**Infant Oral Hygiene for Expecting Mothers**

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**Introduction**

The *International Journal of Dental Hygiene* studied the beliefs and knowledge of parents in regard to their child’s oral hygiene. What this study found is that 75% of the parents included in their study believe in the myths and misconceptions of teething (Owais, 28).  This program intends to educate expectant mothers so that they can better understand their child’s oral hygiene and therefore treat and act appropriately in regard to their child’s hygiene and teething process.

Early childhood caries is the most common chronic disease in children in fact, it is five times more prevalent than asthma (Douglass, 2113).  This statistic is alarming being that it has been well documented and researched that caries can be prevented.  Our program plans to educated parents on how to care for their own hygiene as well as their child’s, in order to reduce their child’s risk for caries and thereby prevent them from developing the disease.

Our educational goals will follow the Guidelines provided by the *American Academy of Pediatric Dentistry*.  We will focus our education on understanding teething and the appropriate treatments, the etiology of caries, oral hygiene habits as well as diet and fluoride exposure and  recommendations.  Parents should understand that while teething can cause gingival irritation and drooling it does not cause fever and diarrhea as the very popular myths of teething claim.  When treating their child’s teething parents should use chilled rings or oral analgesics and not topical anesthetics such as the over-the-counter teething gels which can cause toxicity in infants (*American Academy of Pediatric Dentistry 138).*In regard to preventing caries parents must understand the concept of vertical transmission of S. Mutans, limiting sugar exposure and frequency, and the importance of Fluoride exposure.  Parents who understand these concepts and believe in the importance of beginning oral hygiene on their children at a young age will ensure that their child will have good oral hygiene.

**Assessment**

Pre-Test

1. What trimester are you in?
   1. First
   2. Second
   3. Third
2. Is this your first child
   1. Yes
   2. No
3. Currently, how do you take care of your oral hygiene?
   1. Very well
   2. Could do better
   3. Not very well
4. When your child is 4months what should be the correct oral hygiene?
   1. Brush the gums twice a day with a regular toothbrush
   2. Brush the gums gently with a damp washcloth or gauze after feeding
   3. Nothing, there are no teeth present
5. At what age will your child start to drool?
   1. When they are born
   2. At 6 months
   3. At 1 year
6. Which conditions have nothing to do with teething?
   1. Fever
   2. Diarrhea
   3. Facial rashes
   4. All of the above
7. What are some symptoms of teething?
   1. Gingival irritation
   2. Sleep disturbance
   3. Drooling
   4. All of the above
8. What are some tips to help your child while they are teething?
   1. Gently rub the gum pads with a cold spoon or teething ring
   2. give correct dose of children's Tylenol
   3. Give them a pacifier
   4. A and B
   5. All of the above
9. Until what age should your child ideally stop using a bottle?
   1. By 1 year
   2. By 2 years
10. Is it ok if the child goes to sleep with the bottle?
    1. Yes, it’s just milk
    2. No, it can cause cavities
11. When should your child have their first dental visit?
    1. When the first tooth erupts
    2. When the child is 1
    3. After all the front teeth have erupted
12. What saliva sharing practices should not be done in order to reduce the amount of bacteria transmitted from the mother to the baby?
    1. The mother places a child’s pacifier in her mouth to clean it.
    2. The mother shares food and utensils with the child
    3. The mother places the child’s hand in her mouth.
    4. All of the above
13. What is the fruit juice limit of a 1-6 year old?
    1. No juice
    2. 4-6 ounces a day
    3. 6-10 ounces a day
    4. Doesn’t matter, its FRUIT juice
14. At what age can you start using fluoridated toothpaste on your child?
    1. At 6 months
    2. At 1 year
    3. At 3 years
15. How much TV can a 2 year old watch a day?
    1. None
    2. Only one hour
    3. Enough to get them to eat their food

In order to assess the initial oral health knowledge of the pregnant women in the Lamaze class, we decided to conduct a survey. The survey was made up of 15 questions ranging from very simple to difficult. The varied topics included questions about teething, bottle use for infants, vertical transmission, fruit juice, fluoride use, and ADHD in children.  We wanted to get a basic understanding of what our target population knew in order to better communicate with them and get an idea of what to focus our education on. The results from this pretest showed that the average grade from the 10 women was 10 out of 15 correct. After reviewing which questions were answered correctly, we noticed that most of the women had a general understanding of teething and baby bottle use. We also noticed that they didn’t know much about fluoride use, fruit juice for toddlers and vertical transmission. Therefore, when presenting our information, we decided to spend more time on the areas that our population was lacking in, in order to give them the best oral hygiene instructions for children.

**Planning-program**

We plan to introduce our educational program to expecting mothers. We will be advertising with flyers and posters in locations like Lamaze classes where expecting parents gather. We will coordinate with Lamaze classes to either add additional class or class time, so it will be more convenient to those who want to attend. There will be one instructor for each class. These instructors will be trained to teach expecting parents the relationship of vertical transmission and what to expect with their child's oral health, such as:

* Teething
* Common pathology
* Oral hygiene at different age
* Products and techniques for good hugiene
* Caries prevention
* How bottle and pacifier use can effected a child's oral cavity
* Appropriate time bring their child to see a dentist
* Fluoride usage

**Planning-objective**

Our objective is to educate expecting mothers on their oral hygiene as well as what to expect with their child's oral hygiene. An infant oral health presentation will be present to pregnant women during one often regularly scheduled Lamaze class.

**Implementation**

In choosing where to target our efforts on effectively disseminating infant oral care information, it became clear that the best venue for doing so would be to a group of women in a Lamaze class. This setting would be ideal because, women who sign up for, and voluntary attend, Lamaze classes have already shown a higher level of motivation and interest in health; Also, the women are already used to hearing and learning important health information and working together in a group setting; And, finally, the Lamaze instructor is likely to be enthusiastic and helpful, especially when the presenters emphasize how fortunate the group is, to be signed up with an instructor who is so intelligent, knowledgeable, and up to date on helping her clients attain the highest level of health for themselves and their children.

In a limited time frame, there is just so much information that we can disseminate and hope that the audience retains. But, the most important information would certainly include:

1. Minimize teething pains – gauze pad wipe.

2. Begin oral hygiene measures when the first primary tooth erupts.

3. Avoid Early Childhood Caries

     a. No milk or juice bottle left in crib overnight.

     b. No breast feeding through the night on demand.

4. Decrease caregivers’ strep mutans levels.

5. Nutritional advice.

Of course some of the material to be taught would need a lot of explanation. For example, the women need to understand why it is important for caregivers to decrease their own strep mutans levels or risk colonizing the infant’s mouth with their pathogens. Among the information that would need to be presented would be for caregivers to be especially diligent in their own oral Hygiene, diet, fluoride exposures, caries, sharing utensils, and chewing Xylitol gum.

The difficult question, of course, would be what would be the most effective method for teaching all of this important information. The presenter must remember the saying that, “It is not what is taught, but what is caught, that’s significant.”

An interactive PowerPoint presentation would be the best way to educate the mothers. Each slide affords an opportunity for discussion, questions/answers, and audience interaction; slides with good graphics elicit interest among the women in the audience; and, incorporating very short video clips and/or funny cartoons keeps the presentation interesting while being informative and educational.

Second, after the PowerPoint presentation, we would divide the women into groups. Each of the groups would be given projects that would reinforce some of the important oral health information. Examples of participatory projects would be:

1. Distribute charts of a child’s age, ppm of fluoride content in the local water supply, and calculate the appropriate dosage of fluoride supplementation;

2. Distribute cardboard cutouts of a bottle with milk, a bottle with water, and a bottle with juice and have the group choose which would be healthiest to place in a bedtime crib;

3. Have the women practice wiping gauze pads on a baby doll’s gums in order to minimize teething pains;

4. Have each group choose the appropriate oral health aid (gauze, finger cots, small toothbrushes, etc.) for different age children.

Third, it is important to finish the hour-long presentation with reinforcement. This would involve showing a final slide summarizing everything that the women have learned during the session, and provide everyone with an easy-to-read, easy-to-access, handout summarizing all the important points that need to be remembered.

Finally, it would be a good idea to distribute website addresses that everyone could access at home at their leisure, to further explores certain topics. The American Dental Association and the American Association of Pediatric Dentists have easy-to-access website with wonderful educational materials.

**Evaluation**

After presenting all the information about oral hygiene care in children, we decided to administer the same test we gave them before we started our presentation. The post-test served two purposes. It allowed us to see if presentation was understandable, if it was well received by our target population. It also helped as an additional reinforcement for the pregnant women, to help them remember the key points. When we tallied the scores of the posttest, we saw that all 10 women got all the questions correct. Therefore, our method of teaching was ideal for this Lamaze class and we believe it really helped the women better understand how to take of their infants oral hygiene.

**References**

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