should brush their teeth in circular motion using a soft toothbrush and a smear of toothpaste. Care should be taken to brush each tooth surface and complete the oral care by gently brushing the tongue.
 - Jasper and Maria should use a soft or medium toothbrush that fits their hand or an electric toothbrush. The gum lines should be gently brushed to avoid bleeding and trauma. Both of these children should need minimal supervision, but corrections should be made if they do not brush for a period of 2 minutes and do not clean each tooth surface.
- Older children should floss their teeth at least once each day. High-risk children, as in this case, with gingivitis and misaligned teeth, should floss their teeth twice each day.
- Discuss the importance of routine dental visits and the urgent need for treatment of the multiple dental cavities diagnosed at the child's oral health examination.

Today's Treatment: Apply fluoride varnish in the office for Bella and Jacob.