Module 2: Caries Risk Assessment for Individuals and Groups

Time: 60 minutes



Learning Objective:

Describe a caries risk analysis for individuals and groups.

Additional Materials Needed:

- Flipchart and markers
- PowerPoint presentation
- PowerPoint handout

Brainstorming Session and Discussion:

Now that you know more about what causes dental caries and how to prevent dental caries, who would you say is at greatest risk for developing this disease?

List responses on flipchart.

OK, let's take a look at the presentation on Caries Risk Assessment and see if we missed anything.

Begin PowerPoint presentation.



There are different levels of risk for dental caries. Many children in the United States, and even in Central America, do not have any cavities at all! These children probably aren't going to benefit from additional prevention programs. On the other hand, many children have lots of cavities, beginning when their first teeth erupt into their mouths when they are less than one year old.

So...how do we find these high-risk children to make sure that they receive more prevention programs?

Slide 2



One way to provide systemic fluoride to families is through water fluoridation. In fact, water fluoridation has long been considered the cornerstone of prevention in the United States. In Central America, most communities do not have fluoridated water, but families can benefit from salt fluoridation.

Ask families if they use fluoridated salt and check to be sure that they are using it appropriately. Families who do not use salt fluoridation will be at higher risk for dental caries.

You also want to ask if the children brush their teeth daily with a fluoride toothpaste. As soon as the first tooth comes in, caregivers should brush a child's teeth with a small smear of fluoride toothpaste. As the child gets older, he can brush his own teeth.

We will be talking more later about how fluoride varnish works to prevent cavities.

Who is at High Risk? Children over the age of two who still sleep with a bottle Children who eat lots of sugar and other refined carbohydrates

Children over the age of two who still sleep with a bottle or who walk around all day sipping from a bottle, sippy cup, or other container, are at increased risk for dental caries.

Any children who eat lots of sugar and other refined carbohydrates are at increased risk for dental caries.

That goes for adults too! No one should eat or drink sugared foods throughout the day. It's not good for your teeth, and it's not good for your overall health!

Slide 4

Who is at High Risk?

- Children from low socioeconomic families
- Children whose caregivers and siblings have lots of cavities
- Children with any white spot lesions, cavities, or fillings and those with heavy plaque

It is a fact that dental caries can be linked to the income level and education of the parents. While this does not always hold true, you want to keep this in mind as you work with both individuals and groups to improve their oral health.

Also, children whose parents and siblings have had lots of cavities are much more likely to have cavities themselves, so sometimes we ask questions like "Have her older brothers or sisters had lots of cavities?"

Finally, young children who already have lots of plaque or who have already experienced white spot lesions or cavities, including fillings, can be considered at high risk for future dental caries.

Who is at High Risk? Children with special needs, which includes children who are physically or mentally disabled, or children who are medically compromised.

When interviewing the caregivers of children with special needs, be sure to get information on medications, special diets or food preferences, medical conditions and current and planned medical treatment. You want to know if the child is physically and mentally able to brush his own teeth, and if not, you want to know if the caregiver brushes the child's teeth.

Slide 6

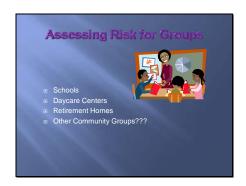
Who is at Low Risk?

- Children who come from families with few dental caries and who have little plaque and no white spot lesions or other signs of cavities, are generally at lower risk for dental caries
- Caries risk can change if the diet changes or if the systemic or topical fluoride changes.

Read first bullet

Keep in mind that caries risk can change. We've all seen patients who had few cavities and then show up one year with lots of cavities. This is often related to a change in diet, like sipping sweetened coffee drinks all day.

Slide 7



Sometimes we need to assess the caries risk for a group. For instance, if we want to apply fluoride varnish in a daycare or school setting, it is cost effective to apply the fluoride for all of the children, especially if we can document that as a group, they are at high risk for dental caries

This is much quicker and therefore more cost effective than assessing individual risk.



If a group has a low socioeconomic status or a documented high prevalence of dental caries, we often assume that most of the children are at high risk, and we implement school and community-based interventions for these children.

We can also assume that most groups of special-needs children will be at high risk for dental caries.

Slide 9



Groups of children or adults at high-risk for future dental caries need increased levels of fluoride and other prevention services!

Slide 10



Turn off projector.

Discussion

- 1. Do you think your community is at high or low risk for dental caries?
- 2. Are some parts of your community at different risk than others?
- 3. Can you list ways to identify high-risk groups in your community that you might like to work with?



You want the group to begin thinking about target populations in your community. Lead this discussion and guide them towards groups where you might intervene with prevention activities.